



INFLUENCE OF GENDER AND AGE ON CONSUMER PREFERENCES FOR BRAND IMAGE AND TECHNOLOGICAL FEATURES IN MOBILE PHONE SELECTION: A STATISTICAL INSIGHT

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Abstract

This research explores the intricate ways in which gender and age influence consumer preferences towards brand image and technological features in mobile phone selection. Additionally, it delves into how the Country-of-Origin (COO) impacts purchasing behavior, offering a comprehensive statistical analysis of demographic variables. Through descriptive statistics, correlation analysis, t-tests, ANOVA, and regression analysis, the study highlights significant gender-based differences in the valuation of brand image and technological features, with males generally placing higher importance on these attributes. Age also plays a pivotal role, with older consumers showing a greater appreciation for brand image and technology, challenging common stereotypes about technology adoption. The findings suggest that while age does not significantly affect the impact of COO, gender differences significantly influence COO perceptions in purchasing decisions. This research underscores the need for gender-specific marketing strategies and a nuanced understanding of age demographics to effectively target consumer segments in the competitive mobile phone market.

Keywords: *Consumer Preferences, Brand Image, Technological Features, Mobile Phones, Gender Differences, Age Demographics, Country-of-Origin (COO), Statistical Analysis, Marketing Strategies*

1. INTRODUCTION

The realm of consumer behavior encompasses a myriad of factors that influence purchasing decisions, among which brand image and technological features have emerged as pivotal in the mobile phone industry. This research delves into the nuanced ways in which gender and age shape consumer preferences, underpinning the importance of these attributes in the decision-making process. The digital age has ushered in an era where mobile phones are not merely communication tools but extensions of personal identity and technological prowess, making the understanding of consumer preferences essential for effective market segmentation and targeted marketing strategies.

The impetus for this investigation stems from the observable shifts in consumer behavior patterns, with brand image and technological innovations playing increasingly significant roles in shaping purchasing decisions. As the mobile phone market continues to expand and evolve, the dynamics of consumer preferences have become more complex, necessitating a deeper exploration of the underlying factors that drive these preferences. This study aims to unravel the statistical relationships between consumer demographics—specifically gender and age—and their impact on the valuation of brand image and technological features in mobile phones.



Gender, as a construct, encompasses a broad spectrum of social, psychological, and cultural dimensions, each influencing consumer behavior in distinct ways. Previous research has highlighted gender differences in perceptions of technology and brand loyalty, suggesting that males and females may prioritize different aspects of mobile phones in their purchasing decisions. This study extends these findings by providing a statistical analysis of how gender influences the importance placed on brand image and technological features, offering insights into the subtleties of gender-based preferences in the mobile phone market.

Age, another pivotal demographic variable, is posited to significantly affect consumer preferences and behaviors. The digital divide between different age groups is a well-documented phenomenon, with younger consumers often being early adopters of technology while older generations may exhibit loyalty to established brands. This research examines the impact of age on the valuation of brand image and technological features, hypothesizing that preferences evolve across life stages, reflecting broader changes in priorities, lifestyle, and technological comfort levels.

Additionally, the study investigates the role of Country-of-Origin (COO) impact on purchasing behavior, analyzing how age and gender may influence perceptions of COO in the context of mobile phone brands. In an increasingly globalized market, COO represents a complex amalgam of quality perceptions, national stereotypes, and brand authenticity, making it a compelling aspect of consumer behavior to explore.

Through a combination of descriptive statistics, correlation analysis, independent samples t-tests, ANOVA, and regression analysis, this research offers a comprehensive statistical framework to understand the interplay between gender, age, and consumer preferences. By dissecting the influence of these demographic variables on the importance placed on brand image and technological features, as well as the COO impact on purchasing behavior, this study contributes to the broader discourse on consumer behavior in the digital age. The findings hold significant implications for marketers and brand managers in the mobile phone industry, providing a data-driven basis for refining marketing strategies to better align with the nuanced preferences of different consumer segments.

2. OBJECTIVE AND HYPOTHESIS

OBJECTIVE

1. To examine the Influence of Gender on Consumer Preferences for Brand Image and Technological Features in Mobile Phone Selection
2. To investigate the Role of Age in the Impact of Country-of-Origin (COO) on Purchasing Behavior Towards Mobile Phone Brands

HYPOTHESIS

Hypothesis I



Null Hypothesis (H₀): There is no significant difference in the importance placed on brand image and technological features between male and female customers when choosing mobile phone brands. This means any observed difference in mean scores between males and females is due to random chance.

Alternative Hypothesis (H₁): There is a significant difference in the importance placed on brand image and technological features between male and female customers when choosing mobile phone brands. This suggests that gender influences how customers value brand image and technological features.

Hypothesis II

Null Hypothesis (H₀):

H₀: There is no significant difference in the importance placed on brand image and technological features among the different age groups.

Alternative Hypothesis (H₁):

H₁: There is a significant difference in the importance placed on brand image and technological features among the different age groups.

HYPOTHESIS III

Null Hypothesis (H₀):

H₀: Age does not significantly influence the impact of Country-of-Origin (COO) on purchasing behavior towards mobile phone brands.

Alternative Hypothesis (H₁):

H₁: Age significantly influences the impact of Country-of-Origin (COO) on purchasing behavior towards mobile phone brands.

HYPOTHESIS IV

Null Hypothesis (H₀):

H₀: Gender does not significantly influence the impact of Country-of-Origin (COO) on purchasing behavior towards mobile phone brands.

Alternative Hypothesis (H₁):

H₁: Gender significantly influences the impact of Country-of-Origin (COO) on purchasing behavior towards mobile phone brands.

3. RESEARCH METHODOLOGY



The methodology employed in this paper integrates a comprehensive blend of quantitative and qualitative research approaches to dissect the influence of gender and age on consumer preferences towards brand image and technological features in mobile phone selection, as well as the impact of Country-of-Origin (COO). This research commenced with the collection of primary data through structured surveys targeting a diverse demographic cohort, ensuring a broad representation of gender and age groups. Descriptive statistics provided an initial overview of the data, setting the stage for deeper analysis. Correlation analysis, independent samples t-tests, and ANOVA were utilized to examine the statistical relationships between gender, age, and consumer preferences, offering insights into the variance and significance of these relationships. Furthermore, regression analysis was conducted to explore the nuances of how age and gender influence the COO impact on purchasing behavior. This methodological framework not only facilitated a robust examination of the hypotheses but also ensured the reliability and validity of the research findings. To support the analysis and discussion, a rich array of literature was referenced, grounding the study in the context of existing knowledge and theories within the fields of marketing, consumer behavior, and brand management.

4. DATA ANALYSIS

4.1 Statistical Analysis of Consumer Preferences for Brand Image and Technological Features by Gender and Age

Hypothesis I

Null Hypothesis (H0): There is no significant difference in the importance placed on brand image and technological features between male and female customers when choosing mobile phone brands. This means any observed difference in mean scores between males and females is due to random chance.

Alternative Hypothesis (H1): There is a significant difference in the importance placed on brand image and technological features between male and female customers when choosing mobile phone brands. This suggests that gender influences how customers value brand image and technological features.

Table 4.1.1 (a) Group Statistics on Importance of Brand Image and Technological Features by Gender

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
brand image and technological features	Male	236	27.6525	5.89248	.38357
	Female	149	25.5168	10.28552	.84262

The group statistics provide a foundational understanding of how gender influences perceptions of brand image and technological features in mobile phones. It reveals that males, on average, rate the importance of these factors higher (mean = 27.6525) than females (mean = 25.5168),

with standard deviations indicating variability in responses within each gender group. The larger standard deviation for females (10.28552) compared to males (5.89248) suggests a broader range of opinions among women about brand image and technological features. This initial analysis sets the stage for a deeper examination of gender differences, hinting at underlying variations in how each gender values these aspects of mobile phone brands.

Table 4.1.1 (b) Levene’s Test for Equality of Variances and t-test for Gender Differences in Brand Image and Technological Features

Independent Samples Test				
		Levene’s Test for Equality of Variances		t-test for Equality of Means
		F	Sig.	t
brand image and technological features	Equal variances assumed	27.090	.000	2.588
	Equal variances not assumed			2.307

Levene’s Test and the subsequent t-tests delve into the statistical significance of the observed differences between genders. Levene’s Test, with an F value of 27.090 and a significance level of .000, indicates that the variances in brand image and technological feature importance between males and females are not equal, justifying the use of t-tests that do not assume equal variances. The t-tests themselves, both assuming and not assuming equal variances, yield significant t values (2.588 and 2.307 respectively), suggesting that the difference in means is not due to chance, thereby providing statistical backing for further analysis of gender-based preferences.

Table 4.1.1 € t-test Results for Gender Differences in Brand Image and Technological Features with Equal Variances Independent Samples Test

		t-test for Equality of Means		
		df	Sig. (2-tailed)	Mean Difference
brand image and technological features	Equal variances assumed	383	.010	2.13576
	Equal variances not assumed	210.011	.022	2.13576

The t-test results, showing significant differences with a p-value of .010 for equal variances assumed and .022 for equal variances not assumed, affirm the initial observation of gender differences in the valuation of brand image and technological features. The mean difference of 2.13576 points towards a quantifiable disparity in preferences, indicating that males attribute higher importance to these factors than females do. This significance across both analyses reinforces the conclusion that gender plays a critical role in shaping consumer priorities in mobile phone selection.

Table 4.1.1 (d) Confidence Interval for Gender Difference in Brand Image and Technological Features

Independent Samples Test				
		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
brand image and technological features	Equal variances assumed	.82513	.51341	3.75812
	Equal variances not assumed	.92582	.31068	3.96085

The confidence intervals provide a range within which the true mean difference between genders lies, with a lower bound of .51341 and an upper bound of 3.75812 for equal variances assumed, and a slightly wider interval for equal variances not assumed. This range not only further confirms the existence of a significant difference but also quantifies the potential extent of this disparity, offering actionable insights into the magnitude of gender differences in brand and technology valuation.

Table 4.1.1 € Effect Size Measures for Gender Differences in Brand Image and Technological Features

Independent Samples Effect Sizes				
		Standardizer ^a	Point Estimate	95% Confidence Interval
				Lower
brand image and technological features	Cohen's d	7.88572	.271	.065
	Hedges' correction	7.90121	.270	.065
	Glass's delta	10.28552	.208	.001

Effect size measures, including Cohen's d, Hedges' correction, and Glass's delta, quantify the magnitude of the observed difference between genders, providing a measure of the practical significance of this difference beyond mere statistical significance. With Cohen's d at .271, the effect size is considered small to medium, suggesting that while the difference is statistically significant, its impact varies among individuals. This nuanced understanding of effect size informs the practical implications of gender differences, highlighting the importance of considering these variations in marketing and product development strategies.

Table 4.1.1 (f) 95% Confidence Interval for Effect Sizes in Gender Differences in Brand Image and Technological Features

Independent Samples Effect Sizes	
	95% Confidence Interval ^a



		Upper
brand image and technological features	Cohen's d	.477
	Hedges' correction	.476
	Glass's delta	.414

The confidence intervals for the effect sizes further contextualize the observed differences, offering a range within which the true effect size is expected to lie. With upper limits ranging from .414 to .477 across different measures, these intervals provide a statistical foundation for understanding the reliability and stability of the observed effect sizes. This statistical detail underscores the significance of the gender differences in preferences for brand image and technological features, reinforcing the need for gender-specific considerations in targeting and positioning mobile phone brands.

Finding: Hypothesis II scrutinizes the impact of gender on preferences for brand image and technological features. The analysis, grounded in group statistics, Levene's test, t-tests, and effect size measures, demonstrates a significant difference between male and female consumers' valuation of these attributes. Specifically, the data reveal males place a higher importance on brand image and technological features compared to females, as evidenced by a mean difference and supported by significant t-test results. The rejection of the null hypothesis underscores gender as a determinative factor in brand preference, highlighting the necessity for gender-specific marketing strategies in the mobile phone industry.

Hypothesis II

Null Hypothesis (H0):

H0: There is no significant difference in the importance placed on brand image and technological features among the different age groups.

Alternative Hypothesis (H1):

H1: There is a significant difference in the importance placed on brand image and technological features among the different age groups.

Table 4.1.2 (a) Descriptive Statistics of Brand Image and Technological Features by Age Group

Descriptives					
brand image and technological features					
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean
					Lower Bound
Upto 20 years	60	24.1500	5.79545	.74819	22.6529



21 to 30 years		113	21.7522	9.84481	.92612	19.9172
31 years to 40 years		78	27.5897	3.96883	.44938	26.6949
41 years to 50 years		77	30.3377	4.57283	.52112	29.2998
above 50 years		57	33.9123	4.99743	.66193	32.5863
Total		385	26.8260	7.94403	.40487	26.0299
Model	Fixed Effects			6.69591	.34126	26.1550
	Random Effects				2.24961	20.5800

Above table presents the mean scores of the importance placed on brand image and technological features across different age groups, providing insight into how age influences consumer priorities in mobile phone selection. The data indicate a progressive increase in the mean scores from younger to older age groups, with those "Up to 20 years" scoring the lowest (mean = 24.1500) and those "Above 50 years" scoring the highest (mean = 33.9123). This trend suggests that older consumers place more importance on these factors than younger ones. Standard deviation and standard error measures provide an understanding of the variability and the reliability of these mean scores, respectively. The confidence intervals further aid in understanding the range within which the true mean likely falls, offering a clearer picture of each age group's valuation of brand image and technological features.

Table 4.1.2 (b) Age Group Comparison in Brand Image and Technological Features with Confidence Interval

Descriptives				
brand image and technological features				
	95% Confidence Interval for Mean	Minimum	Maximum	Between-Component Variance
	Upper Bound			
Upto 20 years	25.6471	15.00	37.00	
21 to 30 years	23.5872	2.00	40.00	
31 years to 40 years	28.4846	19.00	41.00	
41 years to 50 years	31.3756	18.00	41.00	
above 50 years	35.2383	21.00	43.00	
Total	27.6220	2.00	43.00	
Model	Fixed Effects	27.4970		
	Random Effects	33.0719		23.16932

The age group comparison elaborates on the descriptive statistics by adding the minimum and maximum scores, along with the confidence intervals for the mean scores, providing a broader context for understanding age-related differences. This detailed view emphasizes the diversity within each age group's valuation of brand image and technological features. The confidence intervals and the minimum and maximum values illustrate the range of opinions within each group, while the "Between- Component Variance" highlights the variability in the importance

placed on these factors across different age groups, underscoring the heterogeneity within the population studied.

Table 4.1.2 (c) ANOVA Results for Differences in Brand Image and Technological Features Among Age Groups

ANOVA					
brand image and technological features					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7195.974	4	1798.994	40.125	.000
Within Groups	17037.366	380	44.835		
Total	24233.340	384			

The ANOVA (Analysis of Variance) results quantify the statistical significance of the observed differences in the importance placed on brand image and technological features across age groups. With a significant F value of 40.125 and a p-value of .000, the ANOVA results decisively reject the null hypothesis, indicating that there are statistically significant differences among the age groups concerning their valuation of brand image and technological features. The "Between Groups" sum of squares (7195.974) compared to the "Within Groups" sum of squares (17037.366) demonstrates the variance attributed to age differences versus the variance within age groups themselves. This significant finding highlights the impact of age as a determinant factor in consumer preferences for brand image and technological features in mobile phone brands, necessitating age-specific marketing strategies to cater to the distinct preferences of each age segment.

Finding: The exploration of age-related differences in prioritizing brand image and technological features unveils a compelling narrative of evolving consumer preferences across life stages. The analytical journey, informed by descriptive statistics and ANOVA results, uncovers a pronounced variation in how different age groups value brand image and technological innovations in mobile phones. This variance is not merely statistical but tells a story of changing priorities, where younger consumers may prioritize different aspects compared to their older counterparts. Interestingly, the inclination towards valuing brand image and technological features intensifies with age, suggesting a maturity in brand perception that values legacy and innovation. This trend challenges the stereotype of younger consumers being the primary drivers of technology adoption, revealing a more nuanced consumer landscape. The significant differences observed across age groups necessitate a rejection of the null hypothesis, underscoring age as a critical determinant of consumer behavior. This finding illuminates the path for marketers, advocating for age segmentation as a strategic imperative in crafting targeted marketing messages. By acknowledging the diverse priorities across age demographics, brands can tailor their communication strategies to resonate more profoundly with each segment, ensuring relevance and engagement in a competitive market landscape.

4.2 REGRESSION ANALYSIS



HYPOTHESIS III

Null Hypothesis (H0):

H0: Age does not significantly influence the impact of Country-of-Origin (COO) on purchasing behavior towards mobile phone brands.

Alternative Hypothesis (H1):

H1: Age significantly influences the impact of Country-of-Origin (COO) on purchasing behavior towards mobile phone brands.

Table 4.2.1 (a) Descriptive Statistics for COO Impact on Purchasing Behavior and Age

Descriptive Statistics			
	Mean	Std. Deviation	N
Country-of-Origin (COO) on purchasing behavior towards mobile phone brands	1.5325	.49959	385
Ageinyears	2.89	1.304	385

Above table provides a statistical summary of two key variables: the impact of Country-of-Origin (COO) on purchasing behavior towards mobile phone brands and the age of respondents. The average perceived impact of COO on purchasing decisions is moderately positive (mean = 1.5325), with relatively low variability among respondents (standard deviation = .49959), indicating a general consensus or homogeneity in opinions across the sample. The average age is represented on a scale with a mean of 2.89 and a standard deviation of 1.304, suggesting variation in the ages of the participants. This initial analysis sets the stage for examining the relationship between these two variables across the participant pool.

Table 4.2.1 (b) Correlation between Age and COO Impact on Purchasing Behavior

Correlations			
		Country-of-Origin (COO) on purchasing behavior towards mobile phone brands	Ageinyears
Pearson Correlation	Country-of-Origin (COO) on purchasing behavior towards mobile phone brands	1.000	.013
	Ageinyears	.013	1.000
Sig. (1-tailed)	Country-of-Origin (COO) on purchasing behavior towards mobile phone brands	.	.396
	Ageinyears	.396	.

N	Country-of-Origin (COO) on purchasing behavior towards mobile phone brands	385	385
	Age in years	385	385

Above table reports the correlation coefficient between age and the impact of COO on purchasing behavior, quantified by a Pearson Correlation of .013. This value indicates a very weak positive relationship between the two variables, suggesting that as age increases, there might be a slight increase in the importance placed on COO for purchasing decisions, though the relationship is not strong. The significance value (Sig. = .396) suggests that this correlation is not statistically significant, implying that any observed relationship between age and COO impact on purchasing behavior might be due to random chance rather than a true association.

Table 4.2.1 (c) Model Summary of Regression Analysis for Age and COO Impact on Purchasing Behavior

Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.013 ^a	.000	-.002	.50020	.000	.069	1

The model summary provides an overview of the regression analysis conducted to explore the relationship between age and the impact of COO on purchasing behavior. The R Square value of .000 indicates that age explains none of the variability in COO impact, which is further supported by an Adjusted R Square of -.002, indicating no predictive value. The standard error of the estimate (.50020) reflects the average distance that the observed values fall from the regression line, offering insight into the model's precision.

Table 4.2.1 (d) Significance of Regression Model Change for Age and COO Impact on Purchasing Behavior

Model Summary		
Model	Change Statistics	
	df2	Sig. F Change
1	383	.793

This table outlines the significance of the change in the regression model when age is considered as a predictor for the impact of COO on purchasing behavior. The F Change value (.069) and a significance level of .793 indicate that adding age as a predictor does not improve the model's

ability to predict COO impact, suggesting that age does not significantly influence this aspect of purchasing behavior.

Table 4.2.1 (e) ANOVA Results for Regression Analysis of Age's Impact on COO and Purchasing Behavior

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.017	1	.017	.069	.793 ^b
	Residual	95.827	383	.250		
	Total	95.844	384			

a. Dependent Variable: Country-of-Origin (COO) on purchasing behavior towards mobile phone brands

b. Predictors: (Constant), Ageinyears

The ANOVA table provides a statistical test to determine if there is a significant difference in COO impact on purchasing behavior across different ages. The results, showing an F value of .069 and a significance level of .793, indicate that there is no significant effect of age on COO impact, affirming the findings from the correlation and regression analysis that age does not play a significant role in how the COO influences purchasing decisions.

Table 4.2.1 (f) Coefficients of Regression Analysis for Age's Influence on COO Impact on Purchasing Behavior

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.518	.062		24.458	.000
	Ageinyears	.005	.020	.013	.263	.793

a. Dependent Variable: Country-of-Origin (COO) on purchasing behavior towards mobile phone brands

The coefficients table from the regression analysis details the specific impact of age on the COO effect, where the unstandardized coefficient (B = .005) for age implies a minimal increase in COO impact with each additional year of age. However, the significance value of .793 for this coefficient indicates that this effect is not statistically significant. The constant term (1.518) represents the COO impact when age is zero, and the model's overall insignificance suggests that variations in COO impact on purchasing behavior cannot be reliably attributed to differences in age among the participants.



Finding: The analysis begins with an exploration of age as a determinant of the impact of COO on purchasing behavior. Descriptive statistics, correlation analysis, and regression model summaries reveal a minimal correlation between age and COO's impact, highlighted by a Pearson Correlation coefficient of .013 and an R Square value of .000 in the regression analysis. These findings suggest that age does not significantly influence the perception of COO in purchasing decisions, leading to the acceptance of the null hypothesis (H₀). This outcome indicates that, across different age groups, the COO of mobile phone brands does not vary significantly in influencing purchasing behavior, underscoring a uniformity in how COO is perceived across the age spectrum.

HYPOTHESIS IV

Null Hypothesis (H₀):

H₀: Gender does not significantly influence the impact of Country-of-Origin (COO) on purchasing behavior towards mobile phone brands.

Alternative Hypothesis (H₁):

H₁: Gender significantly influences the impact of Country-of-Origin (COO) on purchasing behavior towards mobile phone brands.

Table 4.2.2 (a) Descriptive Statistics for COO Impact on Purchasing Behavior by Gender

Descriptive Statistics			
	Mean	Std. Deviation	N
Country-of-Origin (COO) on purchasing behavior towards mobile phone brands	1.5325	.49959	385
Gender	1.39	.488	385

This table outlines the foundational statistics regarding the perceived impact of the Country-of-Origin (COO) on purchasing behavior towards mobile phone brands, alongside the gender distribution of the study's participants. It establishes a baseline understanding that, on average, the impact of COO is moderately perceived (mean = 1.5325) across the participant pool, with a fairly consistent opinion as indicated by the standard deviation (.49959). Additionally, the gender variable, coded numerically, shows a close distribution around its mean (1.39), hinting at a balanced representation of genders within the sample. This descriptive overview is crucial as it frames the subsequent analysis by highlighting the general consensus on COO's impact and setting the stage for a deeper investigation into how gender differences might influence these perceptions.

Table 4.2.2 (b) Correlation between Gender and COO Impact on Purchasing Behavior

Correlations	
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		Country-of-Origin (COO) on purchasing behavior towards mobile phone brands	Gender
Pearson Correlation	Country-of-Origin (COO) on purchasing behavior towards mobile phone brands	1.000	-.217
	Gender	-.217	1.000
Sig. (1-tailed)	Country-of-Origin (COO) on purchasing behavior towards mobile phone brands	.	.000
	Gender	.000	.
N	Country-of-Origin (COO) on purchasing behavior towards mobile phone brands	385	385
	Gender	385	385

The correlation analysis delves into the relationship between gender and the impact of COO on purchasing behavior, revealing a significant negative correlation (Pearson Correlation = $-.217$). This statistic suggests a discernible link where variations in gender are associated with differences in how the COO influences purchasing decisions. Specifically, the negative correlation indicates that as gender varies (potentially from male to female, depending on coding), there is a tendency for the perceived impact of COO to decrease. The significance level ($.000$) underscores this relationship's statistical robustness, asserting that gender significantly influences the valuation of COO among consumers, pointing towards intrinsic differences in how different genders assess COO in their purchasing behavior.

Table 4.2.2 (c) Model Summary of Regression Analysis for Gender and COO Impact on Purchasing Behavior

Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.217 ^a	.047	.045	.48828	.047	18.994	1

The model summary for the regression analysis provides a quantifiable measure of how well gender predicts the impact of COO on purchasing behavior. With an R Square value of $.047$, the model suggests that gender accounts for approximately 4.7% of the variance in COO impact perceptions. Although this might seem modest, the significance of the model change (Sig. F Change = $.000$) and the F Change value (18.994) indicate that gender is a significant predictor of COO impact. This statistical insight highlights the predictive power of gender concerning COO's influence on purchasing decisions, reinforcing the importance of considering gender differences in marketing strategies related to COO.

Table 4.2.2 (d) Significance of Regression Model Change for Gender and COO Impact on Purchasing Behavior



Model Summary		
Model	Change Statistics	
	df2	Sig. F Change
1	383	.000

a. Predictors: (Constant), Gender

This section emphasizes the statistical significance of including gender as a predictor in the regression model analyzing COO impact. The significance of the F Change (.000) conclusively demonstrates that adding gender to the model markedly improves its predictive capability regarding COO's influence on purchasing behavior. This outcome not only validates the model's robustness but also substantiates the hypothesis that gender plays a critical role in shaping perceptions of COO, offering a compelling argument for the nuanced integration of gender perspectives in marketing practices.

Table 4.2.2 (e) ANOVA Results for Regression Analysis of Gender's Impact on COO and Purchasing Behavior

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.529	1	4.529	18.994	.000 ^b
	Residual	91.316	383	.238		
	Total	95.844	384			

za. Dependent Variable: Country-of-Origin (COO) on purchasing behavior towards mobile phone brands

b. Predictors: (Constant), Gender

The ANOVA results further cement the relationship between gender and COO impact, providing a statistical test of the model's overall significance. The analysis yields a highly significant F value (18.994) with a corresponding Sig. value of .000, firmly rejecting the null hypothesis that gender does not influence COO impact on purchasing decisions. This section underscores the substantial effect that gender differences have on perceptions of COO, illustrating the variance that gender introduces into consumer behavior towards mobile phone brands.

Table 4.2.2 (f) Coefficients of Regression Analysis for Gender's Influence on COO Impact on Purchasing Behavior

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.841	.075		24.516	.000
	Gender	-.223	.051	-.217	-4.358	.000



- a. Dependent Variable: Country-of-Origin (COO) on purchasing behavior towards mobile phone brands

The coefficients table details the specific influence of gender on the perceived impact of COO, offering a precise measurement of this relationship. The significant negative coefficient for gender (-.223) quantifies the extent to which gender differences predict variations in COO impact, with the negative value indicating a decrease in COO impact as gender varies. The significance of this coefficient (.000) corroborates the earlier findings, highlighting the critical influence of gender on COO perceptions.

Finding: In examining the role of gender, the regression analysis uncovers a statistically significant correlation between gender and COO's impact on purchasing behavior, with a Pearson Correlation coefficient of -.217 and a significant F Change in the regression model. This statistical evidence supports the rejection of the null hypothesis (H₀), affirming that gender significantly influences the impact of COO on purchasing decisions. This finding emphasizes the importance of considering gender-specific preferences in marketing strategies related to the COO of mobile phone brands, highlighting that male and female consumers may prioritize COO differently when selecting mobile phones.

5. DISCUSSION

The findings of this research resonate with Aaker (2022), highlighting that brand image significantly impacts consumer preferences, with gender playing a pivotal role. This study's hypothesis that gender differences influence the importance placed on brand image and technological features in mobile phone selection is supported by the statistical analysis, aligning with Belk's (2017) comprehensive discussion on the cultural dimensions of consumer behavior. The higher valuation of brand image and technological features among males compared to females underscores the nuanced gender-based preferences documented by Cheverton & McDonald (2012) and reaffirms the importance of targeted marketing strategies that account for these differences.

Moreover, the age-related insights derived from this research extend the understanding of consumer behavior dynamics, offering a nuanced view that challenges stereotypes about technology adoption across life stages. This study's findings that older consumers place more importance on brand image and technological features than younger ones provide a counter-narrative to common perceptions and echo the observations made by Chen & Hsieh (2012) regarding the evolving preferences with age. The progressive increase in the valuation of these attributes with age corroborates with research by De Chernatony & McDonald (2023), suggesting a maturity in brand perception that values legacy and innovation.

The impact of Country-of-Origin (COO) on purchasing behavior, modulated by age and gender, also provides intriguing insights. The lack of significant influence of age on COO's impact, as discussed by Friedman & Smith (2022), alongside the gender-specific differences in COO perceptions, reinforces the complex interplay of demographic factors in consumer decision-making processes. This is in line with Gaedeke's (1973) early work on consumer attitudes towards



products from developing countries and the more recent findings by Gurhan-Canli & Maheswaran (2010) on cultural variations in COO effects.

Furthermore, the regression analysis findings that gender significantly influences the impact of COO on purchasing behavior add to the discourse on international marketing and consumer ethnocentrism. This supports the arguments presented by Han (2021) and Heslop et al. (2015) regarding the critical role of gender in shaping consumer behavior towards foreign brands. The statistical evidence from this study, indicating that male and female consumers may prioritize COO differently when selecting mobile phones, aligns with the nuanced exploration of COO perceptions by Josiassen et al. (2018) and the broader implications for global marketing strategies emphasized by Khan & Bamber (2017).

In summary, this research enriches the understanding of how gender and age influence consumer preferences for brand image and technological features in the mobile phone market, as well as the nuanced role of COO in purchasing behavior. The findings not only validate the theoretical frameworks proposed by scholars like Laroche et al. (2015) and Lee et al. (2013) but also offer practical insights for marketers aiming to navigate the complex landscape of consumer preferences with strategic brand positioning and communication efforts.

6. CONCLUSION

The conclusion of this research underscores a nuanced understanding of the interplay between gender, age, and consumer preferences towards brand image and technological features in mobile phone selection, along with the influence of Country-of-Origin (COO). This study's findings reveal that gender significantly impacts consumer valuations of brand image and technological attributes, with males generally placing higher importance on these factors than females. This gender disparity in preferences highlights the need for marketers to adopt gender-specific strategies to effectively target and engage with their audience. Furthermore, the research illuminates the evolving nature of consumer preferences across different age groups, indicating that older consumers value brand image and technological features more than their younger counterparts. This insight challenges prevailing stereotypes about technology adoption and suggests that marketing strategies should be nuanced to cater to the preferences of various age demographics. Additionally, the investigation into the role of COO on purchasing behavior, modulated by age and gender, reveals complex dynamics that suggest both universal and segmented approaches to international marketing strategies. While age does not significantly affect COO impact, gender differences present a critical consideration for marketers in positioning their brands in the global marketplace. Overall, this research contributes to the broader discourse on consumer behavior, offering valuable insights for brand managers and marketers aiming to refine their strategies in a highly competitive mobile phone market. The findings advocate for a more segmented approach to marketing, considering the intricate influences of gender and age on consumer behavior, to enhance brand positioning and ultimately drive consumer engagement and loyalty.

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