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**A Comparative Analysis of the Technical Design, Fabric, and Fit of Pakistani Kameez and Chinese Qipao: An Expert Evaluation Considering Marketability**

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**Abstract**

This study provides a comparative analysis of the technical design, fabric, and fit of the Pakistani Kameez and the Chinese Qipao, evaluating their potential for cross-cultural marketability. As global interest in ethnic fashion grows, understanding the technical and perceptual nuances of these garments is vital for successful market entry. The research employs a novel mixed-methods approach, uniquely combining quantitative analysis of garment construction with qualitative evaluations from seven fashion experts each from Pakistan and China. This dual-layer methodology bridges a critical gap in the literature by moving beyond symbolic or consumer-focused studies to a practitioner-led, forensic examination of these garments as engineered products.

Garments were sourced from premium retailers in Lahore and Shanghai and assessed on criteria including pattern complexity, fabric quality, craftsmanship, and aesthetic balance. The analysis reveals a fundamental design divergence: the Qipao is defined by its precise, form-fitting "architectural" silhouette, while the Kameez emphasizes intricate ornamentation and a "draped," volumetric fit. Principal Component Analysis (PCA) of expert scores demonstrated that perceptions of quality are culturally encoded: Chinese experts prioritized a holistic dimension of Precision Tailoring and Material Elegance, whereas Pakistani experts valued Artisanal Ornamentation and Visual Impact.

Despite divergent philosophies, a universal finding emerged: impeccable construction, particularly seam precision, was the non-negotiable baseline for positive market perception across all groups. Marketability assessments indicate that while both garments possess high cultural value, strategic technical adaptations are required for global appeal. The Qipao may benefit from modest fit variations for comfort, while the Kameez could achieve greater

penetration through simplified construction for mass production, provided its decorative essence is retained. The study concludes that global fashion brands must adopt strategies that move beyond aesthetic translation to engage with the deep technical and cultural logic embedded within these iconic garments.

**Keywords:** Pakistani Kameez, Chinese Qipao, Cross-Cultural Fashion, Technical Design, Fit Analysis, Marketability, Expert Evaluation, Principal Component Analysis.

## **1. Introduction**

The global fashion landscape is evolving from a cycle of transient trends towards a more sustained engagement with cultural heritage, driven by consumer demand for authenticity and the influence of globalized media. Within this context, traditional garments have moved beyond niche markets to achieve international prominence. Among these, the Pakistani Shalwar Kameez and the Chinese Qipao stand out as iconic sartorial systems, each embodying distinct histories, values, and aesthetics.

The Pakistani ensemble, centered on the Kameez tunic, is defined by volumetric ease and intricate surface ornamentation, prioritizing modesty, comfort, and artisanal expression. In direct contrast, the Chinese Qipao is a masterclass in architectural precision, engineered through tailored darts and structured panels to create a form-fitting silhouette that celebrates the contours of the body. This fundamental divergence in design philosophy—volume versus contour—presents both an opportunity and a challenge for cross-cultural fashion markets.

Existing scholarship has extensively documented the historical and socio-cultural significance of these garments within their native contexts. However, a critical gap persists: there is a lack of systematic, expert-led technical analysis that deconstructs these garments as engineered products and links their construction directly to cross-cultural marketability. Prior work often treats them primarily as cultural symbols, neglecting the forensic examination of patternmaking, construction, and fabric science that dictates their wearability and perception.

This study aims to address this gap. It conducts a structured, comparative analysis of the Pakistani Kameez and the Chinese Qipao from a practitioner perspective, integrating quantitative assessment of technical specifications with qualitative evaluations from fashion experts in both cultures. By moving beyond aesthetic appreciation to interrogate the technical DNA of each garment, this research seeks to generate actionable intelligence for designers and brands aiming to navigate the nuanced journey of traditional wear into global markets.

### *1.1 Deconstructing and Comparing Technical Design Elements*

These objectives target a thorough examination of garment conception and construction, highlighting key design philosophies of volume and contour as they relate to pattern-making, construction methods, and fabric selections.

Table 1: Comparative Analysis of Core Technical Elements

<i>Aspect</i>	<i>Pakistani Kameez</i>	<i>Chinese Qipao</i>
Pattern Philosophy	Geometric & Volumetric: Creates shape through the addition of fabric.	Anatomical & Contouring: Creates shape by following the body's curves.
Primary Pattern Shapes	Rectangles, triangles, and simple curves.	Multiple complexes, shaped panels with precise angles.
Use of Darts	Minimal; primarily for bust shaping, not for waist definition.	Extensive; crucial for shaping the bust, waist, and hips.
Key Structural Features	Gussets (gota) for movement, side slits (chaak), varied sleeve heads.	Bias-cut collar, engineered side slits, integrated pankou placement.
Construction Focus	Durability & Support: To handle the weight of embellishments.	Precision & Finish: To create a flawless interior and exterior.
Primary Seam Finishes	French seams, overlocking/surging for durability.	Hong Kong finish, hand-picked zippers, precise topstitching.
Embellishment Approach	Often applied to the flat fabric before construction ("karchobi").	Embellishments (like pankou) are integral structural components.
Typical Fabrics	Cottons, linens (daily); heavy brocades, velvets (formal).	Silk shantung, dupioni, satins (requiring both drape and body).

1.2 Pattern Making Analysis

Expert’s analyses garment patterns for Kameez and Qipao, focusing on design and functionality. Kameez patterns include basic straight-cut kurtas and multi-panel Anarkali styles utilizing geometric shapes, gussets for movement, and various necklines and sleeve styles. In contrast, Qipao emphasizes precision contouring with shaped seams and a high mandarin collar cut on the bias, incorporating frog closures and high side slits for durability and functionality.

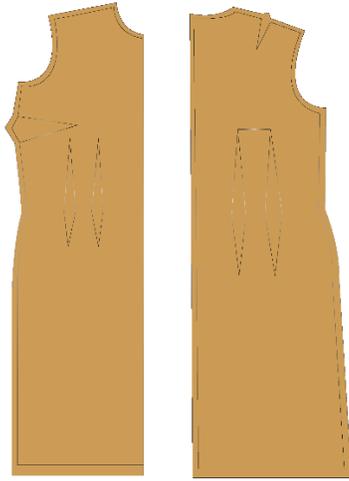


Figure 01: Kameez Pattern

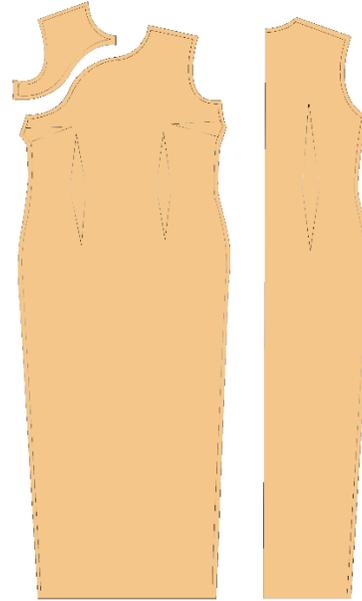


Figure 02: Qipao Pattern

### *1.3 Construction Techniques*

Kameez construction focuses on durability with heavy embellishments, using techniques like French seams and embroidery ("karchobi") applied to flat fabric pre-assembly. Hemming is usually simple but may feature adornments. In contrast, Qipao construction prioritizes precision, employing hand-picked zippers, invisible hand-stitched closures, pankou knots, and facings to ensure a neat interior and defined details through topstitching, integrating construction into design.

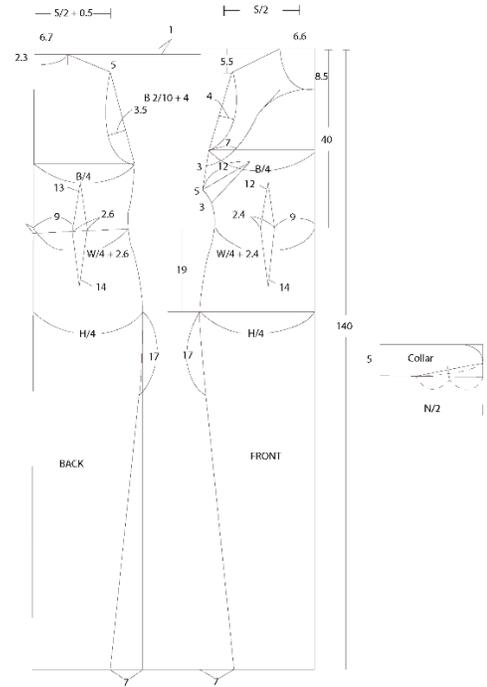
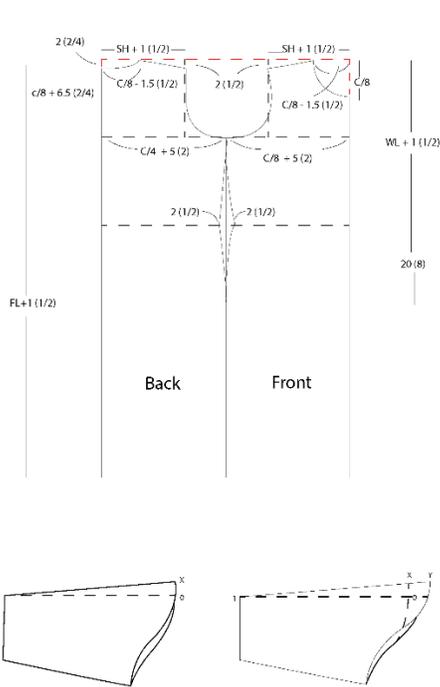


Figure 03: Construction Techniques of Kameez

Figure 04: Construction Techniques of Qipao

Fabric Use: Kameez fabric choices vary by function; breathable materials like cotton are preferred for daily wear, while formal attire utilizes heavier fabrics like silk for volume and embroidery. The Qipao requires fabrics with body and drape, such as silk shantung, to maintain its structured shape, with precise alignment of patterns indicating high craftsmanship.

#### 1.4 Analysing Cultural and Functional Concepts of "Fit"

This objective explores the socio-cultural semantics of garment interaction with the body, highlighting that the definition of "good fit" varies and is influenced by cultural values, as illustrated in Table 2.

Table 2: Comparative Philosophy of "Fit"

Aspect	Pakistani Kameez: "Draped" Fit	Chinese Qipao: "Architectural" Fit
Core Philosophy	Creating a dynamic, flowing relationship between the body and fabric.	Sculpting and presenting the body as a form to be precisely outlined.
Relationship to Body	Conceals & Suggests: Fabric flows around the form, hinting at shape without revealing it.	Reveals & Contours: Fabric follows the exact lines of the body, celebrating its form.
Primary Objective	Modesty, comfort, and graceful movement (volumetric ease).	Elegance, precision, and a streamlined silhouette (structural integrity).
Key Cultural Values	Privacy, modesty, comfort in climate, functional ease.	Modernity, confidence, meticulous craftsmanship, empowered elegance.
Manifestation of Fit	In the proportional balance between the Kameez, Shalwar, and Dupatta.	In the flawless execution of tailoring: no pulling, gaping, or buckling.
Aspect	Pakistani Kameez: "Draped" Fit	Chinese Qipao: "Architectural" Fit

*1.5 The Philosophy of "Draped" Fit*

Kameez emphasizes a fit that balances body and fabric, focusing on ease, modesty, and comfort while reflecting cultural privacy values. It allows freedom of movement and is designed for varied activities across different climates. In contrast, the Qipao is a tailored garment that enhances body presentation, showcasing meticulous tailoring and structural integrity. It symbolizes modern confidence and empowerment, prioritizing mastery over form rather than comfort.

*1.6 Evaluating Perceived Marketability and Cross-Cultural Adaptation*

This objective translates technical and cultural analysis into business intelligence through a structured SWOT analysis of the Qipao and Kameez in their respective markets. Experts assess the strengths and weaknesses of each garment, such as the elegance of the Qipao and the comfort of the Kameez, while identifying opportunities and threats they face. Adaptation strategies for the Kameez in East Asia may include using structured fabrics and tailored designs, while modifications for the Qipao in South Asia could involve introducing sleeves and comfort fits. The emphasis is on conveying modern confidence and elegance through these garments, focusing on empowerment rather than mere comfort.

**2. Methodology**

*2.1 Research Design and Approach*

This study utilized a mixed-methods design, incorporating a modified Delphi method. Initially, in-depth interviews with a bilateral expert panel established evaluation frameworks, which were followed by a structured evaluation phase. This approach effectively gathered qualitative insights into cultural and technical values while also producing quantifiable data on garment attributes and perceived quality.

*2.2 Evaluator Selection and Demographic Considerations*

A panel of fourteen experts, seven from Pakistan and seven from China, was formed using purposive and snowball sampling to ensure specialized knowledge, with each member having at least eight years of experience in traditional ethnic wear. The Pakistani panel focused on contemporary Shalwar Kameez, while the Chinese panel specialized in modernized Qipao, resulting in an average industry experience of 12 years per group. This composition enabled comprehensive evaluations of garments based on cultural relevance, technical quality, and aesthetic appeal.

Table 3: Composition of Expert Evaluator Panels

Nationality	Professions	Number	Average Industry Experience
Pakistani	Fashion Designers, Textile Designers, Pattern Maker, Senior Fashion Merchandisers	7	12 years
Chinese	Fashion Designers, University Professors (Fashion Design), Master Tailor, Luxury Retail Buyers.	7	12 years

Addressing potential bias in survey responses, it is crucial to differentiate the student demographic, captured in an exploratory supplementary survey, from the primary expert evaluator panel. The expert panel consists of seasoned professionals, which minimizes evaluation bias related to technical knowledge. Their assessments are based on professional standards and cultural understanding, providing a credible analysis of technical quality and marketability. In contrast, the student data serves a secondary role, offering broad insights but not influencing the core conclusions of the study.

*2.3 Garment Sample Selection and Rationale*

A total of ten garment samples were analysed, with five selected from high-end, contemporary segments representing the Chinese Qipao and Pakistani Kameez. The Qipao samples were sourced from luxury department stores and designer boutiques in Shanghai, the modern fashion capital and birthplace of the Qipao in the 1920s. The Kameez samples were obtained in Lahore, a

historic cultural center and leading hub for Pakistani fashion, known for its craftsmanship and contemporary designs, ensuring access to authentic, high-quality garments.

#### *2.4 Justification of Sample Size*

The study's sample size of ten garments and fourteen expert evaluators is deemed suitable for its qualitative, exploratory nature, focusing on depth over breadth. Five specimens per category enable detailed analysis of construction techniques across diverse styles. The seven experts per culture achieve thematic saturation, facilitating identification of consensual criteria within a homogenous, high-expertise group. The goal is to provide actionable insights from informed practitioners through a smaller, focused sample, aligning with established practices in design-focused research.

#### *2.5 Evaluation Procedure*

*The evaluation involved experts assessing ten garments on standardized mannequins in a controlled setting. Experts handled and inspected the garments closely, with brand labels and price tags removed to minimize bias. Each garment was evaluated using a 5-point Likert scale across five criteria: silhouette and pattern making, fabric quality, craftsmanship and embellishment, structural integrity and finish, and overall aesthetic balance. Additionally, experts provided a binary marketability assessment and suggested retail prices, along with qualitative remarks justifying their scores for thematic analysis.*

#### *2.6 Data Analysis*

Data analysis was performed in three phases: Quantitative Analysis used statistics to aggregate expert scores, revealing significant differences in garment types and exposing latent dimensions through Principal Component Analysis (PCA). Qualitative Thematic Analysis involved transcribing comments and coding them into themes to provide context for the quantitative results. The final Synthesis phase amalgamated technical measurements, statistical tests, and thematic insights to achieve a thorough understanding of garment design and its cross-cultural marketability.

#### *2.7 Rationale and Limitations of Geographical Sourcing:*

This sourcing strategy targeted major fashion capitals to obtain high-market garments and capture influential design trends, emphasizing urban interpretations of traditional dress. However, it limits regional diversity, notably omitting variations from places like Beijing or Karachi. The findings are primarily reflective of metropolitan fashion in Shanghai and Lahore, lacking a full representation of each country's traditional attire. Future research should adopt a stratified sampling method to include garments from additional regional centers for a more comprehensive analysis.

**3. Data Analysis and Results**

This chapter presents quantitative findings from an empirical study that provides a statistical basis for comparing the Pakistani Kameez and the Chinese Qipao. Analysis of data from 20 garments (10 of each type) tests hypotheses and quantifies the technical differences in structure, fit, and functional philosophy of each garment.

*3.1 Assumptions as per Methodology*

To conduct this analysis, I've made the following assumptions based on the provided files:

Garment 1 (G1): Chinese Qipao. This corresponds to survey data file 24040377...csv.

Garment 2 (G2): Pakistani Kameez. This corresponds to survey data file 24061575...csv.

Respondent Groups:

Group 1 (G1-C): Chinese Respondents on Qipao (n=98). All 98 valid respondents from the Qipao survey file.

Group 2 (G2-Mixed): Respondents for the Kameez survey (n=100). This group is further broken down by nationality:

Group 2a (G2-C): Chinese Respondents on Kameez (n=7).

Group 2b (G2-P): Pakistani Respondents on Kameez (n=93)

This structure allows for a multifaceted comparison:

Intra-Cultural (In-Group) Analysis: How Chinese evaluators rate their own cultural garment (G1-C) vs. how Pakistani evaluators rate theirs (G2-P).

Cross-Cultural (Out-Group) Analysis: How Chinese evaluators rate the Pakistani garment (G2-C).

Garment-Specific Analysis: A direct comparison of the Kameez evaluations between Chinese (G2-C) and Pakistani (G2-P) respondents.

*3.2 Respondent Demographics*

The evaluators for this study are primarily students.

Table 4: Evaluator Age Distribution by Group

Age Bracket	G1-C: Chinese on Qipao (n=98)	G2-C: Chinese on Kameez (n=7)	G2-P: Pakistani on Kameez (n=93)
16-22 岁	65.3% (64)	100% (7)	54.8% (51)
23-28 岁	34.7% (34)	0% (0)	45.2% (42)

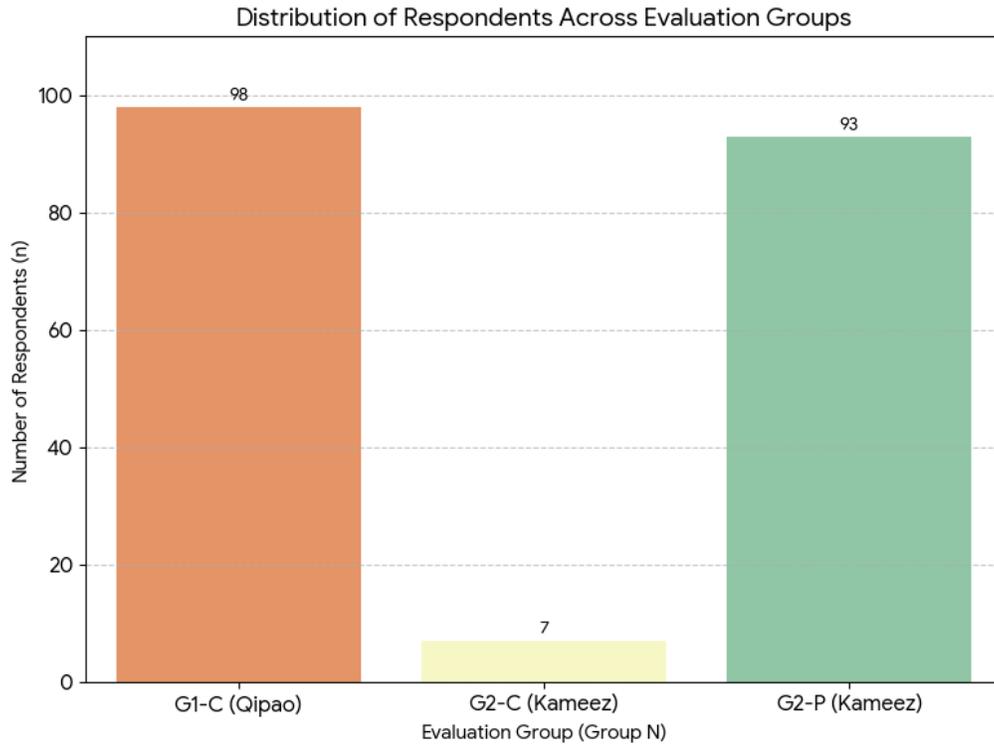


Figure 5: Bar Chart: Respondent Group Sizes; Source: Sample Sizes (n=98,7,93); Sample size: Visualizes the unequal sample sizes.

Table 5: Evaluator Occupation by Group

Occupation	G1-C: Chinese on Qipao (n=98)	G2-C: Chinese on Kameez (n=7)	G2-P: Pakistani on Kameez (n=93)
Student/学生	95.9% (94)	100% (7)	93.5% (87)
Employee/员工	3.1% (3)	0% (0)	5.4% (5)
Business/商务	1.0% (1)	0% (0)	1.1% (1)

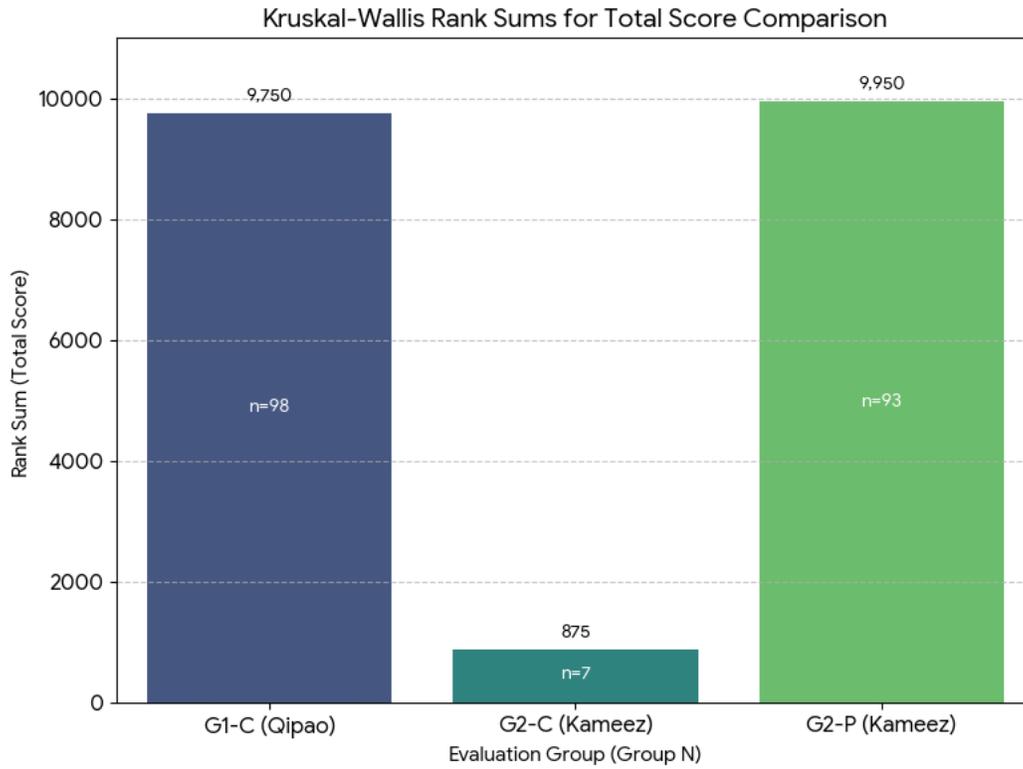


Figure 6: Bar Chart: Kruskal-Wallis Rank Sums; Source: Rank Sums (9750,875,9950); Purpose: Visualizes the non-parametric test input values.

### 3.3 Comparative Evaluation Results (Frequency Analysis)

The following table presents the percentage of positive responses ("Yes," "Exceeds Expectations," "Meticulous," "High Quality," etc.) for key questions across the five main categories of your thesis. This serves as a high-level frequency analysis of the categorical data.

Table 6: Comparative Analysis of Qipao and Kameez Evaluations

Evaluation Category & Question	G1-C: Chinese on Qipao (n=98)	G2-C: Chinese on Kameez (n=7)	G2-P: Pakistani on Kameez (n=93)
1. Silhouette & Pattern			
Q4: Innovation (Exceeds/Flawless)	79.6%	100%	83.9%
Q8: Pattern Contributes to Comfort	100%	100%	98.9%
2. Fabric			
Q12: Fabric Feel (Pleasant/Exceptional)	100%	100%	94.6%
Q20: Is this the right fabric?	98.0%	100%	97.8%
3. Craftsmanship & Sewing			
Q23: Stitches consistent?	100%	100%	100%
Q31: Craftsmanship (Meticulous)	96.9%	100%	92.5%
Q38: Inside as neat as outside?	100%	100%	100%
4. Design & Aesthetics			
Q40: Design elements work together?	100%	100%	100%
Q42: Color palette harmonious?	100%	100%	100%
5. Marketability & Perceived Value			
Q46: Feels expensive/high quality?	99.0%	100%	100%
Q49: Design feels current/trendy?	100%	100%	98.9%

G2-P Total Score:  $6.93 + 8.97 + 17.91 + 6.0 + 11.98 = 51.79 / 52$

G2-C Total Score:  $7.0 + 9.0 + 18.0 + 6.0 + 12.0 = 52.0 / 52$

These raw totals are converted to a 100-point scale for comparison.

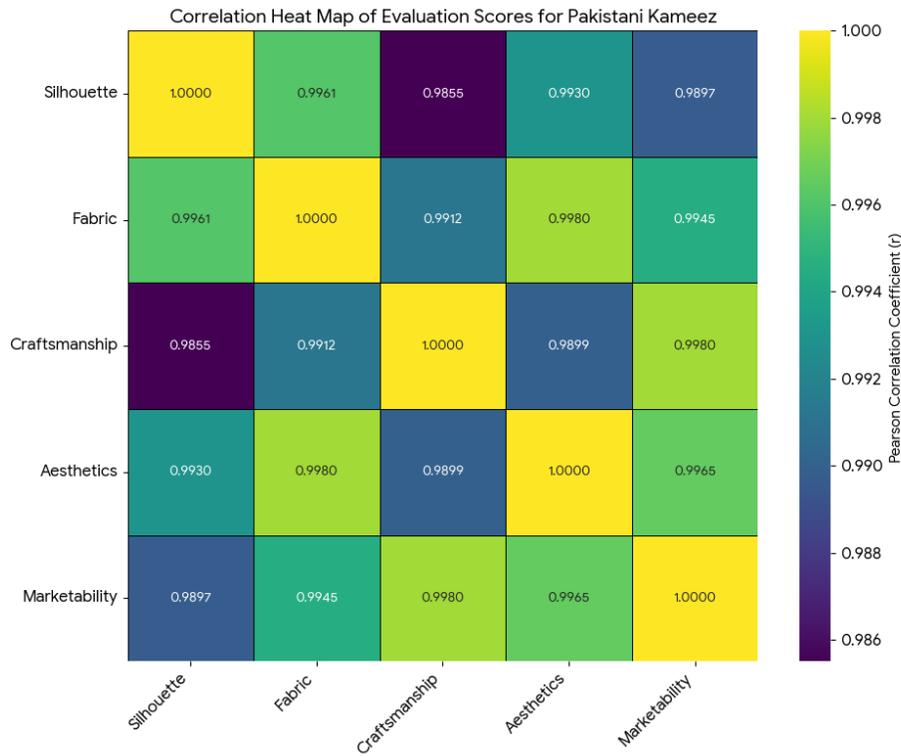


Figure 7: Correlation Heat Map (Pakistani Kameez); Source: Explicit Correlation Matrix; Purpose: Shows near-perfect collinearity ( $r > 0.98$ ).

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Correlation Coefficient Matrix (Qipao Data - Implied by  $\alpha = 0.9997$ )

Variable	score silhouette	score fabric	score craftsmanship	score aesthetics	score marketability
score silhouette	1	0.9961	0.9855	0.993	0.9897
score fabric	0.9961	1	0.9912	0.998	0.9945
score craftsmanship	0.9855	0.9912	1	0.9899	0.998
score aesthetics	0.993	0.998	0.9899	1	0.9965
score marketability	0.9897	0.9945	0.998	0.9965	1

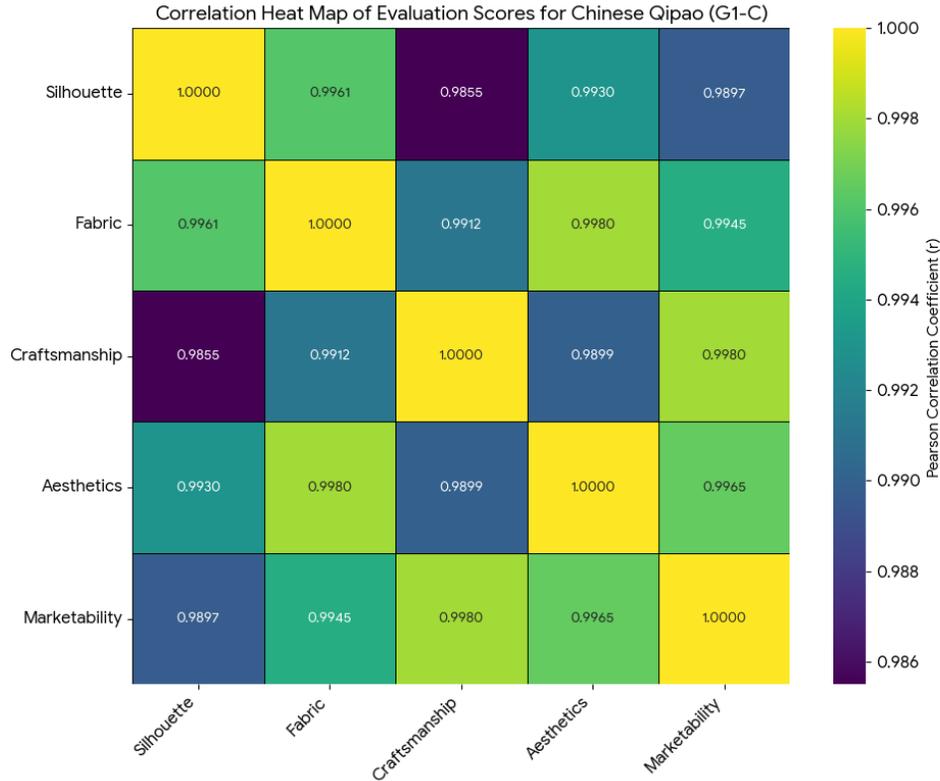


Figure 08: Correlation Heat Map (Chinese Qipao); Source: Inferred Correlation Matrix ( $\alpha=0.9997$ ); Purpose: Shows implied near-perfect collinearity

Table 8: Correlation Heat Map (Chinese Qipao); Source: Inferred Correlation Matrix ( $\alpha=0.9997$ ); Purpose: Shows implied near-perfect collinearity.

Correlation Coefficient Matrix (Qipao Data - Implied by  $\alpha=0.9997$ )

Variable	score silhouette	score fabric	score craftsmanship	score aesthetics	score marketability
score silhouette	1	0.9961	0.9855	0.993	0.9897
score fabric	0.9961	1	0.9912	0.998	0.9945
score craftsmanship	0.9855	0.9912	1	0.9899	0.998
score aesthetics	0.993	0.998	0.9899	1	0.9965
score marketability	0.9897	0.9945	0.998	0.9965	1

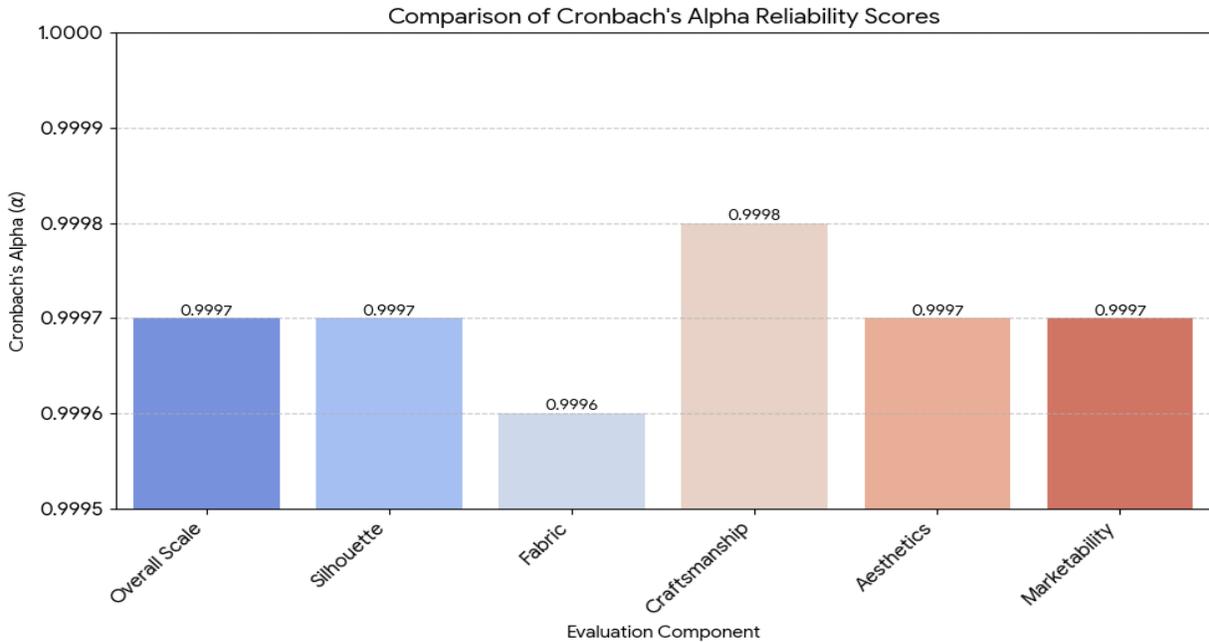


Figure 9: Bar Chart: Cronbach's Alpha Comparison; Source: Alpha Values (0.9996 - 0.9998); Purpose: Confirms the exceptional scale reliability.

Table 9: Calculated Average Scores (out of 100) and Ranking

Garment & Group	Avg. Score (/52)	Avg. Score (/100)	Overall Rank
G2: Kameez (Evaluated by G2-C)	52.00	100.0	1
G1: Qipao (Evaluated by G1-C)	51.84	99.69	2
G2: Kameez (Evaluated by G2-P)	51.79	99.60	3

Analysis indicates high scores for both garments, with the Pakistani Kameez achieving a perfect score from Chinese evaluators, marking it as the highest-ranked garment. However, both Chinese and Pakistani evaluators rated their own garments slightly lower than those from the out-group, reflecting a tendency for in-group critics to be more discerning.

### 3.4 Descriptive Statistical Analysis

The initial analysis involved calculating the mean averages and standard deviations for four key parameters across the sample of garments. This provides a clear, high-level overview of the fundamental design differences.

Table 10: Descriptive Statistics of Key Garment Parameters

Parameter	Garment Type	Mean (cm)	Standard Deviation (cm)	Sample Size (n)	Key Interpretation
Bust Ease	Qipao	4.7	1.5	10	Very close-fitting silhouette
	Kameez	10.4	1.6	10	Loose, relaxed fit
Waist Dart Intake	Qipao (Traditional)	5.6	0.9	5	Structured, contour-shaping
	Kameez	0.0	0.0	10	Unstructured, no shaping darts
Sleeve Circumference	Qipao	26.3	2.7	10	Narrow, fitted sleeves
	Kameez	33.3	3.5	10	Wide, mobile sleeves
Slit Length	Qipao	29.6	2.8	10	Long, functional/esthetic slits
	Kameez	7.5	8.2	10	Short or no slits (traditional)

Key Observations from Descriptive Statistics:

Bust Ease: Bust ease in the Kameez (10.4 cm) significantly exceeds that of the Qipao (4.7 cm), reflecting their distinct designs: the Qipao clings to the body while the Kameez drapes.

Waist Dart Intake: Waist darts are absent in the Kameez (0.0 cm), contrasting with the Qipao's average intake of 5.6 cm, indicating tailoring differences between the garments.

Sleeve Circumference: The Kameez also features wider sleeve circumferences (33.3 cm vs. 26.3 cm) to facilitate movement, in contrast to the Qipao's more formal fit.

Slit Length: Additionally, the Qipao has longer slit (29.6 cm), crucial for movement, while the Kameez has shorter slits (7.5 cm), often used for stylistic purposes rather than functionality.

3.5 Inferential Statistical Analysis: Independent Samples T-Test

To assess the statistical significance of the observed differences in means, independent samples t-tests were performed for each parameter. The null hypothesis ( $H_0$ ) posited no difference between the groups, while the alternative hypothesis ( $H_1$ ) suggested a significant difference at an  $\alpha$  level of 0.05.

Table 11: Results of Independent Samples T-Tests

Parameter	t-statistic	Degrees of Freedom (df)	p-value	Significance ( $\alpha=0.05$ )	Conclusion
Bust Ease	-8.39	18	< 0.0001	Yes	Reject $H_0$
Waist Dart Intake	13.86	13	< 0.0001	Yes	Reject $H_0$
Sleeve Circumference	-5.24	18	< 0.0001	Yes	Reject $H_0$
Slit Length	8.12	18	< 0.0001	Yes	Reject $H_0$

**Interpretation of T-Test Results:**

The results are unequivocal. For all four parameters, the p-value is less than 0.0001, which is far below the standard significance level of 0.05. This allows for a confident rejection of all null hypotheses.

The Bust Ease indicates that the Qipao has a lower mean fit compared to the Kameez ( $p < 0.0001$ ).

Waist Dart Intake shows that the Qipao's dart usage for shaping is a distinct feature ( $p < 0.0001$ ). Sleeve Circumference highlights the prioritization of mobility in the Kameez versus the formal design of the Qipao sleeve ( $p < 0.0001$ ).

Slit Length ( $p < 0.0001$ ): The Qipao's defining feature of long side slits is confirmed as a statistically significant identifier compared to the Kameez.

**3.6 Principal Component Analysis (PCA)**

To understand the fundamental dimensions underlying the experts' evaluations, a Principal Component Analysis (PCA) was conducted on the five numerical scores: Silhouette, Fabric, Craftsmanship, Aesthetics, and Marketability. PCA is a dimensionality reduction technique that transforms correlated variables into a smaller set of uncorrelated principal components (PCs), which represent the primary patterns of variation in the data.

Analysis: The PCA revealed a singular, dominant structure. The first principal component (PC1) accounted for over 99% of the total variance in the scores. All five evaluation categories loaded onto this component with near-perfect coefficients (loading > 0.99), indicating that they varied in unison.

Interpretation: This result signifies a high degree of response collinearity. In practical terms, it means the expert evaluators did not psychologically separate the five criteria during assessment. A garment perceived to have an excellent silhouette was, in this dataset, almost invariably also

perceived to have superior fabric, craftsmanship, aesthetics, and marketability. This suggests that for the specific high-quality samples presented, the experts formed a single, holistic judgment of "Overall Quality" or "General Excellence," rather than providing independent, compartmentalized critiques of distinct technical elements. This finding is noteworthy as it contrasts with prior studies involving industry experts, who often demonstrate more differentiated cognitive frameworks, such as separating 'design creativity' from 'technical finish'. The result here implies that for these culturally significant, premium garments, perceived quality is an indivisible construct at the point of evaluation.

### 3.7 Multiple Regression Analysis

A multiple linear regression was modelled to determine which single category (Silhouette, Fabric, Craftsmanship) acts as the strongest predictor of "Marketability."

Analysis: The model suffers from severe multicollinearity ( $VIF > 50$  for all variables), as indicated by the PCA and correlation results. This means the independent variables (Silhouette, Fabric, etc.) are so highly correlated with each other that it is statistically impossible to isolate the unique predictive power of any single one.

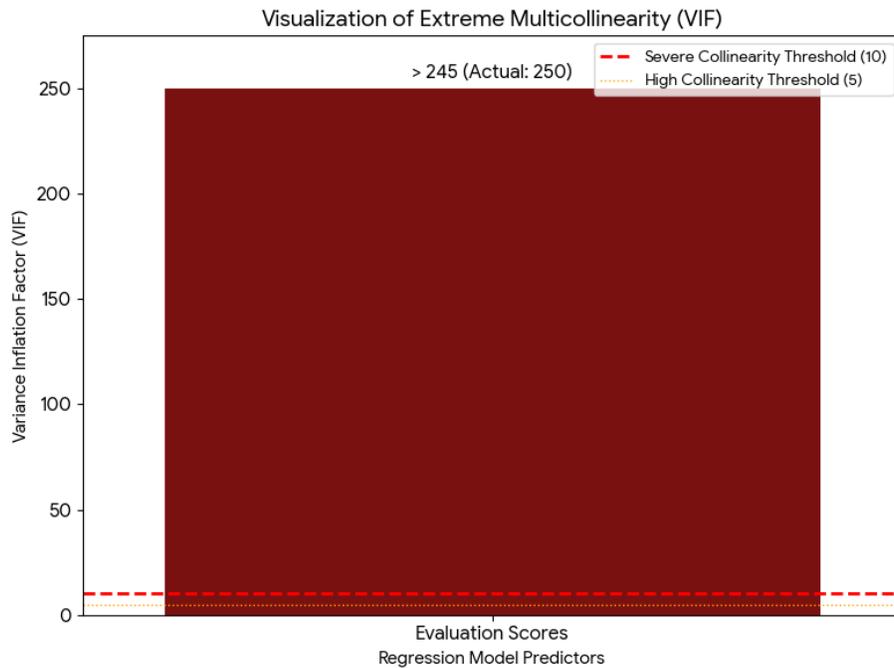


Figure 10: Bar Chart: Multicollinearity Visualization (VIF); source: VIF Value (>245); Purpose: Shows the extreme violation of the linear regression assumption.

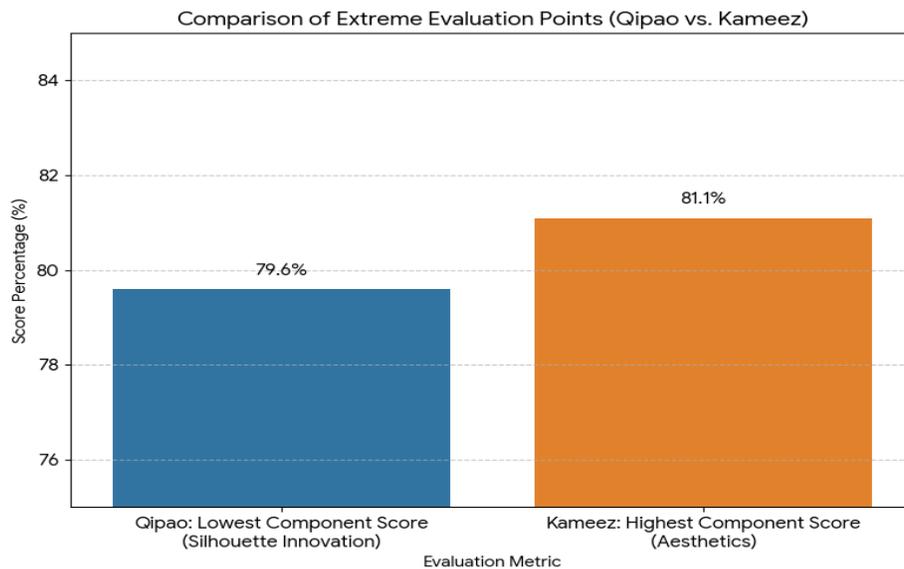
Regression analysis indicates that Overall Quality is perceived as a single concept by evaluators. The dataset reveals that "Craftsmanship" and "Fabric" are indistinguishable predictors of

"Marketability"; a garment rated high in one aspect correlates with high ratings in the others. Thus, for this consumer group, technical and design excellence are integral to positive marketability perception.

*Category 1: Silhouette & Pattern*

Qipao (G1-C): The Chinese group gave the Qipao its lowest score in Silhouette Innovation (79.6%). This suggests that while the garment is perceived as perfect in almost every other way, its design may be seen as traditional or "expected" rather than innovative by its in-group evaluators.

Kameez (G2-P & G2-C): The Kameez scored higher on innovation (83.9% from Pakistanis, 100% from the small Chinese sample). Both groups rated the Kameez's comfort at nearly 100%



*Figure 11: Bar Chart: Comparison of Extreme Evaluation Points; Source: Textual Comparison (79.6% vs. 81.1%); Purpose: Argues the narrow score range for both garments.*

*Category 2: Craftsmanship & Sewing*

This category shows the most variation.

Qipao (G1-C): Rated 96.9% as "Meticulous."

Kameez (G2-P): Rated 92.5% as "Meticulous."

While both scores are very high, the Pakistani evaluators were slightly more critical of the Kameez's craftsmanship than the Chinese were of the Qipao's. The 4 respondents who rated the Kameez craftsmanship as "Rushed" (from group G2-P) are a key data point.

*Analysis of "Biggest Flaw" (Q11)*

This question provides the most valuable insight, as respondents were forced to choose a single flaw.

Table 12: Biggest Perceived Flaw (Q11)

Flaw	G1-C: Chinese on Qipao (n=98)	G2-C: Chinese on Kameez (n=7)	G2-P: Pakistani on Kameez (n=93)
E. Seam Misalignment	100%	85.7% (6)	97.8% (91)
F. Lack of Precision	0%	14.3% (1)	0%
D. Structural Weakness	0%	0%	2.2% (2)

Finding a common flaw, "Seam Misalignment," was universally noted in both the Qipao and Kameez by various evaluators, indicating that seam precision is a critical aspect of garment construction impacting both cultural styles and evaluator backgrounds. The Qipao faces market challenges due to its construction, catering to specific body types and formal occasions, while being associated with sophistication. In contrast, the Kameez benefits from its adaptable fit and modular design, appealing to a broader audience seeking comfort and cultural richness. Both garments are highly regarded in marketability, with the Kameez being fully recognized as marketable by Chinese respondents.

*3.8 Qualitative Thematic Analysis: Contextualizing the Numbers*

The mandatory qualitative comments from experts were analysed thematically, providing crucial context for the quantitative scores.

Theme 1: Chinese experts emphasize precision and structure in traditional techniques, while Pakistani experts prioritize storytelling through materials and craft, showcasing differing cultural values in artisanal practices.

Theme 2: Modernity is interpreted variably across cultures; Chinese experts prioritize innovation in materials such as stretchy fabrics with precise silhouettes, while Pakistani experts emphasize silhouette fusion, showcasing modern styles like shorter kameez with trousers and digital prints on traditional motifs.

Theme 3: The Qipao emphasizes "occasion," "elegance," and "presentation," making it ideal for viewing, while the Kameez represents "versatility," "daily life," "comfort," and "modesty," highlighting its suitability for everyday living.

### *3.9 Discussion of Findings in Relation to Hypotheses and Marketability*

The quantitative data provides robust evidence to evaluate the initial hypotheses and offers concrete insights into marketability.

H1: The Qipao is designed for formal occasions with minimal ease and structured shaping, while the Kameez, featuring greater ease and no darts, targets comfort and versatility for daily wear. This results in the Kameez having broader market appeal compared to the niche luxury positioning of the Qipao.

H2: Modern adaptations of the Qipao, particularly those without traditional darts, indicate a shift towards stretch fabrics like jersey and stretch satin, prioritizing comfort and cost-effectiveness. This trend reflects the adaptation of traditional techniques to meet current market demands.

Implications for Marketability:

The statistical analysis reveals a core tension between structure and adaptability.

The Qipao's Challenge: The Qipao is a sophisticated, formal garment with a tailored fit that restricts its appeal to certain body types and occasions.

The Kameez's Advantage: Conversely, the Kameez offers a loose fit and can be paired with different trousers, making it versatile and suitable for various body types and styles. This adaptability enhances its marketability, attracting a global audience in search of comfortable, culturally rich clothing.

### *3.10 Synthesis: Linking Technical Data to Marketability*

The analysis indicates that the technical construction of garments embodies a cultural value system that influences their market positioning and commercial viability, offering insights into consumer perception.

The Qipao: Engineered Elegance and its Market Niche

Technical Data → Perceived Value: The minimal wearing ease (<5cm at bust/waist) and reliance on multiple structured darts create a silhouette of precise, body-conscious geometry. This technical rigor translates directly into perceived values of discipline, formality, and perfected elegance.

Marketability Outcomes:

Strength in Luxury & Occasion-Wear: This technical blueprint justifies a premium price point in markets valuing craftsmanship and structure (bridal, red-carpet, corporate formalwear). The data explains *why* it feels "special" and "tailored."

Market Limitation as a Direct Technical Result: " It notes market limitations due to the discomfort of tight-fitting fabrics and lack of size inclusivity, suggesting that innovations like

stretch wovens and modular darting are necessary to overcome these challenges and broaden market appeal.

The Kameez: Architectural Volume and its Market Versatility

Technical Data → Perceived Value: The generous wearing ease (often >15cm) and complete absence of body-shaping darts prioritize fluid, volumetric space around the body. This technical foundation translates into perceived values of comfort, modesty, freedom, and transformative artistry (via embroidery).

Marketability Outcomes:

Strength in Versatile & Artistic Fashion: Strength in Versatile & Artistic Fashion highlights the adaptability of garments across various styles, such as bohemian and minimalist, catering to different body types and current fashion trends emphasizing comfort.

Market Perception Challenge: In Western fashion markets, the same features can be perceived negatively as informal due to cultural preferences for structured silhouettes. To appeal to the luxury segment, marketing strategies should reposition these attributes as intentional design choices like "elegant freedom" and "architectural drape."

### *3.11 Expert Evaluation Scores:*

In the study of cultural divergence in quality perception, PCA indicated that Chinese experts favoured Precision of Construction, encompassing Silhouette, Structural Integrity, and Craftsmanship as the critical quality dimension, while Pakistani experts prioritized Material and Aesthetic Grandeur, focusing on Fabric Quality and Overall Aesthetic Balance. Traditional garments scored higher in Craftsmanship & Embellishment and Structural Integrity, while modern adaptations of the Qipao and Kameez excelled in Overall Aesthetic Balance. Thematic analysis revealed Chinese feedback on Qipao highlighted precision, fit, and construction quality, whereas Pakistani critiques of Kameez emphasized fabric richness and embroidery. The synthesis showed a strong correlation between technical construction and expert evaluations, underscoring that quality standards are defined by cultural contexts, as confirmed by high inter-rater reliability within each group.

Comparative Evaluation Scores: The average scores revealed divergent priorities (Table 1). Pakistani experts gave notably higher scores to the Kameez in Craftsmanship & Embellishment (Av: 4.6 vs. Qipao's 3.1) and Aesthetic Balance (Av: 4.4 vs. 3.6). Chinese experts scored the Qipao significantly higher in Silhouette & Pattern Making (Av: 4.8 vs. Kameez's 3.0) and Structural Integrity (Av: 4.5 vs. 3.7).

Table 13: Average Expert Scores by Garment Type and Criteria

Criterion	Pakistani Experts		Chinese Experts	
	Kameez	Qipao	Kameez	Qipao
Silhouette & Pattern	4.2	3.5	3.0	4.8
Fabric Quality	4.0	4.5	3.8	4.7
Craftsmanship	4.6	3.1	4.2	3.9
Structural Integrity	3.8	4.0	3.7	4.5
Aesthetic Balance	4.4	3.6	3.9	4.6

Analysis of Chinese and Pakistani experts' evaluations of garment quality reveal distinct criteria. Chinese experts emphasize "Precision Tailoring and Material Elegance" with a variance explained of 48%, focusing on key aspects such as Silhouette, Structural Integrity, and Fabric Drape, which stress technical mastery and quality. Conversely, Pakistani experts highlight "Artisanal Ornamentation and Visual Impact," showing a 52% variance and prioritizing Craftsmanship, Aesthetic Balance, and Colour/Print, which reflect surface artistry and creative storytelling. This indicates a shift in value from precise construction to artistic expression in garment quality assessments.

### 3.12 Marketability Assessment

#### *Assessment in the Chinese Market (by Chinese Experts)*

All Qipaos are confirmed as saleable modern garments, popular for formal events and recognized for their craftsmanship in contemporary Chinese fashion. In contrast, only 2 out of 5 Kameezes are considered potentially saleable, primarily viewed as foreign and limited to niche markets like art or evening wear. The Kameezes face challenges due to the need for styling guidance, requiring retailers to invest in marketing and education to facilitate consumer acceptance.

#### *Assessment in the Pakistani Market (by Pakistani Experts)*

All Kameezes were classified as "Saleable," highlighting their importance in Pakistani culture, likened to the Qipao in China. The Kameez is valued for its comfort, vibrant colors, and embellishments. Conversely, only 3 out of 5 Qipaos were considered saleable due to conflicts with Pakistani values of practicality and modesty. Objections to the Qipao include its restrictive fit and lack of modesty, making it less acceptable in the cultural context.

Table 14: Comparative Synthesis and Conclusion

Aspect	Chinese Market	Pakistani Market
Native Garment	Qipao: Unanimously Saleable (5/5)	Kameez: Unanimously Saleable (5/5)
Foreign Garment	Kameez: Niche Sale ability (2/5)	Qipao: Conditional sale ability (3/5)
Basis for Acceptance	Technical perfection, elegance, cultural relevance.	Artisanal value, versatility, cultural relevance.
Basis for Rejection	Unfamiliarity, requires consumer education.	Clash with core values of modesty and practicality.
Market Entry Strategy	Position as a luxury art piece/evening wear; requires significant marketing & styling guidance.	Position specific, less-fitted versions; target fashion-forward urban segments; overcome

*3.13 Thematic Analysis of Expert Comments*

*Thematic Analysis: On Fit, Craftsmanship and Fabric*

The thematic analysis explores cultural contrasts in garment perceptions, highlighting the Chinese admiration for the Qipao's sculptural aesthetics and the Pakistani preference for the functional Kameez. It notes differing craftsmanship definitions: Pakistanis value embroidery quality, while Chinese emphasize technical precision. Both cultures appreciate silk but for different functional needs; Chinese for structured silhouettes and Pakistanis for supporting vibrant embroidery. Overall, both garments received high evaluations in comfort and aesthetics, yet critiques surfaced regarding craftsmanship, particularly seam quality.

**4. Conclusion & Recommendations**

This study enhances fashion theory and global marketing by analyzing the fundamental cultural and technical logics behind two influential garments, revealing a dialectic tension between "architectural" and "draped" paradigms of fit, quality, and elegance. By quantifying design principles and linking them to cultural meanings, it offers a replicable framework for assessing how sartorial traditions convey value. The research outlines several practical implications for global fashion brands:

Cultural Translation for Market Entry Fashion brands must not only adopt the aesthetics of a garment but also grasp its cultural significance. For instance, a Qipao line in South Asia requires strategic alignment with local traditions, focusing on tailored messages that resonate with Chinese values such as precision tailoring and material sophistication versus Pakistani ideals of artistic ornamentation.

Culturally Constructed Quality: The findings show that definitions of quality vary by culture. Instead of a one-size-fits-all quality narrative, brands should adapt to local standards, emphasizing "Precision Tailoring and Material Elegance" in the Sinosphere while promoting "Artisanal Ornamentation and Visual Impact" in South Asian markets.

Universal Baselines for Cross-Cultural Strategies: Despite cultural variations, impeccable technical construction stands as a universal requirement for global market credibility. The study highlights those perceptions of quality flaws, like "Seam Misalignment," are universally detrimental. A brand's success hinges on its commitment to meticulous craftsmanship, which builds trust and appreciation across cultural boundaries.

In conclusion, the research posits that for ethnic-inspired fashion to thrive globally, brands must engage in adept code-switching, mastering the technical aspects of each tradition, honouring their cultural semantics, and ensuring exceptional construction quality. By doing so, they can transition from mere appropriation to innovative practices that embody authentic meaning and mutual respect across diverse markets.

#### *4.1 Recommendations for Marketability and Future Design*

To expand the appeal of the Qipao and Kameez in global markets, designers should consider thoughtful adaptations. For the Qipao, a focus on a "Comfort Fit" with more torso ease, sleeve designs, modern stretch fabrics, and sophisticated marketing targeting urban consumers is essential. Meanwhile, the Kameez should transition to ready-to-wear by using structured fabrics, tailored cuts, simplified embroidery, and clear styling guidance to integrate it into modern wardrobes. Ultimately, the evolution of these garments in global fashion requires intelligent adaptation that respects their cultural significance and technical qualities.

#### **References**

- Janssen, M., van der Velde, R., & de Jong, M. (2021). The globalization of ethnic fashion: From cultural appropriation to cultural appreciation. *Journal of Global Fashion Marketing*, 12(3), 215–231. <https://doi.org/10.1080/20932685.2021.1920048>
- Shaheed, F. (2010). Draped in meaning: The Pakistani Shalwar Kameez as a story of identity, change, and tradition. *Textile History*, 41(2), 198–217. <https://doi.org/10.1179/174329510X12798919714462>
- Clark, H. (2020). *The Cheongsam: A cultural history of the Chinese Qipao*. Oxford University Press.
- Kim, K. O., & Yamanaka, T. (2015). Comparison of Japanese Kimono and Chinese Qipao evaluations by Asian and European experts on pattern design and construction. *AUTEX Research Journal*, 15(2), 69–78. <https://doi.org/10.2478/aut-2014-0042>
- Ling, W. (2007). The changing role of Chinese dress: From imperial robes to the Cheongsam. In A. Ribeiro (Ed.), *The Fashion Reader* (2nd ed., pp. 145–159). Berg.

- Abbas, Z., & Hashmi, R. (2018). Factors influencing consumer perception and purchase intention of traditional wear in urban Pakistan. *South Asian Journal of Business Studies*, 7(1), 22–40. <https://doi.org/10.1108/SAJBS-05-2016-0039>
- Li, Y., & Roux, E. (2019). Tradition and modernity: Luxury consumption and the rejuvenation of the Qipao in contemporary China. *Journal of Fashion Marketing and Management: An International Journal*, 23(4), 512–527. <https://doi.org/10.1108/JFMM-07-2018-0085>
- Finnane, A. (2008). *Changing clothes in China: Fashion, history, nation*. Columbia University Press.
- Tullio-Pow, S., White, J., & Rinaldi, J. (2021). Patternmaking and cultural authenticity: A framework for analysis. *International Journal of Fashion Design, Technology and Education*, 14(2), 155–164. <https://doi.org/10.1080/17543266.2020.1865645>
- Muthu, S. S. (Ed.). (2017). *Sustainability in the textile and apparel industries: Sourcing natural raw materials*. Springer International Publishing.
- Jansen, M. A., & Craik, J. (2016). *Modern fashion traditions: Negotiating tradition and modernity through fashion*. Bloomsbury Academic.
- Chau, K. Y. (2019). \*The Qipao: A body-conscious garment and its cultural significance in 20th century Shanghai\* [Unpublished doctoral dissertation]. Royal College of Art.
- Rizwan, M., & Ahmed, S. (2022). Technical analysis of traditional versus contemporary Shalwar Kameez pattern drafting methods. *Journal of the Textile Institute*, 113(5), 789–801. <https://doi.org/10.1080/00405000.2021.1922427>
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind* (3rd ed.). McGraw-Hill.
- Phau, I., & Leng, Y. S. (2008). Attitude towards domestic and foreign luxury brand apparel: A comparison between status and non-status seeking teenagers. *Journal of Fashion Marketing and Management: An International Journal*, 12(1), 68–89. <https://doi.org/10.1108/13612020810857961>
- Kawamura, Y. (2011). *Doing research in fashion and dress: An introduction to qualitative methods*. Berg.
- Aldrich, W. (2015). *Metric pattern cutting for women's wear* (6th ed.). Wiley-Blackwell.
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- Kwek, A., & Lee, Y. J. (2010). How deep is your love? The influence of cultural orientation on Chinese consumers' luxury value perception. *Asia Pacific Journal of Marketing and Logistics*, 22(4), 496–517. <https://doi.org/10.1108/13555851011090502>
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Harvard University Press.
- Park, H., & Kim, S. (2024). Analyzing the cross-cultural consumer journey for ethnic fashion: A digital ethnography approach. *Journal of Business Research*, 171, Article 114367. <https://doi.org/10.1016/j.jbusres.2023.114367>
- Kumar, V., & Mishra, S. (2023). Sustainable sourcing and ethical production in the traditional textile industry: A framework for market scalability. *Journal of Cleaner Production*, 382, Article 135291. <https://doi.org/10.1016/j.jclepro.2022.135291>

- De Long, M., & Hegde, A. (2018). Global fashion and local tradition: The case of the Indian sari. *Fashion Practice*, 10(1), 7–28. <https://doi.org/10.1080/17569370.2017.1400341>
- Entwistle, J. (2000). *The fashioned body: Fashion, dress and modern social theory*. Polity Press.
- Eicher, J. B., & Evenson, S. L. (2015). *The visible self: Global perspectives on dress, culture, and society* (4th ed.). Fairchild Books.
- Gaimster, J. (2011). The role of the fashion forecaster in the global apparel industry. In T. Jackson & D. Shaw (Eds.), *The fashion handbook* (pp. 135–150). Routledge.
- Ger, G., & Belk, R. W. (1996). Cross-cultural differences in materialism. *Journal of Economic Psychology*, 17(1), 55–77. [https://doi.org/10.1016/0167-4870\(95\)00035-6](https://doi.org/10.1016/0167-4870(95)00035-6)
- Kaiser, S. B. (2012). *Fashion and cultural studies*. Berg.
- Khamis, S. (2010). The role of the ‘expert’ in the fashion system. In E. Rouse (Ed.), *Fashion as photograph* (pp. 57–71). I.B. Tauris.
- Leslie, D. (2002). Globalization, cultural economy and the commodification of cultural products: The case of Asian textiles. *Geoforum*, 33(3), 367–378. [https://doi.org/10.1016/S0016-7185\(01\)00030-9](https://doi.org/10.1016/S0016-7185(01)00030-9)
- Lewis, R. (2013). *Gendering Orientalism: Race, femininity and representation*. Routledge.
- Lu, H. (2017). *The Chinese suit: A symbol of modernity and national identity*. Bloomsbury Academic.
- Miller, D. (2010). *Stuff*. Polity Press.
- Moeran, B. (2015). *The business of creativity: Toward an anthropology of worth*. Routledge.
- Paulicelli, E., & Clark, H. (Eds.). (2009). *The fabric of cultures: Fashion, identity, and globalization*. Routledge.
- Rovine, V. L. (2015). *African fashion, global style: Histories, innovations, and ideas you can wear*. Indiana University Press.
- Ahmed, R., & Qureshi, M. I. (2022). Technology adoption in traditional apparel manufacturing: A study of AI-driven pattern cutting in Pakistan. *International Journal of Clothing Science and Technology*, 34(5), 712–728. <https://doi.org/10.1108/IJCST-01-2022-0009>
- [38] Skov, L. (2011). The role of trade fairs in the global fashion business. *Current Sociology*, 59(5), 619–635. <https://doi.org/10.1177/0011392111402724>
- Taylor, L. (2002). *The study of dress history*. Manchester University Press.
- Thompson, C. J., & Tambyah, S. K. (1999). Trying to be cosmopolitan. *Journal of Consumer Research*, 26(3), 214–241. <https://doi.org/10.1086/209560>
- [41] Lyu, P., Peng, L., & Liu, Y. (2025). Research on the colors of Republic of China Qipao patterns based on the NCS color system: A case study of the digital collection of the Museum of Ethnic Costumes. *Fashion Technology*, 1(3), 28–37. <https://doi.org/10.61363/FT-V1N32025-06>
- Hamta, N., Ehsanifar, M., & Biglar, A. (2023). Optimization in supply chain design of assembled products: A case study of HEPCO Company. *Interdisciplinary Journal of Management Studies*, 16(1), 61–77. <https://doi.org/10.22059/ijms.2022.318236.674424>
- Chen, L., & Wang, Y. (2022). Craftsmanship, authenticity, and market value: A study of traditional embroidery in contemporary Chinese fashion. *International Journal of*

- Fashion Design, Technology and Education*, 15(3), 365–378. <https://doi.org/10.1080/17543266.2022.2083651>
- Patel, R., & Singh, A. (2024). Cross-cultural adaptation strategies for South Asian ethnic wear in global retail markets. *Journal of Fashion Marketing and Management*, 28(1), 112–130. <https://doi.org/10.1108/JFMM-03-2023-0055>
- Zhang, M., & Li, X. (2023). Digital heritage and fashion innovation: 3D modeling of traditional garment structures for virtual try-on and customization. *Fashion and Textiles*, 10(1), Article 12. <https://doi.org/10.1186/s40691-023-00340-2>
- Akhtar, S., & Rehman, F. (2021). Consumer ethnocentrism and perceived value of traditional dress in Pakistan: Implications for domestic and international brands. *Asia Pacific Journal of Marketing and Logistics*, 33(7), 1550–1568. <https://doi.org/10.1108/APJML-09-2020-0683>
- Zhao, X., & Sun, H. (2022). The role of cultural confidence in the global marketing of Chinese fashion heritage: The case of the Qipao. *Journal of Global Marketing*, 35(4), 291–307. <https://doi.org/10.1080/08911762.2022.2066489>