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Abstract

In the era of globalization, the significance of a product's Country of Origin (COO) in consumer behavior studies has gained prominence. COO serves as an intangible cue influencing consumers' purchasing decisions and product evaluations. Amidst the escalating trends of global trade and competition, COO emerges as a powerful determinant impacting the competitive positioning and business success of brands. Given this context, this study aims to elucidate the influence of COO on the purchasing behaviors of young Indian consumers in the context of white goods. Additionally, the study delves into the intricate interplay among COO, product evaluation, and purchase intention within the home appliances industry in India. Utilizing mediation analysis, the study reveals that product evaluation significantly mediates the relationship between COO and consumers' purchase intentions regarding white goods.

Keywords: Country of origin, Globalization, Mediation analysis, Product evaluation, Purchase intention, White goods

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Introduction

One of the fastest-growing industries in the Indian market is the home appliance sector, with both large and small appliances contributing to its continuous expansion. In 2018, the majority of home appliance categories witnessed growth in both retail volume and current value. Appliances such as refrigerators, washing machines, and air conditioners (AC) exhibit significant untapped potential within this industry. Premium product categories, ranging from televisions to higher capacity refrigerators and air conditioners, experienced growth rates up to nine times faster than the entire segment in 2022, according to recent data shared by GfK Market Intelligence Offline Sales Tracking (February 21, 2023, Business Line). In India, only 4% of households possess air conditioners, in contrast to a global average of 30%. This disparity can be attributed to the burgeoning middle class, the prevalence of nuclear families and one-person households, and the migration of the population, all of which are manifestations of India's burgeoning economy and evolving consumer lifestyles.

Country of origin (COO) is perceived as an intangible cue capable of influencing consumers' product purchase and evaluation processes. Despite the abundance of studies on COO and product assessment, the Indian white goods industry has seen limited research in this area. Hence, this study posits a compelling rationale for investigating the relationships between COO, product evaluation, and purchase intention within the Indian white goods industry. Specifically, this research endeavors to explore the impact of the country of origin (COO) on product evaluation and purchase intention among consumers of home appliances in the Indian market.

Literature Review

Country of Origin

In the contemporary era characterized by flourishing globalization, the country of origin (COO) emerges as a significant parameter, with studies indicating its influence on consumer behavior and purchase intentions (Parkvithee & Miranda, 2012). In this globalized milieu, individuals accord considerable importance to the origin country of products, wherein the perception of a product is enhanced or diminished based on its country of origin (Cateora & Graham, 1999). COO, as defined, encompasses the impact exerted by the home country of a product or brand on consumer perceptions, whether positively or negatively (Samiee, 1994). Anwar, Yasin, Iqbal, and Sajid (2013) further expound on the notion that various brands are inherently associated with different countries.

Since the 1960s, studies have consistently highlighted the significance of country of origin as an extrinsic cue in product evaluation, a trend that persists to date (Chen et al., 2011; Michaelis et al., 2008). The advent of globalization has empowered companies to distribute their products globally, offering consumers a plethora of choices and amplifying the importance of COO in consumer purchase behavior analysis. Additionally, COO serves as a branding label, enabling consumers to discern the origin of both the product and the firm (Bilkey & Nes, 1982).

Moreover, COO significantly influences the consumer's product evaluation process, subsequently shaping purchase intentions. Bilkey and Nes (1982) assert that consumers often rely solely on COO information during product evaluation and decision-making. The country-of-origin image plays a pivotal role in engendering consumer trust regarding product attributes and informs the evaluation process of brands (Lin & Chen, 2006b). Consumers form preconceived notions about products originating from specific countries and correlate these perceptions with product attributes (Srikatanyoo & Gnoth, 2002). For consumers, the country-of-origin image
The COO effect manifests when a consumer engages in product evaluation and ultimately decides on a purchase. This effect is driven by various factors, including country image/national stereotypes, consumer ethnocentrism, level of involvement.

**Purchase Intention**

In today's highly competitive global market, attracting customers requires employing various strategies. With an array of alternatives available to consumers, several factors come into play affecting product success and customer purchase intention. Purchase intention, as defined by Kumar & Gautam (2021), refers to the measure of one's inclination or determination to engage in a specific behavior, such as deciding to purchase a product or service. While attitude pertains to the evaluation of products, intention represents an individual's motivation or willingness to engage in a particular behavior. Another perspective posits purchase intention as an individual's readiness to make an attempt to purchase a brand (Shabbir et al., 2009).

Some researchers equate purchase intention with the perceived likelihood of buying advertised products, while others view it as the anticipated purchasing behavior, i.e., "what we think we will buy" (Park, 2002). Daneshvary and Schwer (2000) assert that demographic characteristics such as age, gender, profession, and education are correlated with purchase intention. Moreover, studies indicate that various product attributes, the country of origin, consumer perceptions, and perceptions of the country of origin all influence customer purchase intention (Wang et al., 2012). Purchase intention can further be conceptualized as the decision to act or the observable behavior that reflects consumer response to a product (X. Wang & Yang, 2008).

**Influence of Country of Origin on Purchase Intention and Product Evaluation**

The influence of Country of Origin (COO) on product evaluation and purchase intention has been subject to study since the 1960s. Research indicates that COO is a significant factor impacting global marketing (Cordell, 1992; Brouthers and Xu, 2002; Johansson and Ebenzahl, 1986; Klein, 2002; Lee, Yun, and Lee, 2005; Nagashima, 1970; Roth and Romeo, 1992). Studies highlight that products from developing countries are often unfairly evaluated by consumers due to entrenched beliefs, leading to unjust assessments (Lee & Lee, 2009). Moreover, COO is commonly regarded as an indicator of product quality (Lee & Lee, 2009).

The effect of COO on purchase intention can be traced back in the literature for over 40 years (Zeugner-Roth & Diamantopoulos, 2010). The rapid growth of globalization has rendered this evaluation process more complex, with customer preferences often influenced by the COO (Liu & Johnson, 2005). In many cases, the assessment of extrinsic cues, including COO, supersedes consideration of intrinsic features, reflecting the involuntary nature of the COO effect in consumer evaluation (Dagger & Raciti, 2011; Powers & Fetscherin, 2008; Yasin et al., 2007).

Studies from 1989 suggest various understandings of COO's effect on product evaluation. Firstly, COO influences observations regarding specific products, which may extend to overall product evaluation. Secondly, consumer perceptions of a country and the products originating from it are shaped by the COO, which can have either a positive or negative impact on the evaluation of specific products. Additionally, COO is identified as a significant factor motivating consumer concerns regarding the country of origin of a product and, consequently, influencing

**Conceptual Framework**

The findings of earlier studies conducted in other markets create a framework for developing a positive strategy for the white goods industry in their marketing plans. Review of the literature demonstrates the relationships between product evaluation, country of origin image, and purchase intention. The following are the main objectives of this research:

1. To determine the effect of the product evaluation on consumer purchase intention of white goods.
2. To find out the link between country-of-origin image and purchase intention of white goods.
3. To establish the direct and indirect relations of the product evaluation on the formation of purchase intention of white goods.

With these three objectives, paper aims to study the relationship of the product evaluation in developing an intention to buy white goods mediated country-of-origin image. The conceptual framework shown in Figure 01 serves as the foundation for the current study.

![Figure 01: Conceptual Framework](image)

**Research Methodology**

In order to determine consumers' intentions to acquire white goods, a study was undertaken in India. The current study examines the impact of product evaluation on consumer purchase intention using a causal research design. Additionally, the country of origin image is examined as a mediating variable, with product evaluation intended to be the causal variable, purchase intention the outcome.

**Data Collection**

A cross-section of the population in the Indian state of Kerala, including both the public and private sectors, was asked to fill out Google forms to provide the information for this study. The target participants for this study were customers of a well-known brands both Indian and foreign brands in home appliance. Data was collected using an online questionnaire distributed via social media platforms. The respondents were actual consumers who shared their usage history with one of the three product categories—television, refrigerator, or air conditioner. The choice of household appliances was made since significant electrical appliances are typically pricey things that carry a certain amount of risk. So it makes sense to assume that before making a purchase, consumers will have developed some brand knowledge and selection criteria.

Additionally, consumers have extensive knowledge and experience with these product categories and the brands they use, which are pertinent to the research topics. The respondents' responses to the questionnaire are more trustworthy and valid.
when they are relevant to the product categories and brands of their choosing. The brands that respondents used were elicited after assigning them to a specific product. In this way, they respond to inquiries about the brands they mentioned. The sample unit was made up of users of the brand who actively participated in decision-making in order to get accurate answers. The samples in this study are restricted to adults of age 20 and above and employed.

The respondents for the survey were picked using a convenience sampling method, which relied on non-probability sampling. This kind of approach is the cheapest and least time-consuming, which perfectly represented our constrained time period. A convenience sample is a method where respondents are chosen based on how easily they can be reached by the researcher. For the study, 264 completed responses were collected, and the data was chosen over the course of four months, from February to May 2023. However, the validity of this approach has been questioned. To increase the credibility when applying a convenience sample, the data gathering process was carried out at various hours of the day and on various days of the week, including both weekdays and weekends (Aczel & Sounderpandian, 2009; Malhotra, 2010).

The data collection instrument is a structured questionnaire designed to consist of various constructs of the conceptual model recognised in the literature review. It contains three parts: Part I consists of statement items to measure variable country-of-origin image, product evaluation and purchase intentions. Part II includes questions on demographic and socio-economic characteristics of the respondents.

**Measures**

All three variables were measured using validated constructs. The Country of Origin Image construct was adopted from Magnusson et al. (2011), the Product Evaluation scale was adopted from Hong and Wyer (1990), and the Purchase Intention scale was adopted from Wang et al. (2012). Each construct was assessed using a reflective five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

During the initial screening of the collected data, it was observed that only 205 respondents completed the questionnaires. The present study incorporates mediation analysis using the Sobel test to analyze the mediation effect of the Country of Origin Image on the relationship between Product Evaluations and Purchase Intention of white goods.

Mediation analysis extends simple linear regression by introducing one or more variables to the regression equation. It involves the process by which the effect of one or more independent variables (X) is transmitted to a dependent variable (Y) through one or more third variables. Not only direct effects but also other interactions, thought to have indirect effects, have been extensively studied in the literature. The presence of a third variable, known as the mediator variable, facilitates the connection between two variables in situations involving indirect effects (MacKinnon et al., 2007).

**Profile of the Respondents**

The study sample comprises respondents who vary on such characteristics as gender, age, marital status and household income. In terms of gender, the sample indicates a somewhat balance between the males (52%) and females (48%). Of the 264 responses, majority of the respondents were between 20 to 35 years of age (76.5%). 63% of the respondents were purchasers of television. Since every respondent was a salaried member in the household, their opinions can be trusted.

**Analysis**

In order to examine the objectives of this study which includes relationship between
country of origin, product evaluation and purchase intentions with regard to white goods, the researchers conducted a mediation analysis. It allow to assess the effect of one variable on another variable via a mediator variable or an intervening variable. This is a great analysis tool when it comes to understanding what is presumed to be a causal relationship between three variables in which one variable is theoretically proposed to influence another which in turn is proposed to influence another variable. Mediation analysis is used to investigate whether one or more than one variable transmits the effects of a predictor variable on an outcome variable. This can be tested using multiple regression and path analysis. In this study, the researchers have opted for regression method.

According to the Baron and Kenny (1986), mediation hypotheses are often evaluated, and the outcome determines whether partial or full mediation will take place. The BK technique involves three regression equations and four phases for establishing the mediation relationships. In this present study the steps are as cited below.

Step 1: Estimate the total effect between product evaluation (dependent variable) and purchase intention (independent variable) – path c

Step 2: Estimate the direct effect between product evaluation and mediating variable (COO) - path a

Step 3: Estimate the direct effect between mediating variable (COO) and dependent variable (purchase intention) - path b

Step 4: Estimate the indirect effect between product evaluation and purchase intention for statistical significance using Sobel test.

**Mediation Analysis**

The research model (Figure 1) illustrates mediation hypotheses, delineating how an independent variable (product evaluation) influences a dependent variable (purchase intention) through a mediating variable (country of origin). The mediating effect of country of origin image on the relationship between product evaluation and purchase intention was examined through a four-step procedure.

**Step 1- Assessing the total effect between product evaluation (dependent variable) and purchase intention (independent variable)**

A bivariate regression was done to assess if product evaluation significantly predicts consumer purchase intention.

| Table 01: Coefficients of Bivariate relationship between product evaluation and purchase intention |
|---------------------------------------------------------------|---------------|---------------|-----|-----|
| Model             | Unstandardized Coefficients | Standardized Coefficients | t   | Sig. |
|                  | B       | Std. Error | Beta |     |     |
| 1 (Constant)     | 4.785   | .695       | .543 | 6.889 | .000 |
| Product Evaluation | .309   | .034       | .543 | 9.216 | .000 |

a. Dependent Variable: Purchase Intention

Source: Data Analysis

Using standardised values are preferable because it provide comparability between values however while using Sobel test unstandardized values are used to obtain the significance of indirect effects. Results of the bivariate regression (refer Table 01) depicts that the total effect of product evaluation on
consumer purchase intention & this relationship is also significant (p < 0.05).

**Step 2 - Assessing the direct effect between product evaluation and mediating variable country of origin**

Table 02: Coefficients of Bivariate relationship between product evaluation and country of origin

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>9.501</td>
<td>.798</td>
<td>11.909</td>
</tr>
<tr>
<td></td>
<td>Product Evaluation</td>
<td>.415</td>
<td>.039</td>
<td>.603</td>
</tr>
</tbody>
</table>

Dependent Variable: Country of Origin

*Source: Data Analysis*

Table 02 depicts the direct effect of product evaluation on the mediating variable country of origin. From the table path a = 0.415 and standard error of a (SEa) is 0.039 and both these values are significant with p < 0.05.

**Step 3 - Assessing the direct effect between COO and purchase intention & product evaluation and purchase intention.**

Table 03: Coefficients of multiple regression between product evaluation and country of origin with purchase intention

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>3.167</td>
<td>.890</td>
<td>3.558</td>
</tr>
<tr>
<td></td>
<td>PE</td>
<td>.239</td>
<td>.061</td>
<td>.419</td>
</tr>
<tr>
<td></td>
<td>COO</td>
<td>.170</td>
<td>.060</td>
<td>.206</td>
</tr>
</tbody>
</table>

Dependent Variable: Purchase Intention (PI)

*Source: Data Analysis*

Table 03 shows the direct effect of country of origin on purchase intention denoted by path b. (b=0.170, SEb = 0.60). Also this table shows the direct relationship between product evaluation (PE) and Purchase intention denoted by path c (c= 0.239, SEc= 0.041). And both these direct relationship between product evaluation & purchase intention as well as country of origin and purchase intention was found be significant with p < 0.05.

**Step 4: Assessing the indirect effect between product evaluation and purchase intention for statistical significance using Sobel test.**

The indirect effect between product evaluation and purchase intention with the mediating effect of COO is tested using Sobel test. The indirect effect is the product of a and b (a * b = 0.070). This means to say that the indirect effect of Product evaluation on Purchase Intention with the mediating effect of COO is 0.070. Now the statistical significance of this result is tested using Sobel test.
The test is calculated by Sobel test calculator by Preacher and Hayes (2004).

### Table 04: Sobel Test

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>0.415</td>
</tr>
<tr>
<td></td>
<td>Test Statistics</td>
</tr>
<tr>
<td>b</td>
<td>0.170</td>
</tr>
<tr>
<td></td>
<td>Std Error</td>
</tr>
<tr>
<td>SEa</td>
<td>0.039</td>
</tr>
<tr>
<td></td>
<td>P value</td>
</tr>
<tr>
<td>SEb</td>
<td>0.60</td>
</tr>
</tbody>
</table>

*Source: Data Analysis*

Table 04 indicates that the indirect effect between product evaluation & purchase intention is significant with a p value < 0.05 and standard error of 0.025. In Sobel first order test, if the z score is greater than 1.96 we can conclude that the effect is larger than would be expected by chance and call the effect significant. In this case, the test statistics is 2.73 (Table 04) proving that country of origin image indeed significantly mediates the relationship between product evaluation and purchase intention. This means to say that product evaluation has a significant impact on consumers purchase intention with the mediating effect of country of origin. Table 05 shows the summary of hypothesis.

### Table 05: Summary of Hypothesis

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path a Bivariate regression predicting</td>
<td>Product Evaluation has a positive &amp; significant impact</td>
<td>Significant</td>
</tr>
<tr>
<td>mediating variable from Independent</td>
<td>on Country of origin</td>
<td></td>
</tr>
<tr>
<td>variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path b Multiple regression predicting</td>
<td>Country of Origin has a positive and significant impact on</td>
<td>Significant</td>
</tr>
<tr>
<td>DV from mediating variable</td>
<td>purchase intention</td>
<td></td>
</tr>
<tr>
<td>Path c Multiple regression predicting</td>
<td>Product Evaluation has a positive and significant impact on</td>
<td>Significant</td>
</tr>
<tr>
<td>DV from IV</td>
<td>purchase intention</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Data Analysis*

### Discussion & Recommendations

The data suggests that COO has a significant and advantageous impact on purchasing intention. This is consistent with a number of other study studies (Agrawal & Kamakura, 1999; Piron, 2000, Verlegh & Steenkamp, 1999). Consequently, marketers should place a greater emphasis on COO information when informing clients about product offerings through advertising, promotion, or other means. It is also found that COO mediated the path between product evaluation and purchase intention. This is an interesting finding as product features alone cannot help in enhancing consumer purchase intention. The countries with its positive COO image help in strengthening the brand image originating from these countries thereby significantly impacting the purchase intention of white goods.

In order to improve the overall perception of their brand, manufacturers of household electrical appliances should constantly work to improve and promote the reputation of
their brand's home nation in all of their marketing strategies, particularly advertising and personal selling. In general, it is simpler to sell brands from countries with a positive reputation or that have a strong market presence. Producers of brands from nations with positive reputations can also take advantage of the positive perception in their brand-naming approach. Additionally, marketers who wish to profit from a positive country image should emphasize the high-quality domestic brands. This emphasis can make it easier for customers to generalize about products across national brands. The present investigation represents an initial effort in providing empirical evidence of how COO information may impact evaluative and behavioral variables differently in the consumer decision process.

Therefore, international businesses entering the Indian market in the home electronics sector should be associated with their own national brand. Additionally, it has been discovered that Indian consumers favour brands produced in developed nations. Consequently, by positioning themselves with COO as a distinct selling point, these firms may defeat rivals in the Indian market. The trade in home electronics is growing quickly in the twenty-first century, and the global market has gotten more cutthroat. It is crucial for marketing managers to comprehend that consumer sentiments towards a certain brand or COO might vary drastically, for better or worse, and that this could affect the customers' preferences.
References


