



## Consumer Buying Attitudes towards Counterfeit and Green Products: Application of Social Comparison Theory and Materialism

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**Abstract:** *Counterfeiting and purchase of counterfeits has been a global issue since years and it seems to be growing, it gives rise to criminality and many other economic problems. It does not only affect economic environment but ecological environment as well. Hence, this research aims to find out the factors that make people purchase counterfeits and factors that affect green consumption with respect to materialism. The purpose of our research is to emphasize on the factors namely; Self-Esteem, Social Media Usage, Religiosity and Individual values specifically Self-Enhancement, Self-Transcendence Values that affect purchase of counterfeit and green consumption and their relationship with three aspects of materialism. Findings illustrate new relations, which showed that materialism mediates the relationship between Social Media Usage and Purchase of counterfeits; Self-Enhancement Values and Purchase of counterfeits; Self-Esteem and Purchase of counterfeits and Religiosity and Purchase of counterfeits.*

**Keywords:** Materialism, Green Consumption, Purchase of Counterfeits.

### Introduction

The most valuable asset that a firm can have is their brands, and their brand equity is a fruit of their years of efforts. However, numerous brands are ending up undermined because of the overall concept of product counterfeiting, according to which copies of the brands are sold to customers as the genuine product (Green & Smith, 2002). The International Chamber of Commerce (2009) recommends that selling and purchasing of counterfeits takes place in practically all global economies and has expansive consequences for exchange, employment, criminality, foreign investment and the environment. Not only does it affect social and economic environment, but also ecological environment.

Green consumption is linked with the protection of the environment for the next and present generations. It is a concept that consumers are obliged to be concerned for ecological or environmental problems through adoption of environmental friendly behavior, just as the use of renewable energy, organic products and the exploring products made by organization with minimal impact (Connolly & Prothero, 2008).

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A lot of studies have analyzed the concept of materialism in clarifying behavior of consumers, including green consumption (Perera & Klein, 2011; Segev, Shoham, & Gavish, 2015). Materialism is not something new and has been mainly linked with the consumer culture (Segev et al., 2015). Studies suggested that deliberate purchase of counterfeit products is linked with a person's materialistic values (Penz & Stottinger, 2005). Kilbourne and LaForge (2010), studied the relationship between individual values and materialism. The pace of technological advancement has increased at a phenomenal rate in recent years, particularly social media platforms (Duffett, 2015). Interaction on social media among individuals generates comparative behaviors that affect consumer-purchasing habits. Usage of social media has turned out to be pervasive in human life since people constantly make comparisons with others therefore, it can be said that online socialization prompts comparisons (Ozimek & Bierhoff, 2016). According to Norris and Inglehart (2005), in a society where values are surrounded by material gains, religious values are more likely to be neglected. Hence, studies suggest that religious people are less materialistic. In regards to self-esteem, earlier research has discovered that self-esteem is inversely related to materialism (Park & John, 2011).

According to Karabati and Cemalcilar (2010), a lot of research has been done about materialism and the collection is huge, but the debate and discussion isn't decisive, and studies have suggested and called for additional research. Addressing to this call, the present study makes the use of the theory of materialism (Richins & Dawson, 1992) and put three aspects of materialism in a model with some causes and consequences. This study has highlighted the constructs (i.e. Individual values, Religiosity, Self Esteem and Social Media Usage) in materialism as a predictor, incorporated them into a centralized model that break materialism into its aspects, and examine their effect on green consumption and purchase of counterfeits.

## Literature Review

### Green Consumption

Green consumption can be defined as purchase decision, use and post use of a product, household management, and the kind of consumer behavior that reflects a concern for environment or consumption of the products with less ecological effects, such as use of environmentally friendly products, recycled packaging and low use of energy (Costa Pinto, Herter, Rossi, & Borges, 2014). In last four decades, many researchers have studied and examined green consumption (Leonidou, Leonidou, & Kvasova, 2010). Researchers have found different causes for different kinds of environmentally responsible behavior. Past studies critically analyzed the role of demographic variables such as age, gender, education, and moral standards regarding environmentally friendly behavior (Xiao & McCright, 2007). Researchers have also found that environmentally friendly behavior is associated with identity performance, self-expression, and have positive associations with things like social networking, taking part in adventurous activities, having fun, and being happy (Andreou, 2010).

## Purchase of Counterfeits

The illegal demonstration of a registered logo is used on products that look same as the products for which the logo is authorized, in order to make people think that they are using the original goods or product is known as counterfeit (Wilcock & Boys, 2014). Counterfeiting is of two types: 1) Deceptive counterfeiting, 2) Non-deceptive counterfeiting. Non-deceptive counterfeiting is the one where consumers knowingly purchase counterfeits. However, in deceptive counterfeiting consumer thinks that he/she is purchasing an original product when in reality they are buying a counterfeit (Rahpeima, Vazifedost, Hanzaae, & Saeednia, 2014).

Rahpeima et al. (2014) findings show that word of mouth and lower ethical standards are key factors behind consumers motivation to knowingly purchase counterfeits. Another reason for purchase of counterfeits is their affordability and inexpensiveness. Moreover, because of the low prices of counterfeits, consumers don't expect a high quality of the product. As long as the basic purpose of symbolic value is achieved, consumers will be happy with the product (Eisend & Schuchert-Güler, 2006).

## Materialism

“Materialism” means how important worldly possessions are to a person with the presumption that people with high level of materialism are excessively concerned with material objects (Goldsmith & Clark, 2012). Social learning, family, friends, advertisements and materialistic messages shown on TV programs are other sources through which people learn and adapt materialism (Kasser, Ryan, Couchman, & Sheldon, 2004). A major issue with respect to materialism, particularly in youth is social comparison (Chan & Prendergast, 2008). Social comparison theory refers to a belief that there is a drive inside people that motivates them to get exact self-assessments. It suggests that people try to evaluate themselves by comparing their views and capabilities to the views and capabilities of others. People might tend to move towards materialism because of the bitterness originating from unfavorable social comparisons (Kim, Callan, Gheorghiu, & Matthews, 2017).

## Materialism and Green Consumption

Studies show an inverse relationship between materialism and green consumption (Tascioglu, Eastman, & Iyer, 2017). Hurst, Dittmar, Bond, and Kasser (2013)'s findings proposed that “materialism and pro-environmental attitudes and behaviors are negatively associated with each other.” Researchers view self-centeredness as a root cause for the pursuit of self-interest at the expense of the common good, including Mother Nature, and lack of concern for others (Richins & Dawson, 1992). As opposed to the concern for others, which is inseparable with green consumption, studies suggest that materialistic people focus on their own selves. Taking into account the fact that success and centrality facets are more related to one's own self, one might engage in green consumption out of the desire for achievements rather than happiness (Tascioglu et al., 2017). Thus, it can be hypothesized that:

*H<sub>1</sub>: Materialism has a significant relation with green consumption.*

## Materialism and Purchase of Counterfeits

The connection between people's materialistic attributes and their goals to buy fake products is a critical zone to study because all the reasons for which products are counterfeited relate to materialism e.g. status, brand name and luxurious nature of the product (Davidson, Nepomuceno, & Laroche, 2019). There are arguments for both positive and negative relationship between materialism and purchase of counterfeits. Wilcox, Kim, and Sen (2009) found positive relationship between purchase of counterfeits and materialism with the end goal of social approval while negative relation was found by Davidson et al. (2019) because of fear of being recognized with a fake item (Liao & Hsieh, 2013). Thus, it can be hypothesized that:

*H<sub>2</sub>: Materialism has a significant relation with purchase of counterfeits.*

## Self-Esteem and Materialism

Self-esteem is an assessment of our value as people, a judgment that we are great, important individuals (Neff, 2011). According to Toth (2014), consumers boost their self-esteem, enhance their image and maintain their status by consumption practices. Studies examining low self-esteem as a predictor of materialism has considerable evidence. For instance, Park and John (2011) findings suggest that people who have low self-esteem are more materialistic than people who have high implicit self-esteem. In addition, they indicated with experiment that having high self-esteem lessens materialism. Another research by Ruvio, Somer, and Rindfleisch (2014) suggests that low levels of self-esteem are the main reason that people tend to move towards materialism when they are faced with social insecurities.

## Self-esteem and Green Consumption

Johnstone and Tan (2015) findings discovered that Green consumers weren't generally appreciated, which definitely changed how a few customers saw environmentally friendly behavior. According to Banister and Hogg (2004), the end goal to stay away from a negative social image, people will keep a distance from individuals or goods that may undermine their self-identity and esteem level. Hence, this idea stops people from taking a part in green consumption and sometimes it even creates resistance towards environmentally friendly behavior. A few consumers might avoid embracing green behavior because they need to abstain from being 'lectured' or controlled, or because they want to keep up their positive self-esteem (Johnstone & Tan, 2015).

## Self-Esteem and Purchase of Counterfeits

Wang et al. (2014) examined purchase of counterfeit luxury products. They found that social compliments and feedbacks play a vital role in moral disengagement and proposed that when people who use counterfeits get compliments, they are more inclined to purchase counterfeit products. Hence, it was suggested that implicit self-esteem affect the preference for counterfeits of luxury products. Thus, it has been hypothesized that:

*H<sub>3</sub>: Self Esteem has a positive relation with materialism.*

*H<sub>4</sub>: Materialism mediates a relationship between self-esteem and Green Consumption.*

*H<sub>5</sub>: Materialism mediates a relationship between self-esteem and purchase of counterfeits.*

## **Social Media Usage and Materialism**

In past few years, social media and all social networking sites have become so popular (Vinerean, Cetina, Dumitrescu, & Tichindelean, 2013). For example, Facebook have more than a billion users since its start in 2004. Social networking sites can be defined as platforms where professional and social interaction of friends takes place (Trusov, Bucklin, & Pauwels, 2009). Social networking sites have made the acquisition and search of information quite easy for people. From Information search to after purchase behavior, social media influence almost every aspect of consumer behavior (Akrimi & Khemakhem, 2012).

Social media usage has become pervasive in lives of human beings because people constantly compare themselves with others (Ozimek & Bierhoff, 2016). Online interaction prompts comparison, and at times people practice a particular group's norms with regards to similar material objects in order to become a part of that group. Such kind of social comparisons empowered by social media and social networking sites raises materialism among youths and youthful grown-ups. Youths and youthful grown-ups discuss about their material gains with friends and get affected by the material possessions of celebrities; both are factors that promote materialism (Islam, Sheikh, Hameed, Khan, & Azam, 2018).

## **Social Media Usage and Green Consumption**

People are more inclined to take part in purchasing activity when they have information regarding the product. Since users of social media have more knowledge about environmental issues and green products, it was found that they are more likely to use green products and act responsibly for the environment. Thus, social media usage is significantly related to green consumption.

## **Social Media Usage and Purchase of Counterfeits**

Morra, Gelosa, Ceruti, and Mazzucchelli (2018)'s study shows that consumer's willingness to purchase luxury brand get affected by the information posted on social media by the experienced consumers. It has been proposed that this kind of marketing is positively related to the consumer's willingness to purchase counterfeit luxury products. Thus, it can be hypothesized that:

*H<sub>6</sub>: Social Media Usage has a positive relation with materialism.*

*H<sub>7</sub>: Materialism mediates a relationship between social media usage and green consumption.*

*H<sub>8</sub>: Materialism mediates a relationship between Social Media Usage and purchase of counterfeits.*

## Religiosity and Materialism

Religiosity can be defined as “the extent to which a person is committed to his religion” (Madni, Hamid, & Rashid, 2016). According to Patel (2012), suggested that, religiosity can affect the behavior of a consumer because it is a significant cultural and religious force.

Studies explain that there is an important linkage between religiosity and different consumption factors like materialism (Stillman, Fincham, Vohs, Lambert, & Phillips, 2012), impulsiveness (Yousaf & Shaukat Malik, 2013), and moral value and ethics. The studies on religion and its aspects are limited, which shows the need of more research work in the future and hence, researchers should make an effort in the future in order to maintain the development of the field (Agarwala, Mishra, & Singh, 2019).

Research on relationship between materialism and religiosity have been of great interest for scholars (Bindah & Othman, 2012). It has been proposed that people who are religious are less inclined towards materialism. However, it has also been discussed that religious people aren't necessarily against materialism and choose luxury products over common products. However, they might neglect the luxurious nature of the product and provide reasons to justify the consumption of luxury products (Veer & Shankar, 2011).

## Religiosity and Green Consumption

Religiosity can affect all aspects and parts of consumer behavior, and it is concluded that there is a link between religiosity and green behavior. There are some studies that have established a positive impact of religiosity on green consumption (Minton, Kahle, & Kim, 2015). However, other researchers (Chuvieco & Burgui, 2016) also found contradictory findings.

## Religiosity and Purchase of Counterfeits

Even though selling and purchasing of counterfeit products have become a major issue, the causes that lead towards the purchase of counterfeits are not completely discovered (Quoquab, Pahlevan, Mohammad, & Thurasamy, 2017). The previous studies examined the association of motivation behind purchase of counterfeits with both personal and social factors (Cheng, Fu, & Tu, 2011). However, there is lack of studies that examined the relationship between purchase of counterfeits and religiosity. People who are more religious might respond ethically about the phenomenon of purchase of counterfeits. It can be because moral people have valuable perspectives that affect their behavior in terms of fear of God, law, society, love, appreciation and respect. These feelings restrict them from engaging in unethical behaviors, such as promoting, selling and purchasing illegal products (counterfeits) and/or services. Thus, it can be hypothesized that:

*H<sub>9</sub>: Religiosity has a negative relation with materialism.*

*H<sub>10</sub>: Materialism mediates a relationship between Religiosity and Green Consumption.*

*H<sub>11</sub>: Materialism mediates a relationship between Religiosity and purchase of counterfeits.*

## Individual Values and Materialism

Values are used to understand the motivational factors for specific attitudes and behaviors and to characterize individuals and societies, to follow change over time (Schwartz et al., 2012). Values can be categorized in two dimensions: 1) Openness to change against conservation, 2) self-enhancement values against self-transcendence values. This study has focused on Self-Transcendence and Self-enhancement values. Self-Transcendence values are related to benevolence and universalism, whereas self-enhancement values are associated with power and achievement. Self-transcendence values focus on others, while self-enhancement values focus on oneself (Nordlund & Garvill, 2002).

Schwartz et al. (2012) created a system of values which can be used to analyze materialism. However, all the values in the system are not necessarily related to the concept of materialism. Since past research has shown that materialism comes from an egotistical and self-centered point of view, it is suggested that only two domains are more related to materialism, i.e. self-transcendence and self-enhancement. Self-transcendence values are inversely related and self-enhancement values are directly related with materialism (Kilbourne & LaForge, 2010).

## Individual Values and Green Consumption

It cannot be guaranteed that all values are of equivalent significance in influencing the behavior of consumers. Research has suggested that people who focus more on self-enhancement are less likely to consume green products as compared to the people with self-transcendence values (Verain et al., 2012).

## Individual Values and Purchase of Counterfeits

Earlier research has inspected consumer inspirations for using counterfeits, for example, the craving for status and self-enhancement. As per Bian and Forsythe (2012), self-representing and self-expressive values are major reasons behind the usage of luxury products (either original or counterfeit). Thus, it can be hypothesized that:

*H<sub>12</sub>: Self-Enhancement Values has a positive relation with materialism.*

*H<sub>13</sub>: Self-Transcendence Values has a negative relation with materialism.*

*H<sub>14</sub>: Materialism mediates a negative relationship between Self-Enhancement Values and Green Consumption.*

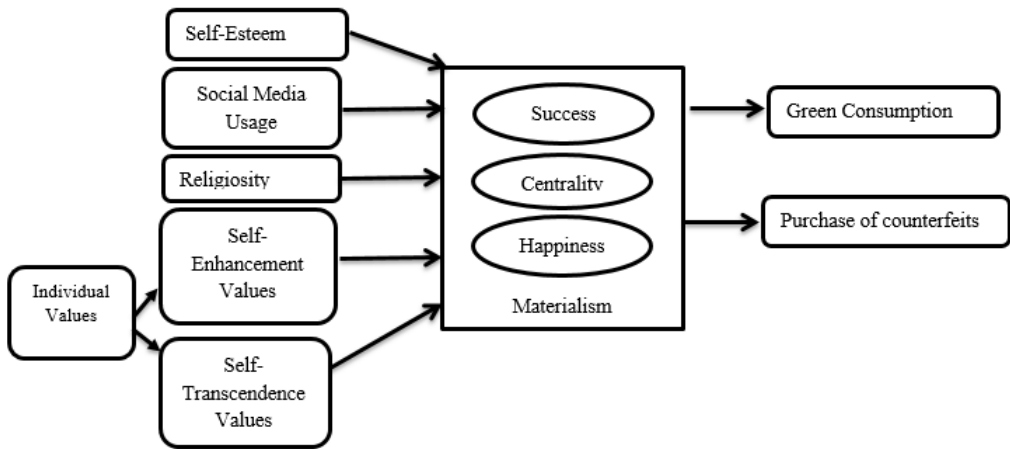
*H<sub>15</sub>: Materialism mediates a positive relationship between Self-Transcendence Values and Green Consumption.*

*H<sub>16</sub>: Materialism mediates a positive relationship between Self Enhancement Values and purchase of counterfeits.*

*H<sub>17</sub>: Materialism mediates a negative relationship between Self-Transcendence Values and purchase of counterfeits.*

## Research Framework

**Figure 1**  
Research Framework



## Method

In this study, explanatory research design has been used. We have applied the Theory of Social Comparison, in order to test the relationship between four independent variables, namely; Individual values, Self-Esteem, Social Media Usage, Religiosity; a mediator, namely, Materialism, and two dependent variables, namely; Green Consumption and Purchase of counterfeits. We have conducted a quantitative research method in this study. It is a causal research, which tests the relationship between independent and dependent variables. The unit of analysis used in this study is individual. The data is gathered on the bases of individual and each response is used as an individual data source.



## Sampling Design

The target population in our study is consumers of Karachi, Pakistan, particularly students of different universities. The population chosen in this study were university students because they are well educated and understand the concepts of green consumption and also know the difference between original and counterfeit products. They understand English and as the medium of instruction of questionnaire was also English, the population was better able to understand the questionnaire. Daniel Soper sample size calculator recommended minimum sample size of this study were 103. We have used convenience-sampling technique. We have taken the sample of 300 respondents so that we can get a better representation of the population. 50 respondents from Iqra University, 50 from Bahria University, 50 from IBA, 50 from Indus Valley School of Arts and Architecture, 50 from DHA Suffa University and 50 from NED University of Engineering and Technology were taken in the study. The sample comprised mainly of students aged less than 30 and having income above 50,000.

## Measures

Likert scale was used in the questionnaire using a scale of 1 to 5 (strongly disagree to strongly agree). Questionnaire was distributed among the students through hard copy, as well as soft copy (Google form). The questionnaire was used to collect data, which was comprised of close-ended 69 items. Self Esteem variable was measured by using [Rosenberg \(1965\)](#) Self-Esteem Scale. The scale contains 10-items. The Cronbach's alpha of the scale was 0.760. Social Media Usage variable was assessed using a 10-items Social Media Use Integration scale, developed by [Jenkins-Guarnieri, Wright, and Johnson \(2013\)](#). The Cronbach's alpha was 0.802. Religiosity factor was measured using modified version of the scale originally developed by [Wilkes, Burnett, and Howell \(1986\)](#). The scale had 6 items. The reliability of the scale was 0.734.

The individual values were measured using the portrait value questionnaire, developed by [Schwartz et al. \(2012\)](#). It was divided into Self-Enhancement values (6 items) and Self-Transcendence values (6 item). The Cronbach's alpha for Self-Enhancement values was 0.681 and Self-Transcendence values was 0.846. The three constructs of materialism were assessed using material values scale developed by [Richins and Dawson \(1992\)](#). Scale contains 18 items in total. The items were divided into subscales i.e. success (6 items), centrality (7 items) and happiness (5 items). The overall reliability was 0.756. The variable of Green consumption was measured by using a six items scale developed by [Haws, Winterich, and Naylor \(2014\)](#), named as 'Green' scale. The Cronbach's Alpha was 0.681. A scale developed by [Krishnan et al. \(2017\)](#), was used having 7 items and their reliability was 0.899.

## Data Analysis Technique

Structural Equation Modeling was used with the help of Partial Least Squares as it is statistically very efficient and provide more predictive accuracy to analyze the data. According to the [Hair, Ringle, and Sarstedt \(2011\)](#), if the study model is complex (many

constructs and indicators) then PLS-SEM is preferred. SMART-PLS software was used to analyze the data.

## Results

Table 1 represents the demographics of our sample. 88% of the sample were aged less than 30. 52% were male and 48% were females. 72% of them had income higher than 50,000. Table 2 represents mean, standard deviations and Inter-correlations of 8 variables using SPSS 19 software. These variables are; Materialism; Green Consumption; Purchase of Counterfeits; Religiosity; Self- Esteem; Self-Enhanced Values; Social Media Usage and Self- Transcendence Values. Results show that green consumption is significantly and negatively correlated with materialism while green consumption is significantly and positively correlated with religiosity. Purchase of Counterfeits is significantly and negatively correlated with self-esteem while Purchase of Counterfeits is significantly and positively correlated with religiosity and green consumption.

Table 1  
Demographics

Variables	Frequency	Percentage
<b>GENDER</b>		
Male	157	52.30%
Female	143	47.70%
<b>AGE</b>		
Less than 21	61	20.30%
21 to 30	204	68.00%
31 to 40	32	10.70%
41 to 50	3	1.00%
<b>INCOME</b>		
Below 30,000	52	17.30%
30,000-50,000	32	10.70%
above 50,000	216	72.00%

N=300

Table 2  
Descriptive Statistics and Inter-Correlations

Construct	Mean	Std. Deviation	SE	SMU	REL	Materialism	GC	POC	SEV	STV
SE	3.516	0.586	-	-	-	-	-	-	-	-
SMU	3.259	0.681	0.082	-	-	-	-	-	-	-
REL	3.880	0.655	0.137*	0.015	-	-	-	-	-	-
Materialism	2.956	0.473	0.051	0.45**	-0.210	-	-	-	-	-
GC	3.400	0.621	0.058	(-)0.079	0.287**	(-)0.144*	-	-	-	-
POC	2.721	0.841	(-)0.157**	0.007	0.190**	-0.009	0.226**	-	-	-
SEV	3.401	0.650	0.065	0.204**	0.132*	0.350**	0.084	0.220**	-	-
STV	3.965	0.707	0.191**	0.014	0.253**	(-)0.143*	0.306**	0.044	0.280**	-

N=300; p<0.05\*; p, 0.01\*\*; Note: GC= Green Consumption; POC= Purchase of Counterfeits; REL= Religiosity; SE= Self- Esteem; SEV= Self-Enhanced Values; SMU= Social Media Usage; STV= Self- Transcendence Values

## Model Measurement

The measurement of the model has been conducted using PLS 3 software and Construct Reliability, Convergent Validity and Discriminant Validity has been calculated for each construct in the model.

### Convergent Validity

According to [Carmines and Zeller \(1979\)](#), Correlations among constructs show Convergent Validity. Cross Loading values of each item which must be greater than 0.5. Cronbach alpha value must be equal to or greater than 0.5 for measuring Construct Reliability. AVE or Average Variance Extract must be greater than or equal to 0.5 ([Fornell & Larcker, 1981](#)) and Composite Reliability must be greater than or equal to 0.7 ([Gefen, Straub, & Boudreau, 2000](#)). Table 3 shows the values of Cronbach Alpha which is more than 0.5, Composite Reliability of all the constructs is more than 0.7 and all the values of AVE is more than 0.5. Table 5 shows that Cross Loading values of each item is greater than 0.5. This means that the measurement scale used for the constructs; Materialism; Green Consumption; Purchase of Counterfeits; Religiosity; Self- Esteem; Self-Enhanced Values; Social Media Usage and Self- Transcendence Values has Convergent Validity.

Table 3  
Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability	AVE
<b>Materialism</b>	0.709	0.821	0.537
<b>GC</b>	0.583	0.754	0.612
<b>SEV</b>	0.680	0.807	0.522
<b>STV</b>	0.847	0.868	0.529
<b>POC</b>	0.899	0.918	0.617
<b>REL</b>	0.732	0.827	0.548
<b>SE</b>	0.553	0.765	0.520
<b>SMU</b>	0.757	0.834	0.502

Note: GC= Green Consumption; POC= Purchase of Counterfeits; REL= Religiosity; SE= Self- Esteem; SEV= Self-Enhanced Values; SMU= Social Media Usage; STV= Self- Transcendence Values

### Discriminant Validity

When constructs are different from each other, they have discriminant validity ([Carmines & Zeller, 1979](#)). Discriminant validity can be assessed using three criteria's; Fornell and Larcker (1981); Cross Loadings of each construct and Hetrotrail-Monotrait (HTMT). According to [Fornell and Larcker \(1981\)](#), all diagonal values must be greater than non-diagonal values. Cross loading of each item must have highest value in one construct ([Fabrigar, Wegener, MacCallum, & Strahan, 1999](#)) and each value must be greater than 0.5. Hetrotrail-Monotrait (HTMT) must be less than 0.8 ([Henseler, Ringle, & Sarstedt, 2015](#)).

Table 4 shows that all diagonal values are greater than non-diagonal values ([Fornell & Larcker, 1981](#)). Table 5 shows that all factor loadings are highest in one construct and each item in a construct has greater than 0.5 value ([Gefen et al., 2000](#)). Table 6 shows

that all the values of HTMT ratios are below 0.8 and which fulfill the criteria of HTMT Ratio. Thus, Discriminant Validity exists among the constructs.

Table 4  
Fornell-Larcker Criterion

Construct	GC	Materialism	POC	REL	SE	SEV	SMU	STV
GC	0.782	-	-	-	-	-	-	-
Materialism	0.084	0.733	-	-	-	-	-	-
POC	0.110	0.203	0.786	-	-	-	-	-
REL	0.173	-0.178	0.142	0.740	-	-	-	-
SE	0.136	0.141	-0.077	0.219	0.721	-	-	-
SEV	-0.009	0.436	0.253	0.005	0.051	0.722	-	-
SMU	-0.051	0.496	0.062	-0.160	0.096	0.204	0.708	-
STV	0.145	-0.170	0.032	0.352	0.187	0.045	-0.129	0.728

Note: GC= Green Consumption; POC= Purchase of Counterfeits; REL= Religiosity; SE= Self- Esteem; SEV= Self-Enhanced Values; SMU= Social Media Usage; STV= Self- Transcendence Values

Table 5  
Cross Loadings

Construct	Items	GC	Materialism	POC	REL	SE	SMU	SEV	STV
GC	GC2	0.640							
	GC4	0.902							
Materialism	C6		0.772						
	H4		0.593						
	S1		0.782						
	S2		0.768						
POC	POC1			0.805					
	POC2			0.827					
	POC3			0.767					
	POC4			0.785					
	POC5			0.838					
	POC6			0.759					
	POC7			0.711					
REL	R1				0.586				
	R2				0.779				
	R3				0.773				
	R5				0.803				
SE	SE1					0.703			
	SE3					0.756			
	SE7					0.703			
SMU	SMU1						0.678		
	SMU2						0.734		
	SMU3						0.674		
	SMU4						0.675		
	SMU5						0.774		
SEV	IVa3							0.447	
	IVa4							0.787	
	IVa5							0.796	
	IVa6							0.795	
STV	IVb1								0.750
	IVb2								0.782
	IVb3								0.466
	IVb4								0.842
	IVb5								0.729
	IVb6								0.738

Note: GC= Green Consumption; POC= Purchase of Counterfeits; REL= Religiosity; SE= Self- Esteem; SEV= Self-Enhanced Values; SMU= Social Media Usage; STV= Self- Transcendence Values; C4=Centrality; H4= Happiness; S1 & S2= Success

Table 6  
Heterotrait-Monotrait Ratio (HTMT)

Construct	GC	Materialism	POC	REL	SE	SEV	SMU	STV
GC	-	-	-	-	-	-	-	-
Materialism	0.160	-	-	-	-	-	-	-
POC	0.229	0.233	-	-	-	-	-	-
REL	0.306	0.226	0.175	-	-	-	-	-
SE	0.341	0.244	0.160	0.402	-	-	-	-
SEV	0.179	0.612	0.320	0.139	0.237	-	-	-
SMU	0.140	0.648	0.099	0.223	0.204	0.284	-	-
STV	0.341	0.200	0.136	0.395	0.279	0.307	0.151	-

Note: GC= Green Consumption; POC= Purchase of Counterfeits; REL= Religiosity; SE= Self- Esteem; SEV= Self-Enhanced Values; SMU= Social Media Usage; STV= Self- Transcendence Values

## Path Coefficient

Table 7 shows all the direct paths or relationships in the structural equation model in PLS. Hypotheses 1, 2, 3, 6, 9, 12 and 13 represent the direct relationships in the model. The results of this research shows that there is an insignificant impact of Materialism on Green Consumption as the p value is 0.191 ( $p > 0.05$ ), therefore  $H_1$  is rejected. Our studies are contradictory to past studies which have shown significant relationship between materialism and green purchase behavior (Manchanda, 2014; Banerjee & McKeage, 1994). Their study showed that people with less materialistic inclination tend to purchase green products.

There is a significant positive impact of Materialism on Purchase of Counterfeits as the p value is 0.000 ( $p < 0.05$ ) with  $\beta=0.203$ , therefore  $H_2$  is accepted. According to Davidson et al. (2019) materialistic consumers are more likely to purchase a counterfeit product as compared to their less materialistic counterparts, thus this hypothesis supports previous findings. There is a significant positive impact of Self-Esteem on Materialism as the p value is 0.005 ( $p < 0.05$ ) with  $\beta=0.133$ , therefore  $H_3$  is accepted. Materialistic consumers want to evidently flaunt their possessions to generate self-esteem and show high status, which shows that self-esteem leads to materialism and purchase of counterfeit products.

There is a significant positive impact of Social Media Usage on Materialism as the p value is 0.000 ( $p < 0.05$ ) with  $\beta=0.378$ , therefore  $H_6$  is accepted. As per the study of Kamal, Chu, and Pedram (2013), social media usage is a significant predictor of materialism. Islam et al. (2018) studied the impact of social media as a moderator between social comparisons with celebrities and materialism. They also studied the impact of social media as a moderator between social comparisons with peers and materialism and both hypotheses were significant and positive. Also, in Chan and Prendergast (2008), social comparison had a positive correlation with materialism. So, our hypothesis is supported by these previous studies. There is a significant negative impact of Religiosity on Materialism as the p value is 0.022 ( $p < 0.05$ ) with  $\beta= -0.104$ , therefore  $H_9$  is accepted. Although the result of the study conducted by Bindah and Othman (2012) did not support the hypothesized relationship between religiosity and materialism.

There is a significant positive impact of Self-Enhanced Values on Materialism as the p value is 0.000 ( $p < 0.05$ ) with  $\beta=0.358$ , therefore  $H_{12}$  is accepted. This is supported by the study of Karabati and Cemalcilar (2010), that Self-Enhancement has a positive

significant impact on materialism. There is an insignificant impact of Self-Transcendence on Materialism as the p value is 0.050 ( $p > 0.05$ ), therefore  $H_{13}$  is rejected. This is not supported by the study of Karabati and Cemalcilar (2010) in which Self-transcendence has a negative significant impact on materialism.

Table 7  
Direct Relationship Results

		$\beta$	Mean	SD	T Statistics	P Values	Decision
$H_1$	Materialism $\rightarrow$ GC	0.084	0.097	0.064	1.309	0.191	Reject
$H_2$	Materialism $\rightarrow$ POC	0.203	0.218	0.057	3.578	0.000	Accept
$H_3$	SE $\rightarrow$ Materialism	0.133	0.143	0.048	2.783	0.005	Accept
$H_6$	SMU $\rightarrow$ Materialism	0.378	0.376	0.044	8.504	0.000	Accept
$H_6$	REL $\rightarrow$ Materialism	-0.104	-0.115	0.045	2.301	0.022	Accept
$H_{12}$	SEV $\rightarrow$ Materialism	0.358	0.357	0.045	8.025	0.000	Accept
$H_{13}$	STV $\rightarrow$ Materialism	-0.126	-0.132	0.064	1.964	0.050	Reject

Note: GC= Green Consumption; POC= Purchase of Counterfeits; REL= Religiosity; SE= Self- Esteem; SEV= Self-Enhanced Values; SMU= Social Media Usage; STV= Self-Transcendence Values

The indirect effects or mediation effects of the model are shown in Table 8, which consists of Hypotheses 4, 5, 7, 8, 10, 11, 14, 15, 16 and 17. All these hypotheses test the mediating impact of Materialism between independent and dependent variables. The results of this research shows that there is an insignificant impact of Materialism between Self-Esteem and Green Consumption as the p value is 0.301 ( $p > 0.05$ ) with  $\beta = 0.011$ , therefore  $H_4$  is rejected. There is a significant impact of Materialism between Self-Esteem and Purchase of Counterfeits as the p value is 0.03501 ( $p > 0.05$ ) with  $\beta = 0.027$ , therefore  $H_5$  is accepted. There is an insignificant impact of Materialism between Social Media Usage and Green Consumption as the p value is 0.201 ( $p > 0.05$ ) with  $\beta = 0.032$ , therefore  $H_7$  is rejected. There is a significant impact of Materialism between Social Media Usage and Purchase of Counterfeits as the p value is 0.001 ( $p > 0.05$ ) with  $\beta = 0.077$ , therefore  $H_8$  is accepted.

There is an insignificant impact of Materialism between Religiosity and Green Consumption as the p value is 0.321 ( $p > 0.05$ ) with  $\beta = -0.009$ , therefore  $H_{10}$  is rejected. There is a significant impact of Materialism between Religiosity and Purchase of Counterfeits as the p value is 0.066 ( $p > 0.1$ ) at 10% confidence interval with  $\beta = -0.021$ , therefore  $H_{11}$  is accepted. There is an insignificant impact of Materialism between Self-Enhanced values and Green Consumption as the p value is 0.197 ( $p > 0.05$ ) with  $\beta = 0.030$ , therefore  $H_{14}$  is rejected. There is a significant impact of Materialism between Self-Enhanced values and Purchase of Counterfeits as the p value is 0.002 ( $p > 0.05$ ) with  $\beta = 0.073$ , therefore  $H_{15}$  is accepted. There is an insignificant impact of Materialism between Self-Transcendence values and Green Consumption as the p value is 0.366 ( $p > 0.05$ ) with  $\beta = -0.011$ , therefore  $H_{16}$  is rejected. There is an insignificant impact of Materialism between Self-Transcendence values and Purchase of Counterfeits as the p value is 0.111 ( $p > 0.05$ ) with  $\beta = -0.026$ , therefore  $H_{17}$  is rejected.

Table 8  
Specific Indirect Effects

		$\beta$	Mean	SD	T Statistics	P Values	Decision
$H_4$	SE → Materialism → GC	0.011	0.014	0.011	1.036	0.301	Reject
$H_5$	SE → Materialism → POC	0.027	0.031	0.013	2.112	0.035	Accept
$H_7$	SMU → Materialism → GC	0.032	0.036	0.025	1.280	0.201	Reject
$H_8$	SMU → Materialism → POC	0.077	0.082	0.023	3.269	0.001	Accept
$H_{10}$	REL → Materialism → GC	-0.009	-0.011	0.009	0.993	0.321	Reject
$H_{11}$	REL → Materialism → POC	-0.021	-0.025	0.011	1.841	0.066	Accept
$H_{14}$	SEV → Materialism → GC	0.030	0.034	0.023	1.290	0.197	Reject
$H_{15}$	SEV → Materialism → POC	0.073	0.078	0.024	3.032	0.002	Accept
$H_{16}$	STV → Materialism → GC	-0.011	-0.013	0.012	0.904	0.366	Reject
$H_{17}$	STV → Materialism → POC	-0.026	-0.029	0.016	1.597	0.111	Reject

Note: GC= Green Consumption; POC= Purchase of Counterfeits; REL= Religiosity; SE= Self- Esteem; SEV= Self-Enhanced Values; SMU= Social Media Usage; STV= Self-Transcendence Values

Table 9  
Hypotheses Assessment Summary

$H_1$	Materialism has a significant relation with green consumption	Rejected
$H_2$	Materialism has a significant relation with purchase of counterfeits.	Accepted
$H_3$	Self-esteem has a significant relation with materialism	Accepted
$H_4$	Materialism mediates a relationship between self-esteem and green consumption	Rejected
$H_5$	Materialism mediates a relationship between self-esteem and purchase of counterfeits.	Accepted
$H_6$	Social media usage has a significant relation with materialism	Accepted
$H_7$	Materialism mediates a relationship between social media usage and green consumption	Rejected
$H_8$	Materialism mediates a relationship between social media usage and purchase of counterfeits.	Accepted
$H_9$	Religiosity has a significant relation with materialism	Accepted
$H_{10}$	Materialism mediates a relationship between religiosity and green consumption	Rejected
$H_{11}$	Materialism mediates a relationship between religiosity and purchase of counterfeits.	Accepted
$H_{12}$	Self enhancement values has a positive relation with materialism	Accepted
$H_{13}$	Self-transcendence values has a negative relation with materialism	Accepted
$H_{14}$	Materialism mediates a negative relationship between self enhancement values and green consumption	Rejected
$H_{15}$	Materialism mediates a positive relationship between self-transcendence values and green consumption	Rejected
$H_{16}$	Materialism mediates a positive relationship between self-enhancement values and purchase of counterfeits.	Accepted
$H_{17}$	Materialism mediates a negative relationship between self-transcendence values and purchase of counterfeits.	Rejected

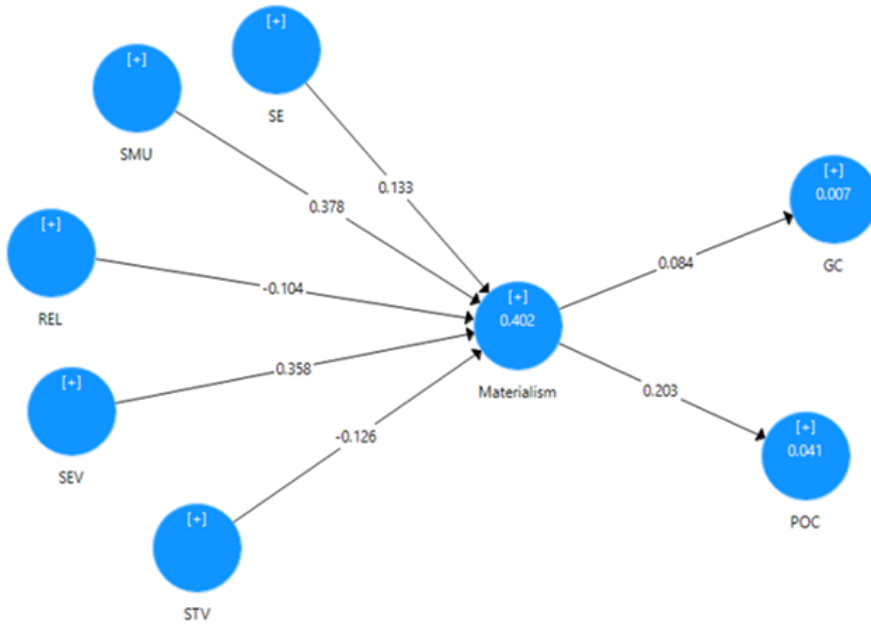
## Discussion and Conclusion

This study tested the relationship of possible causes of materialism and its outcomes. Through this research, we also found that self-esteem doesn't have much to do with or green consumption, however self-esteem does have a direct relationship with purchase of counterfeits, which supports the findings of Wang et al. (2014), which suggested that implicit self-esteem affect the preference for counterfeits of luxury products.

This research also suggested that social media usage has a direct significant relationship with materialism. This statement can be backed by number of studies which suggested that people who use social media excessively are more materialistic than others (Heimlich & Ardoin, 2008; Kamal et al., 2013). The findings also support the studies, which stated that religiosity has a negative relation with materialism, Stillman et al. (2012) proposed that people who are religious are less inclined towards materialism. As suggested by Schwartz et al. (2012), our findings endorse the statement that self-enhancement values are directly related with materialism. We also found new mediation relations, firstly, Materialism mediates between Social Media Usage and Purchase of Counterfeits, and also between

Self-Enhancement values and Purchase of Counterfeits. Also, Materialism mediates the relationship between Self-Esteem and Purchase of Counterfeits and between Religiosity and Purchase of Counterfeits.

**Figure 2**  
Structural Equation Modelling in PLS



## Practical Implication

This study focuses on the probable causes of materialisms and its effects on buying attitudes of consumers with respect to green consumption and purchase of counterfeits. Marketing managers can use this research to get a better understanding of the consumers who prefer green consumption and purchase of counterfeits and can design their strategies accordingly.

## Limitations and Future Research

As a small sample of people was selected for, the data collection so there might be a possibility of generalization. Hence, the data should be collected from more respondents. The data can be collected from different classes or religious sects to get more insight and understand the intricacies of these results. Moreover, in future the data should be collected from different areas of the city or even from different cities with the different class group which would give an insight of the study.

Furthermore, data can be collected from different malls, super markets and common households, which would give the opinion of diverse people. With respect to the data



collections, this research used only questionnaire. In the future research, observations should be taken into considerations like the purchasing behavior of the customers while they are shopping in a mall or some supermarkets. Future research can be done, using other values such as conservation, openness to change etc. In our study, we used 3 facets that were described by [Richins and Dawson \(1992\)](#), future research can be conducted using the other 3 facets possessiveness, non-generosity and envy.

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