

The Influence of Materialism on Consumer Preferences: A Conjoint Analysis Approach

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This study examined how materialistic beliefs influence consumer preferences and the relative importance of purchase attributes. Materialism was measured using the Richins and Dawson material values scale and its subscales. A conjoint analysis model was employed to measure consumer preferences. Seventy university students completed a conjoint analysis task where they were asked to order, based on personal preference, 12 stimulus cards representing a series of unique hypothetical purchases that varied according to monetary value, brand prestige, and tangibility. Correlation analysis was performed on the results of the materialism values scale, part-worth utilities and relative attribute importance scores generated by the conjoint analysis. Results of the study supported the notion that stronger materialistic beliefs are positively associated with a greater preference for material purchases and negatively associated with experiential purchases. A less impressive association between materialism measures and brand prestige was found as well. Monetary value preferences were not associated with materialism. Tangibility and monetary purchase attributes were not associated with materialism, however, a significant positive association between brand prestige and materialism was observed. These findings suggest that materialism is associated with tangibility and prestige preferences, as well as with an increased concern with prestige as an attribute of a purchase.

Keywords: materialism, conjoint analysis, consumer preferences, material purchases, experiential purchases

1 Introduction

The pursuit, acquisition, ownership and consumption of material goods are behaviors frequently and broadly encouraged in Philippine society today. Commercial entities invest heavily in marketing communications intended to reinforce the already pervasive belief that the acquisition of material possessions leads to improvements in quality of life. However, a materialistic disposition is largely viewed as a morally undesirable characteristic (Ger & Belk, 1999; Kasser & Ryan, 1993; Fournier & Richins, 1991; Belk, 1983) and a considerable amount of empirical work suggests that materialistic values are associated with lower subjective well-being and life satisfaction (Belk, 1984, 1985; Richins & Dawson, 1992; Kasser & Ryan, 1993; Kasser & Ahuvia, 2002). Additionally, materialism is associated with a variety of negative consumer behaviors such as compulsive buying (Desarbo & Edwards, 1996; Rose, 2007), looseness with money (Tatzel, 2002), aggression (Saunders, Allen, & Pozzebon, 2008) and prestige-seeking consumer behavior (Belk, 1985). Despite the growing body of empirical work on materialism, there remains the need for exploratory work on the influence that materialism has on consumption preferences.

Since materialism substantially influences the social functions of material possessions and the motives to acquire them (Dittmar, 1991), it is important to understand how this disposition affects more specific consumer preferences. Extant research has found that materialistic predispositions influence consumer preferences for purchases with premium prices, that convey prestige and status (Belk, 1985), and tangible products (Van Boven & Gilovich, 2003; Howell & Hill, 2009). However, existing materialism research does not adequately explore which of these purchase attributes exerts the strongest influence on the consumer decision making process. Moreover, materialism studies have yet to examine whether materialism increases or decreases the relative importance of any purchase attribute in the consumer decision making process.

Given this gap in the materialism literature, there remains a need to explain how materialism influences the relative importance of specific purchase characteristics. Moreover, learning how a

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materialistic disposition influences consumer preferences permits a more nuanced understanding of the factors that make a purchase more appealing to materialistic individuals. This article seeks to empirically test two propositions: 1) a materialistic disposition is associated with an increased preference for certain purchase characteristics and, 2) a materialistic disposition is associated with the relative importance of attributes of a purchase. Thus, the research objective of the study was to determine whether more materialistic individuals have consumption preferences that reflect purchase priorities and schemas that differ from those of non-materialistic individuals. A conjoint analysis model is employed to identify the specific purchase characteristics that appeal to materialistic individuals.

2 Related Literature

2.1 Materialism

Over the past three decades since Russel Belk's (1984) seminal work, materialism has been defined in variety of ways. Authors have defined materialism as a personality trait (Belk, 1984), an attitude towards material goals (Csikszentmihalyi, 2004), a set of values (Richins & Dawson, 1992; Chatterjee & Hunt, 1996), or as an interaction effect between the individual and the environment (Kasser, Ryan, Couchman, & Sheldon, 2004). Therefore, materialism has been extensively studied as either a personality trait or as a value orientation (Kasser, Cohn, Kanner, & Ryan, 2007). The two dominant perspectives on materialism that have emerged in the domain of consumer research are Belk's (1985) trait perspective and Richins and Dawson's (1992) values perspective. These views of materialism have remained the dominant variants of the materialism construct in contemporary consumer research.

Belk views materialism as a trait reflecting the relative importance that a person places on the acquisition and ownership of material possessions and the belief that ownership of material possessions is the principal source of happiness (Belk, 1985). Materialism is believed to consist of the three sub-traits of possessiveness, non-generosity and envy. Possessiveness is the desire to maintain ownership of one's material possession or the need to "hold on to" these possessions. It represents a person's concern over the loss of possessions and a desire for greater control of ownership. Non-generosity is considered as the reluctance to share one's possessions with others. Envy is defined as a feeling of resentment or contempt for the happiness, achievement, status, and material possessions of others. Belk argues that people who exhibit high levels of possessiveness, non-generosity and envy tend to be more materialistic.

Alternatively, Richins and Dawson view materialism as a set of beliefs or values that influence the importance a person places on material goals. According to this perspective, materialism is characterized by three central values: acquisition importance, the causal role of acquisition in happiness, and, possessions as measures or symbols of success. The model suggests that materialism is the extent to which people espouse materialistic beliefs. Materialistic individuals are expected to value the pursuit of material possession to a greater extent than the less materialistic. This suggests a stronger preference for materialistic goals over non-materialistic strivings. Materialistic individuals also tend to view their possessions as more instrumental in increasing their happiness and well-being, and that these play an instrumental role in creating and maintaining happiness. Lastly, materialistic individuals tend to use the amount and quality of material possessions as a metric for judging both their own and other's success and life satisfaction. In the absence of clear evaluative standards for individual success, material possessions serve as a yardstick that people use to judge themselves and others by.

The models proposed by Richins and Dawson and Belk both assume that possessions are the main source of happiness. As a consequence of this belief, materialistic people tend to have a preference for, or preoccupation with, materialistic goals. Both models consider the social aspect of materialism; people use possessions as a measure of success and happiness and when others have comparatively more possessions, it creates dissatisfaction (envy). The models also advance the notion of using consumption to acquire greater instrumental value from possessions purchased.

2.2 Measuring Materialism

One of the first measures of materialism is Moschis and Churchill's (1978) materialism scale that includes six items that measure attitudes towards money and other material possessions. A likely explanation for the limited use of this scale in consumer research is its poor reliability (reported coefficient alpha of 0.60) when compared to the more contemporary measures of materialism. The more popular and recognized measures of materialism are the instruments developed by Belk (1984) and Richins and Dawson (1992) for their respective models of materialism. These scales have become the most recognized and frequently used measures of materialism in consumer research (Smith, 2010). Belk developed his original materialism scale in 1984 and revised the instrument in 1993. Richins and Dawson's material values scale (MVS) and its shorter form were developed between 1987 and 2004. The Belk scale and MVS were developed in the United States using Caucasian, European-American samples.

The Belk materialism scale is a 24-item scale (nine items for possessiveness, seven items for non-generosity, and eight items for envy) measuring the three sub-traits possessiveness, non-generosity, and envy. Five-point Likert-type scales are used for item scoring. Scores are computed for each sub-trait and summed to acquire an overall score reflecting general materialism. Belk (1984) used two samples to assess the scale's reliability and validity. The scale was developed using a student sample of 237 respondents and validated with a sample of students and nonstudents ($N = 338$). Belk reported alpha coefficients of 0.68, 0.72, and 0.80 to measure the reliability of possessiveness, non-generosity, and envy sub-traits, respectively. Acceptable levels of convergent and discriminant validity were established using multi-trait-multi-method analysis, where behavioral and photo indices of materialism were correlated with the scales. Measures of happiness and satisfaction in life were also found to be negatively correlated with the scale.

Richins and Dawson's material values scale (MVS) included 18 items: six items for "defining success," seven for "acquisition centrality," and five for "pursuit of happiness". The scale uses a 5-point Likert-type system similar to the Belk scale. Scores for each sub-dimension are summed; overall indices for materialism are computed from the sum of sub-scores. Richins and Dawson used a convenience sample of 11 consumers to develop items for the scale and three samples of students ($N = 448, 194, \text{ and } 191$) were used for the initial tests of the scale. An additional four consumer samples ($N = 144, 250, 235, \text{ and } 205$, respectively) were used for development, reliability and validity assessment. Scale reliability using Cronbach's alpha was between 0.80 and 0.88, and test-retest reliability over a three-week period was 0.87 for the whole 18 item scale, 0.82 for centrality, 0.86 for happiness and 0.82 for success.

Despite its popularity and widespread use in consumer studies, the MVS has been criticized by some for the stability of its factor structure and its cross-cultural applicability. Richins (2004) reassessed the psychometric properties of the MVS based on an analysis of 15 MVS data sets. Results of her study indicated that the MVS possesses adequate reliability and is empirically useful, however, the factor structure reported by Richins and Dawson (1992) was not consistently found in the data. According to Wong, Rindlfeisch, and Burroughs (2003), the MVS may also have limited cross-cultural applicability due to the reverse-worded nature of its items. In their study on over 800 adults from the United States, Thailand, Japan and Korea, Wong and colleagues discovered that the reverse-worded items affected both the reliability and the factor structure of the MVS.

2.3 Material Purchases

Several studies have shown that highly materialistic individuals tend to prefer material purchases or the purchase and ownership of tangible goods over experiential purchases, or investing in personal experiences (Howell, Pchelin, & Iyer, 2012; Tatzel, 2003; Holt, 1995; Richins, 1994). Experiential purchases tend to have a stronger association with buyer subjective well-being compared to material purchases (Van Boven, 2005). Howell et al. (2012) have attempted to explain why higher subjective well-being is associated with experiential purchases and why less materialistic individuals have a preference for these. Firstly, experiential purchases do not encourage social comparisons since they tend to be valued for more intrinsic reasons. It is also generally easier to make social comparisons between tangible products than it is to compare consumer experiences. Material purchases are also less effective than experiential purchases at satisfying the need for relatedness. Kasser et al. (2004)

reported that materialistic individuals experience more difficulty in establishing close relationships, and have less favorable appraisals of their relations. Experiences are also more open to positive reinterpretation; people may recall even unremarkable past experiences and remember them more favorably at a later time. Lastly, experiences define our identities to a greater extent than material possessions; life is defined more by our past experiences rather than our past purchases. Thus, it is hypothesized that:

- H1a: Materialism is positively associated with preferences for material or tangible purchases and negatively associated with preferences for experiential purchases
- H1b: Materialism is positively associated with the relative importance of purchase tangibility as a purchase attribute. Higher materialism is associated with higher attribute importance scores for purchase tangibility.

A methodological issue that has been frequently raised in materialism literature involves the distinction between material and experiential purchases. This stems from the possibility that some material purchases may be acquired and valued for the experiences that they provide the buyer. For instance, a consumer may purchase a vehicle for the primary purpose of enjoying the experience of riding the vehicle while also enjoying the benefits of owning it. Van Boven and Gilovich (2003) made the distinction between material and experiential purchase by defining a material purchase as a tangible purchase that is made for the primary purpose of ownership, whereas an experiential purchase is made mainly to acquire a life experience. They reported that participants in their study were capable of distinguishing between material and experiential purchases despite the inherent imprecision of the terms.

2.4 Prestige Purchases

Vigneron and Johnson (1999) defined prestige brands as brands that are likely to exhibit one or more of the following characteristics: 1) They are comparatively expensive and their price serves as a signal of status and wealth; 2) they are scarce and perceived as unique; 3) Their superiority may be partly derived from their technical or aesthetic superiority. Though what is perceived as a prestige purchase may vary from person to person, it is apparent that self-expression and impression management are among the main reasons why people purchase prestige brands.

Given the nature of prestige purchases, there is reason to expect that materialism is associated with a preference for prestige purchases; highly materialistic individuals tend to be more concerned with appearances, use their possessions for impression management (Browne & Kaldenberg, 1997) and are more likely to engage in conspicuous consumption (Richins, 1994; Holt, 1995). Some evidence supports the argument that materialistic individuals acquire prestige brand products to cope with feelings of uncertainty and other negative emotions. Research on the antecedents of materialism such as existential anxiety (Kasser & Sheldon, 2000), the influence of mass media (Churchill & Moschis, 1979), and family background (Kasser, Ryan, Sax, & Sameroff, 1995; Rindfleisch, Burroughs, & Denton, 1997) have also suggested that materialism stems from a need to assuage uncertainty. Rindfleisch, Burroughs, and Wong (2009) believed that materialistic individuals have a relatively higher need for certainty and consequently view the acquisition, ownership, and consumption of prestige products as a legitimate strategy for satisfying these needs. A brand provides the consumer with a greater feeling of certainty by serving as vehicle of cultural meaning that aids in establishing and organizing their belief system (Fournier, 1998). Since brands convey meaning, they may also facilitate the creation of more meaningful connections with other users of the brand. Therefore, materialism has been believed to strengthen the relationship that consumers have with their brands due to their instrumentality in providing stronger sense of meaning and certainty (Rindfleisch et al., 2009). The foregoing body of empirical work suggests that materialistic individuals may have a greater preference for and loyalty towards prestige brand products that are instrumental in managing their appearance, signaling status, and satisfying their need for certainty. Considering how the needs of materialistic individuals are more effectively satisfied by prestige brand purchases, it was hypothesized that:

H2a: Materialism is positively associated with preferences for prestige brand purchases and negatively with preferences for non-prestige brand purchases.

H2b: Materialism is positively associated with the relative importance of prestige as a purchase attribute. Higher materialism is associated with higher attribute importance scores for prestige.

2.5 Monetary Value of the Purchase

Materialism is unlikely to have a substantial effect on preferences for the monetary value of the purchase. Following the general principles of rational-choice theory and exchange theory (Homans, 1961), it was expected that, when all other purchase attributes are held constant, consumers will prefer purchases that provide them with the most benefits and the least cost. Therefore, materialism was expected to be unrelated to the relative attribute importance of monetary value of the purchase since all consumers, regardless of their level materialism, will seek alternatives that maximize benefits while minimizing costs. Thus, it was hypothesized that:

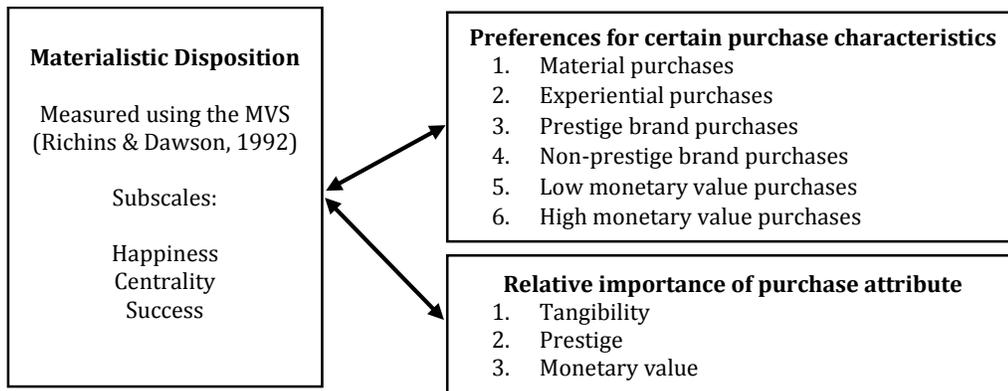
H3a: Materialism is not associated with purchase value.

H3b: Materialism is not associated with the relative attribute importance of purchase value.

3 Conceptual Framework

Some empirical work indicates that a materialistic disposition is associated with a preference for certain purchase attributes (Belk, 1988; Richins, 1994; Howell et al., 2012). The conceptual framework below (see Figure 1) illustrates the hypothesized association between materialism, purchase characteristic preferences, and the relative importance of purchases attributes. It is important to note that, though preferences for certain purchase characteristics and the importance of such attributes may possibly be related, they are nevertheless separate and distinct variables that may be independently associated with materialism. As an example, a materialistic individual may claim to have a stronger preference for material purchases over experiential purchases, but this preference says little about whether the purchase tangibility attribute plays a major role in their decision making process. The limitation of this conceptual framework is that it considers a limited set of purchase attributes, and their importance may only be evaluated against the relative importance of the other attributes that are included in this study. Additionally, the framework is limited to the aforementioned variables and does not include others that may mediate the relationship between materialism, purchase attribute importance, and purchase characteristic preference. Lastly, the framework does not examine how preferences are associated with the relative importance of their respective attributes.

Figure 1. Materialism and Purchase Preference Conceptual Framework



4 Research Objectives

Since the materialism literature has alluded to the possibility that materialistic dispositions influence preferences for both material (Van Boven, 2005; Van Boven & Gilovich, 2003) and prestige brand products (Belk, 1988; Richins, 1994), it is therefore essential to examine whether preferences are manifested in the purchase decisions made by materialistic and non-materialistic consumers. Furthermore, quantifying the utility associated with purchase attributes and their respective levels provides information about the preferences of consumers for various types of purchases. Likewise, describing the qualities of products that appeal to materialistic and non-materialistic consumers provides managers with archetypal products or services that ostensibly may appeal to market segments known to be high or low on materialism.

Taking into consideration these objectives, the current study seeks to examine consumer preference variables, attribute importance variables, and materialism's association with these variables using conjoint analysis. The study measured the relative importance of the three purchase attributes: monetary value, brand prestige, and, purchase tangibility. Secondly, it quantified the preferences for the levels of each of the three purchase attributes. Lastly, it investigated the possible association between materialism and both the purchase attributes and their levels. The quantification of preferences and the relative importance of the purchase attributes would be highly informative inasmuch as it provides a glimpse into the decision-making process of materialistic and non-materialistic consumers.

5 Research Design

5.1 Participants

A purposive sample of 97 business students from the University of the Philippines, College of Business Administration were invited to participate in the experiment in exchange for course credit. Students participating in the study majored either in accounting or business administration and were either 2nd or 3rd year standing in their respective academic programs. Participants were between 18 and 28 years of age, with a mean age of 18.94 years; 52.9% of the sample were female and 47.1% male. To lessen socially desirable responses, since materialism is widely considered as an undesirable characteristic, the participants were informed that they were participating in a study measuring consumer preferences.

5.2 Measures of Materialism

Richins and Dawson's (1992) Material Values Scale (MVS) was used to measure materialism in the current study. The MVS is a 5 point, Likert-type instrument (5= strongly agree, 4= agree, 3 neither agree nor disagree, 2= disagree, 1= strongly disagree) that consists of 18 items, with six items for the success subscale, seven for centrality, and five for happiness. MVS scores range between 18 and 90 for the entire scale, six and 30 for success, seven and 35 for centrality, and between five and 25 for happiness.

Though the MVS literature has identified certain cross-cultural (Wong et al., 2003) and dimensional limitations (Richins, 2004) of the scale, it was selected for the current study because it remains the most reliable of the extant materialism scales. The MVS is also the most widely used instrument for measuring materialism in cross-cultural settings (Watchravesringkan & Dyer, 2007), with studies using the MVS conducted in China, (Richins & Dawson, 1992; Watchravesringkan & Dyer, 2007), Thailand (Watchravesringkan & Dyer, 2007), and Singapore (Keng, Jung, Jiuan, & Wirtz, 2000). The author was unaware of any studies in the Philippines that have used the MVS at the time this study was conducted. Lastly, the MVS assumes that materialism is a value orientation, which is arguably the more accurate definition of the materialism construct (Trinh & Phau, 2012).

5.3 Conjoint Analysis

Conjoint analysis is a non-parametric statistical approach that requires respondents to make a series of trade-offs between different levels of product attributes. This method was employed because

it is the only multivariate method that allows a decomposition of the choices that reveal the underlying value structure of consumption preferences (Wang, Thomas, Chan, & Cheing, 2003; Hair, Black, Babin, & Anderson, 2010). Moreover, it is a considerably more ecologically valid method of measuring an attitude towards an object than conventional attitude measures. Additionally, it permits the disaggregation of a general attitude towards an object into more specific attitudes towards attributes of the object (Hair et al., 2010). Due to the similarity of the conjoint task to real purchase scenarios compared to more traditional measures of consumer attitudes, it is less likely to elicit socially desirable responses.

In a conjoint task, respondents are required to rate or rank a set of stimulus cards. These are representations of hypothetical, multi-attribute objects that are distinct from one another and vary according to their levels on two or more attributes. The number of stimulus cards presented is determined by the number of attributes and levels for each attribute. As an example, a full-factorial conjoint analysis performed on two attributes with two levels per attribute will require four stimulus cards. Since conjoint analysis uses the same general linear model underlying regression analysis, it produces part-worth utilities (PWU) that are akin to beta coefficients in regression analysis. These serve as utility measures for all levels of all attributes. When expressed as a utility function, PWU's enable comparisons between different alternatives by quantifying the degree of preference for each individual alternative.

In addition to PWU's, conjoint analysis also generates data on the relative importance of each attribute in the decision making process. The relative importance score for an attribute is acquired by first determining the range of part-worth utility scores for each attribute. The sum of the ranges of all attributes is then calculated. The importance for each attribute is then found by getting its range as a percentage of the sum of ranges for all attributes (American Marketing Association, 1992). Conjoint analysis is useful for describing preferences and the relative importance of attributes at both an individual and aggregate level. This characteristic of the technique permits both inter-individual and inter-group comparisons of preferences.

Based on the aforementioned research objectives, two levels of the purchase tangibility attribute (experiential and material), two levels of brand prestige (non-prestige and prestige) and three levels of monetary value (Php150,000, Php300,000 and Php500,000) were used to produce a 2x2x3, full factorial conjoint model with 12 stimulus cards. The three levels of monetary value were selected based on the results of a survey determining the extent to which respondents would carefully consider how they would spend various amounts of discretionary income. The survey was conducted on a subsample of 30 respondents. The survey presented 15 monetary values ranging from Php10,000 to Php2,000,000 that were rated on a 7-point Likert scale according to the amount of cognitive effort that would be exerted in determining how to use the amount. Moderate levels of cognitive effort were associated with the value of Php100,000 whereas very high levels of cognitive effort were associated with values above Php500,000. The levels of monetary value were then set within the range of values associated with moderate to high levels cognitive effort.

A manipulation check was performed to determine whether participants recognized the difference between material and experiential purchases and prestige and non-prestige brands. Participants were required to list down purchases that they considered to be experiential or material and to provide examples of prestige and non-prestige brands. Prior to the listing task, participants were given examples of material and experiential purchases and definitions of these types of purchases. Products such as watches, bags, vehicles and clothes were cited as examples of material purchases whereas travel, medical services, education and cinema tickets were used to represent experiential purchases. Since the definition of prestige may vary due to differences in socioeconomic background and culture (Vigneron & Johnson, 1999), participants were required to perform a brand listing task identifying brands that they perceived as prestige and non-prestige brands. They were then asked to explain which brand qualities motivated them to categorize their listed brands as either prestige or non-prestige brands. Results were then compared with the prestige qualities suggested by Vigneron and Johnson (1999). Respondents who were unable to distinguish between experiential and material purchases, or prestige or non-prestige brands were removed from the sample. As a result of the manipulation check, the responses of 27 participants were removed resulting in a final sample of 70.

The conjoint model generated 12 unique combinations of the three attributes; these combinations were operationalized as stimulus cards presented to the participants. Stimulus cards were created to

appear as gift certificates that could be used to purchase specific types of purchases (experiential or material) of certain types of brands (non-prestige or prestige) and within specific amounts. Prestige brands were defined as brands that are: 1) viewed as an indicator of status and wealth, 2) considered as expensive relative to normal standards, 3) scarce and perceived to be unique and, 4) are prestigious partly due to their technical superiority or aesthetic appeal (Vigneron & Johnson, 1999).

5.4 Procedure

Following the manipulation check, respondents participated in the conjoint activity; they were given the stimulus card gift checks and asked to order them from most to least preferred. The ranking method was chosen since ordinal approaches have been observed to be more reliable and more powerful than rating approaches (Krantz & Tversky, 1971; Green & Srinivasan, 1978; Hair et al., 2010). Before performing the ordering task, participants were asked to shuffle their cards to randomize their order of presentation. This precaution was taken since the PWU and attribute importance measures are typically sensitive to the order of presentation of stimulus cards (Green & Srinivasan, 1978).

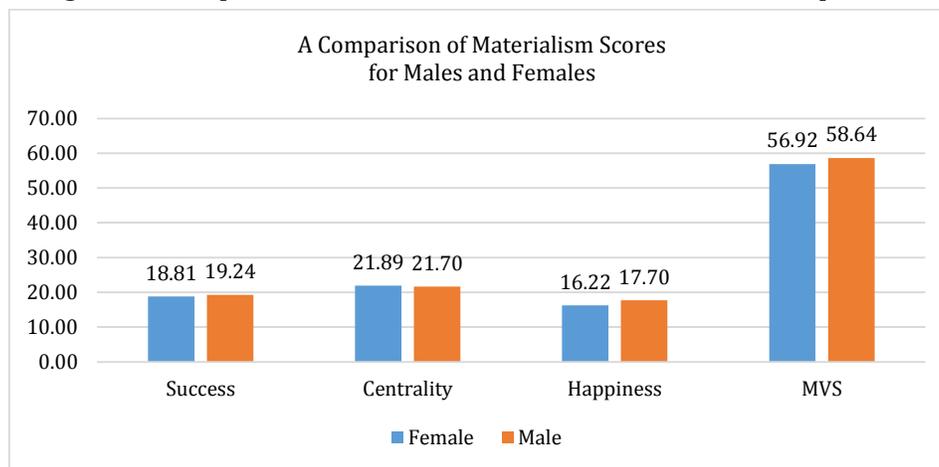
In order to further increase the respondent's ability to distinguish between various types of purchases, a one-page definition guide that included examples of experiential, material, prestige, and non-prestige purchases taken from the listing task was provided to participants during the conjoint activity. By providing this information, respondents were aware of what types of purchases they could acquire with the gift checks that they were presented. Participants were then requested to accomplish the 18 item MVS and to provide basic demographic information.

Results of the stimulus card task were analyzed using the SPSS Conjoint Analysis 8.0 module in SPSS 17, generating part-worth utilities for each level of the three attributes and the relative importance scores for each attribute. Part-worth utilities and relative importance scores were computed for both the sample (N=70) and individually for each respondent. Correlation analysis was performed on the part-worth utilities, importance scores and the measures of materialism.

6 Results and Discussion

For the sample, the MVS results indicated a mean level of materialism of 57.72 (SD = 7.89), 16.91 (SD = 2.92) for happiness, 21.8 (SD = 3.92) for centrality, and 19.01 (SD = 3.12) for success. In Figure 2, the comparison of MVS scores of male and female participants suggest that males and females did not significantly differ in their mean levels of materialism, however, independent T-tests conducted on the MVS scores reveal that males scored significantly higher than females on the subscale of happiness at a 5% level of significance. This suggests that the men held stronger beliefs about the association between owning possessions and personal happiness compared to women. Scale analysis of the MVS revealed a coefficient alpha of 0.81, similar to the degree of reliability reported by Richins and Dawson (1992).

Figure 2. A Comparison of Materialism Scores for Male and Female Respondents



The conjoint analysis produced the part-worth utilities seen in Table 1. A greater preference for prestige brand purchases (.789) as opposed to purchases of a non-prestige brand (-.789) was evident in the results. Material purchases (-.458) were generally less preferred than experiential purchases (.458). As was expected, purchases with larger monetary value were preferred to those of lower value. Table 2 presents the estimated utility derived from each of the 12 stimulus cards. Estimated utility for each of the 12 combinations of purchase characteristics was computed by summing the corresponding PWU's of each characteristic and the conjoint model constant of 6.487. Judging from the estimated utility scores, the most preferred purchase was a prestige brand, experiential purchase worth Php500,000 whereas a non-prestige, material purchase worth Php150,000 was the least preferred alternative.

Table 1. Part-Worth Utilities of the Purchase Characteristics

Part-Worth Utility Estimates		
Attribute	Purchase Characteristic	Utility
Monetary Value	Php150,000	-1.719
	Php300,000	0.031
	Php500,000	1.688
Prestige	Non-prestige brand	-0.789
	Prestige brand	0.789
Tangibility	Material purchase	-0.458
	Experiential purchase	0.458

Table 2. Estimated Utilities

Profile	Monetary Value	Prestige	Tangibility	Estimated Utility
8	Php500,000	Prestige brand	Experiential	9.423
4	Php500,000	Prestige brand	Material	8.506
9	Php500,000	Non-prestige brand	Experiential	7.844
11	Php300,000	Prestige brand	Experiential	7.766
5	Php500,000	Non-prestige brand	Material	6.927
1	Php300,000	Prestige brand	Material	6.849
12	Php300,000	Non-prestige brand	Experiential	6.187
6	Php150,000	Prestige brand	Experiential	6.016
10	Php300,000	Non-prestige brand	Material	5.27
3	Php150,000	Prestige brand	Material	5.099
2	Php150,000	Non-prestige brand	Experiential	4.437
7	Php150,000	Non-prestige brand	Material	3.52

Table 3 shows the relative importance of the three purchase attributes. Importance scores of the three attributes indicate that monetary value (54%) is by far, the most important concern of respondents in general. The prestige attribute of the purchase (28%) was the second most important attribute and tangibility of the purchase (18%) the least important attribute in the purchase decision. Two reversals or counter-intuitive responses were found in the conjoint analysis results; this is an acceptable degree of response error (2.8%) considering the sample size of the conjoint task (N = 70).

Table 3. Attribute Importance Scores

Attribute Importance Values	
Monetary Value	57.72%
Prestige	26.74%
Tangibility	15.53%

To determine whether materialism is associated with specific consumer preferences, a correlation analysis was performed on the PWU's derived from the conjoint analysis and the MVS scores. Table 4 presents the correlation matrix of the part-worth utilities and the measures of materialism.

Table 4. Correlation Matrix of Materialism and Utility Variables

	Php150,000	Php300,000	Php500,000	Non-prestige brand	Prestige brand	Material	Experiential
Success	.205	.217	-.226	.033	-.033	.353*	-.375*
Centrality	.148	.210	-.203	-.005	.005	.262*	-.309*
Happiness	.207	.118	-.240*	-.267*	.270*	.308*	-.311*
MVS	.231	.215	-.218	-.159	.159	.384*	-.417*

*p<.05

The analysis revealed a positive relationship between materialism and a preference for material purchases and a corresponding negative relationship with experiential purchases (.384 and -.417 at $p = .05$). On closer inspection of the subscale scores, success had the strongest association with preferences for either material or experiential purchases. The same pattern of positive association with preferences for material purchases and negative association with experiential purchases was observed for the centrality and happiness facets, albeit with weaker associations.

The strong association of success scores with preferences for material purchases may be attributable to experiential purchases being less facilitative of social comparisons in comparison to material purchases. Material purchases are likely to be more effective tools of signaling success since they function as tangible indicators of status and prestige that are associated with success (Belk, 1988). These findings are supportive of H1a and the materialism literature that has reported materialistic individuals to prefer materialistic purchases whereas lower materialism is associated with experiential purchases.

The MVS score was not significantly associated with preferences for either prestige or non-prestige branded purchases. However, the MVS happiness subscale was positively associated (.270) with prestige brand PWU's and negatively associated (-.267) with non-prestige brand PWU's. These results may indicate that the materialistic respondents view prestige brand purchases as more effective means for achieving and maintaining personal happiness. These results are consistent with H2a, yet they do not strongly support the hypothesis and may in fact be a product of the aforementioned dimensional instability of the MVS. Proposition H3a is supported by the results that clearly indicate that the utility from the monetary value of the purchase is unrelated to materialism. It was expected that all respondents, materialistic or otherwise, would prefer alternatives with higher monetary value.

To investigate whether materialism influences the relative importance of attributes in the consumer decision making process, the relative importance scores were correlated with the MVS measures. Table 5 presents the association of these importance scores with the MVS scores.

Table 5. Correlation Matrix of Materialism Variables and Attribute Importance

	Value	Prestige Brand	Tangibility
Success	-.099	.211	-.089
Centrality	-.189	.399*	-.167
Happiness	.017	-.094	.069
MVS	-.127	.247*	-.093

*p<.05

Results of the correlation analysis contrast with the predictions of H1b; they are somewhat supportive of H2b; and strongly support H3b. There was no association between any of the MVS scores and the importance of purchase tangibility. This indicates that the sample's materialistic disposition was unrelated to the degree of importance of purchase tangibility. This may indicate that though materialism may influence the respondent's preferences for experiential or material purchases, it does not affect the relative importance of this attribute.

There was a weak but significant correlation between MVS scores and the importance of the prestige attribute (.247). However, much of this association was due to the association between the happiness subscale and the importance of prestige (.399). This association may hint that a respondent who strongly believes that possessions do buy happiness would tend to view the brand prestige attribute as more important compared to other attributes of the purchase. It may be argued that the prestige attribute may be of greater importance to respondents of higher materialism since they tend to have greater impression management and self-expression needs (Howell & Hill, 2009). Therefore, the consumer decision process of a materialistic individual may be more heavily influenced by the prestige attribute of a purchase. The lack of significant associations with the other two subscales of the MVS may be due to dimensional issues of the MVS that were raised earlier. Therefore, the results provide only moderate support for proposition H2b. Lastly, the analysis showed that the importance of the monetary value attribute is unrelated to materialism, as was predicted in H3b. It was expected that the importance of monetary value would not vary as a function of materialism since, for any level of materialism, consumers will generally want more rather than less.

To summarize, the results of the correlation analysis supported the notion that materialism is associated with stronger preferences for material purchases, it was only weakly associated with preferences for prestige brand purchases, and was unrelated to preferences concerning monetary value. Materialism was also found to be unrelated to the relative importance of purchase tangibility and monetary value. However, it was related to the importance of the prestige attribute.

7 Research Limitations

Most conjoint studies use sample sizes of up to 200 respondents to achieve statistical power of around 50% for small effect sizes (Hair et al., 2010). Thus, the small sample size (N = 70) of the study is perhaps its main limitation. However, given the exploratory nature of this study, a sample size of 70 respondents is satisfactory since samples as small as 50 have been found to be adequate (Hair et al., 2010) for providing some insight into the basic ways in which preferences of respondents may vary. Orme (2010) has reported that sample sizes between 30 and 60 respondents are acceptable for investigational work. Another limitation of the study is the operationalization of prestige brands. Since there is considerable variance in how people define what a prestige brand is, the study could only rely on brands that the majority of respondents viewed as prestige and non-prestige brands. It is entirely plausible that some respondents have perceptions of prestige and non-prestige brands that contrast with the consensus, which consequently may contribute to measurement error. Lastly, since the sample consists of university students from a single college, the results of this study may not be applicable to the general population.

8 Conclusion and Managerial Implications

The conjoint analysis performed in this study has provided some insight into the relationship between materialistic values and consumer preferences. Consistent with the findings of previous studies on material and experiential purchases, this study has produced evidence indicating that, for the students who participated in the study, higher materialism is associated with a greater preference for tangible or material purchases, whereas lower materialism is associated with a preference for experiential purchases. The study has generated some evidence that materialism may encourage a preference for prestige brand purchases, however, the evidence is less impressive than the findings on materialism's association with material and experiential preferences. The results of the study also showed that materialism is positively associated with the relative importance of the prestige attribute, but not associated with tangibility or monetary value. This may suggest that, to a materialistic consumer, the amount of prestige associated with a purchase is what matters most because of its instrumentality in bringing about desirable consumer outcomes through social comparisons.

This study has some ethical implications for marketing managers as well. Since materialism is positively associated with preferences for material purchases, managers may decide to add or embellish existing tangible elements of an intangible market offering, such as a service, to make it more appealing to materialistic consumers. Additionally, they may elect to heighten the perceived prestige of their brand through adjustments in distribution, pricing, marketing communications, or the product itself to increase its appeal to consumers who embrace more materialistic values. Though these strategies may be effective in appealing to certain consumers given the findings of this study, they may however, be inadvertently promoting materialistic beliefs and values. Given that a materialistic disposition is largely viewed as a morally undesirable characteristic and a considerable amount of empirical work suggests that materialistic values are associated with lower subjective well-being and life satisfaction (Kasser & Ahuvia, 2002; Keng et al., 2000; Kasser et al., 2004), a caveat is hereby offered whereby an immediate posterior study will have to investigate how overall human well-being and happiness can be achieved, in the context of the considerable materialism levels revealed in this study. Such a study can address the ethical issues for both consumers and marketing managers, given the social responsibility that business has for contributing to societal wellness.

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Appendix

Material Values Scale (Richins and Dawson 1992)

Success

1. I admire people who own expensive homes, cars, and clothes.
2. Some of the most important achievements in life include acquiring material possessions.
3. I don't place much emphasis on the amount of material objects a person owns as a sign of success.*
4. The things I own say a lot about how well I'm doing in life.
5. I like to own things that impress people.
6. I don't pay much attention to the material objects other people own.*

Centrality

7. I usually buy only the things I need.*
8. I try to keep my life simple, as far as possessions are concerned.*
9. The things I own aren't all that important to me.*
10. I enjoy spending money on things that aren't practical.
11. Buying things gives me a lot of pleasure.
12. I like a lot of luxury in my life.
13. I put less emphasis on material things than most people I know.*

Happiness

14. I have all the things I really need to enjoy life.*
15. My life would be better if I owned certain things I don't have.
16. I wouldn't be any happier if I owned nicer things.*
17. I'd be happier if I could afford to buy more things.
18. It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.

*reverse scored items