


“The processing of advertising: does a consumer’s level of materialism make a difference?”

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The processing of advertising: does a consumer's level of materialism make a difference?

Abstract

Materialism has been given great attention in the consumer behavior literature. How materialistic tendencies are shaped by advertising has also been documented. Yet, the impact of consumers' materialism on their perceptions of ads is not clearly understood. The goal of this research is to examine the relationship between an individual's materialism and his/her perceptions of various kinds of advertising. Using four specific advertising appeals (i.e., interpersonal, prestige/status, achievement, and appearance-related), attitudes toward the ad, and thoughts elicited by the advertisement were measured and compared across high and low materialism groups. Significant differences were found between respondents from the two groups with respect to the evaluation of each type of appeal. When prestige/status, achievement, and appearance-related appeals were used in advertising, they were evaluated more favorably by consumers with high levels of materialism than by consumers with low levels of materialism. In contrast, advertising that used an interpersonal appeal was viewed more favorably by consumers with low levels of materialism. The results of this research provide implications for marketers on three perspectives: the furthering of our conceptualization of the materialism construct, the design of promotional communication for specific target markets, and the public policy dimension of targeting consumers more vulnerable to certain appeals.

Keywords: materialism, consumer behavior, advertising.

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Introduction

Advertising is an integral part of modern culture and is often used to create demand for the massive volume of goods and services that are available. Ralph Waldo Emerson's view of the late 1800s that Americans were caught in an "imbalance . . . between materialism and idealism in the pursuit of the good life" seems even more apparent in contemporary life (Shi, 1986). Consumers are constantly exposed to advertising – advertising that claims the purchase of specific products or services will solve many of our problems; we will be more attractive, popular, successful, smarter, and ad infinitum. Many of these advertisements are said to appeal to materialistic impulses of consumers, especially vulnerable populations such as young adults and tweens (Oprea, 2014), trying to convince people to consume more (Jiang and Chia, 2009; Pollay, 1986). Despite the pervasiveness of such appeals, little is known about how effective these ads are when viewed by people with high levels of materialism compared to those with lower levels.

Heretofore, studies have linked materialism to a number of individual characteristics including compulsive buying (Harnish and Bridges, 2014), the desire to publicly display status (Belk, 1985; Richins, 1994), the display of personal achievement via

consumption (Hirschman, 1990), concern for one's appearance and vanity (Durvasula and Lysonski, 2007; Richins, 1994), self-esteem (Chaplin and John, 2007), and money attitudes and personal debt (Durvasula and Lysonski, 2010; Nepomuceno and Laroche, 2015). Richins (1992) examined the link between materialism and advertising, but she did not use materialism as an individual difference variable to study responses to specific ads. Other studies examined how advertising affects materialism in different demographic groups (cf. Oprea, 2014), but not how materialism affects ad processing. As such, a vacuum exists in the literature regarding our understanding of the impact of one's materialism on perception of advertisements.

As the advertising literature suggests, consumer's attitudes toward different advertising appeals become quintessential with respect to the effectiveness of the advertisement itself. As Brown and Stayman (1992) state, the liking of an ad may be the best indicator of advertising effectiveness. It is, therefore, important to understand which advertising appeals are more effective for consumers in various target markets and, hence, to provide insight with respect to how to advertise effectively to such consumers and/or to provide public policy insight regarding vulnerable audiences. The goal of this research is to determine if a consumer's level of materialism is related to his/her evaluation of different types of advertising appeals that are used within print media. More specifically, this research will examine whether interpersonal, prestige/status, achievement, and/or appearance-related appeals are evaluated differently by people with high levels of materialism versus those with low levels.

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The structure of this paper is as follows. First, in the background section, we provide a *raison d'être* from the literature why materialism is likely to affect a viewer's perceptions. Next, we state each hypothesis and its underpinnings and the methodology to be used to test each hypothesis. After reporting the statistical analysis, we, then, provide a discussion, limitations of the research and implications.

1. Background and hypotheses

1.1. The materialism construct. Richins (1994) states that materialism is a value that represents an individual's perspective regarding the role worldly possessions should play in his/her life. Richins and Dawson (1992) claimed that persons holding strong material values place possessions and their acquisition at the center of their lives, value possessions as a means of achieving happiness, and use possessions as indicators of their own and others' success. Holt (1994) discussed the interaction between possessions and the individual, and defined materialists as those people who view value as inherent in the object. Belk (1985) found that materialism is associated with feelings of possessiveness, non-generosity, and envy; and each of these was correlated positively with unhappiness. Richins' (1994) study revealed that highly materialistic people have an orientation that tends to emphasize appearance and status concerns, while people with low levels of materialism tend to emphasize the interpersonal/symbolic value of possessions. As materialists value possessions for specific reasons (e.g., expense, demonstration of status and wealth) (Richins, 1994), certain advertising appeals may be viewed more favorably by consumers with high levels of materialism in comparison to consumers with low levels of materialism. Four such appeals – interpersonal, prestige/status, achievement, and appearance-related – will be discussed below and a hypothesis related to each will be made.

1.2. Interpersonal appeals. Highly materialistic people have been characterized as self-centered and individualistic (Richins and Dawson, 1992; Rindfleisch, Burroughs and Denton, 1997). Richins and Dawson (1992) described them as valuing the acquisition and possession of goods more than their relationships with other people. Fournier and Richins (1991) note that materialists place greater emphasis on acquisitive attitudes and traits than on 'cultivating family relationships'. One aspect of Belk's (1985) operationalization of materialism is 'non-generosity'. Belk states that non-generosity is not merely based on "an unwillingness to give possessions to or share possessions with others" (even family members), but it is also based on

egoistic self-interest. Consequently, people with high levels of materialism have a tendency to pursue individual rather than collective or community goals (Belk, 1985; Campbell, 1987). Furthermore, Richins (1994) found that the possessions materialistic consumers value are less likely to involve interpersonal associations, and, as such, highly materialistic consumers are less likely to mention interpersonal ties as a reason for valuing their important possessions. Rindfleisch, Burroughs and Denton (1997) examined levels of materialism within the family unit and found that young adults reared in disrupted families are more materialistic than young adults reared in intact families. Further, research in popular press suggests that millennial group young adults from low income households have higher rates of materialism and technology addiction than those from high income households (Stein, 2013).

In contrast, consumers with low levels of materialism have been found to place considerably more importance on interpersonal relationships than on other pursuits (Richins and Dawson, 1992). This, coupled with the centrality of the self and the lack of importance that highly materialistic people appear to place on interpersonal relationships (Kasser and Kasser, 2001), is, therefore, hypothesized to translate into a less favorable evaluation of interpersonal advertising appeals by consumers who have high levels of materialism in comparison to those with lower levels. Thus, Hypothesis One is:

H1: In comparison to people with high levels of materialism, those with low levels of materialism will evaluate advertising that uses interpersonal appeals more favorably.

1.3. Prestige/status appeals. Previous research has established a connection between materialism and status consumption (Lertwannawit and Mandhachitara, 2012). Materialistic consumers have also been characterized as being more status conscious than other consumers, more likely to purchase products that confer status (Goldsmith and Clark, 2012), and more likely to use possessions to express characteristics of success to both themselves and others (Durning, 1992; Richins and Dawson, 1992). Possessions are used not only to project the materialist's desired image, but also to confer status (Richins and Dawson, 1992). Fournier and Richins (1991) found that respondents generally do not distinguish between the concept of materialism and status display; and when Richins (1994) used a continuum based on the "prestigiousness" of the product when describing the possessions that consumers value, she found that highly materialistic

consumers value possessions that are located closer to the prestige end of the continuum.

This desire to impress others with the ability to pay high prices and/or to possess prestige products that are inspired by the social rather than economic or psychological utility of the products (Mason, 1981) is a central motive for highly materialistic consumers. Such a desire often results in materialistic individuals engaging in upward social comparison (Richins and Dawson, 1992). Since materialistic people tend to look at higher social classes when seeking consumer information, advertisements that use idealized images of status and prestige may continually encourage materialistic consumers to compare themselves with individuals who are perceived to be “better-off”.

As most publicly consumed products valued by materialists are located toward the prestige end of Richins’ (1994) continuum, and since highly materialistic consumers have a tendency to acquire possessions as a method of conveying their success or status, it is hypothesized that materialistic individuals will be more responsive to advertising that employs prestige/status appeals. Accordingly, Hypothesis Two is:

H2: In comparison to people with low levels of materialism, those with high levels of materialism will evaluate advertising that uses prestige/status appeals more favorably.

1.4. Achievement appeals. The achievement orientation of highly materialistic people has been well documented in the consumer behavior literature (cf. Belk, 1985; Bryce and Olney, 1991; Hirschman, 1990), even though one recent study found a negative association between materialism and academic achievement (King and Datu, 2017). Highly materialistic people tend to be success driven and are more likely to use possessions to express characteristics of success to themselves and to others. The acquisition of possessions is, therefore, a tool to publicly display achievements to other consumers (Richins and Dawson, 1992). Belk (1985) suggests that materialistic individuals demonstrate and justify their drive for achievements through the consumption of products that are “socially sanctioned”, while Hirschman (1990) identifies the documentation of personal achievement via consumption as a dominant theme in our culture. Thus, the importance that materialistic individuals place on achievement is hypothesized to translate into more favorable evaluations of achievement appeals used in advertising. Hypothesis Three is:

H3: In comparison to people with low levels of materialism, those with high levels of materialism will evaluate advertising that uses achievement appeals more favorably.

1.5. Appearance-related appeals. It has been suggested that highly materialistic individuals are very concerned about their appearance and the reactions of others with respect to their appearance (Durvasula and Lysonski, 2010). Guðnadóttir and Garðarsdóttir (2014) have discovered that internalization of materialistic values from exposure to media images of the “body-perfect” ideal is strongly linked to the internalization of body-perfect ideals – the thin-ideal for young women and muscular-ideal for young men. Further, they report that materialistic value orientation is a significant predictor of body dissatisfaction. Other research has found that materialism is positively related to public self-consciousness and self-monitoring, two constructs in which the idea that appearance is very important are central. Richins (1994) too has found that highly materialistic consumers place more importance on appearance than people with low levels of materialism. More specifically, she found that the possessions valued by highly materialistic individuals were valued, because not only the object itself possessed or represented beauty, but also, in many cases, because the possession made the consumer “feel better about themselves, or about their own appearance” (Richins, 1994). Because of this focus on appearance, it is hypothesized that highly materialistic people will be more responsive to appearance-related advertising appeals than individuals who have low levels of materialism. Consequently, Hypothesis Four states that:

H4: In comparison to people with low levels of materialism, those with high levels of materialism will evaluate advertising that uses appearance-related appeals more favorably.

2. Methodology

2.1. Subjects. Two hundred and seventy-four university students were selected for the research. Students were from a range of disciplines including Management, Engineering, Economics, Law, and Art. Since the focus of our study is theoretical, it is appropriate to use student samples (Bello et al., 2009). Further, even in top-tier marketing journals such as *Journal of Consumer Research* and *Journal of Marketing Research*, 75% of human subjects employed were identified as college students (Simonson et al., 2001). Further, a study of young adults – the so-called “millennials” - provides us an opportunity to understand the interplay between materialism and advertising in a market segment that is actively courted by marketers. While some

evidence in popular press suggests that the young adults – the millennials – may be turning away from materialism and embracing minimalism (Becker, 2017; Ghosh, 2015), other research proposes the opposite – all millennials, irrespective of household income, continue to have materialistic tendencies (Stein, 2013), possibly shaped by ad exposure during their adolescent years (Kamini, 2014). In another study based on student samples, Twenge and Kasser (2013) concluded that the current generation of students are no less materialistic than students from the past. Given that an important demographic group for marketers continues to exhibit materialistic tendencies, how this group evaluates various ad appeals is a vital question that our study addresses.

2.2. Stimuli. Prior to the main study, thirty-eight advertisements were selected and pilot tested for suitability. The advertisements were shown to academic judges in order to determine the applicability and usefulness of the advertisements to the study. Both academic judges and a group of students evaluated the ads for the degree to which they conveyed appeals concerning family/interpersonal, prestige/status, achievement, and appearance-related themes. Seventeen of the original 38 advertisements were deemed suitable by the academic judges. To select the final ads for the main study, a group of 66 students were asked to list their thoughts related to each ad. Those ads which elicited the most thoughts related to family/interpersonal, prestige/status, achievement, and appearance were chosen for the final study. A control ad, which did not elicit responses related to any of the appeals mentioned above, was also selected.

The stimuli for the final study were six print advertisements, five of which are relevant for this study. Appendix 1 provides a complete discussion of each of these ads. The advertisements were for two different brands of cars (Toyota for interpersonal appeal and Jaguar for prestige/status appeal), an investment fund (achievement appeal), toothpaste (appearance-related appeal), and clothing (appearance-related appeal). To avoid potential order effects, two booklets of the advertisements were created using a random ordering procedure.

2.3. Free elicitation of thoughts. Rather than use forced-choice responses, we used a free elicitation technique. This technique tends to provide “truer” measures of an individual’s own beliefs compared to those found with belief statements applied by the researcher (cf. Muehling, 1987). Thought-elicitation instructions,

adapted from those successfully used by Andrews, Lysonski and Durvasula (1991) were given to the students as follows:

We would like you to list your thoughts that come to mind when you are looking at the ad. Simply write next to the first number the first thought that comes to your mind about the ad, the second idea that comes to your mind next to the second number, etc. Please put only one thought next to each number. Your thoughts about the ads may be favorable, unfavorable, or neutral.

A numbered list of seven blank spaces was provided for respondents to list their thoughts about each advertisement. This allowed enough space, since Olsen and Muderrisoglu (1979) found that the subjects give an average of four verbal responses when asked to elicit thoughts. When finished, respondents were instructed to return to each thought and indicate whether the thought was positive (by circling the “+” provided), negative (by circling the “–” provided), or neutral (by circling the “O” provided).

2.4. Coding of thought. These self-generated thoughts (i.e., cognitive responses) were categorized according to the seven-category typology described by Richins (1994). The seven categories were utilitarian/functional, enjoyment, interpersonal ties/emotional, identity/social, financial, appearance-related, and other. Because achievement appeals were central to the study, the achievement dimension of Richins’ identity/social category served as its own category. In addition, four other categories emerged from the data: (1) class, prestige, and status references, (2) sexual references, (3) references related to the product, and (4) references about the ad itself. The final coding scheme had 12 categories and is provided in Table 1. Respondents indicated whether each thought was positive, neutral, or negative.

Table 1. Coding scheme for elicitation of thoughts for advertisements

Utilitarian/Functional
A necessity such as transportation and food. Reference to quality. Material makeup or characteristics of advertised product (tastes, materials). References to functional attributes (speed, power, cleaning ability, etc.). References to freedom, independence. References to functional consequences of the advertised.
Enjoyment
References to enjoyment/excitement/entertainment: allows a pleasurable activity.
Interpersonal ties/Emotional
References to trust and communities. References to family bonds/situations. References to positive emotions (love, happiness, warmth, friendly, caring, etc.). References to negative emotions (sadness, anger, jealousy, etc.).

Table 1 (cont.). Coding scheme for elicitation of thoughts for advertisements

Achievement
Represents achievement, is a source of pride. Represents achievement of goals; the future and/or professional success.
Identity/Social
References to self expression (is part of the self, or expresses the self). References to age (retirement, ages, etc). References to religion/traditional standards/morals. References to racial background.
Financial
References to cost or expense of the product. References to investment value; wealth; financial security.
Appearance-related
References to specific body parts of the model (e.g., hair, teeth/mouth, eyes). References with respect to appearance of the advertised product. (color, cool, etc). References with respect to fashion and designer labels/clothes. References with respect to stylishness. References with respect to health and hygiene
Class/Prestige/Status
References to class, prestige, status, luxury. References to famous or celebrity identities.
Sexual references
References to sex appeal seduction. References with respect to overall body/attractiveness/beauty/appearance of model. Exploitation of women.
Product
References to the advertised product's country of origin. Reference to the product name. References to the product class.
Advertisement references
Positive references about the ad itself (good, effective, clever, nice photography, etc.). Negative references about the ad itself (boring, corny, too much writing, etc.).
Other
Miscellaneous, negative references - specifically, "Who Cares"

2.5. Procedure. At the beginning of each class session, the experimenter announced that the main objective of the study was to examine student reactions to advertisements. Subjects were told not to discuss the advertisements with their classmates, but rather to look at the advertisements as they would if they were reading a magazine.

The two advertisement booklets and a questionnaire were distributed as evenly as possible within the lecture rooms. Subjects responded to a three-item mood scale before viewing the test stimuli. Subjects, then, viewed each advertisement individually, documented any thoughts that they had about the advertisement, and indicated whether each thought was positive, negative or neutral in valence. Subjects were, then, asked to indicate their overall evaluation of the advertisement, their familiarity with the brand that was advertised, their overall evaluation of the brand, and their most preferred advertisement in the booklet.

Each advertisement was shown in the order it was presented in each booklet using color images on an

overhead projector. Each color copy of each advertisement was, then, shown to the subjects for two minutes.

2.6. The questionnaire. The questionnaire took approximately 15 minutes to complete and contained questions related to attitude towards the ad, attitude towards the brand, brand familiarity, and some basic demographic items. Attitude towards the ad (Aad) was measured by aggregating three seven-point items (bad/good, favorable/unfavorable, and pleasant/unpleasant). Brand familiarity was measured with a single item "Are you familiar with the brand that is advertised in this ad?" Attitude towards the brand (Abrand) was measured by aggregating three seven-point items (bad/good, negative/positive, unfavorable/favorable).

The Richins and Dawson's (1992) materialism scale was used to measure individual levels of materialism. This scale consists of 3 subscales: success (6 items), centrality (7 items), and happiness (5 items). To examine the psychometric properties of the materialism scale, a covariance structure analysis was performed using Lisrel VIII. The correlated three-factor model with each factor representing a different materialism scale provided the best overall fit. The fit statistics are as follows: $\chi^2(132 \text{ df}) = 305.97$, root mean square residual (RMR) = .05, comparative fit index (CFI) = .93, and normed fit index (NFI) = .90. The composite reliability of the overall scale was .94 and the composite reliability indices of the subscales were .87 (success), .86 (centrality), and .77 (happiness). Correlations among all pairs of materialism subscales were statistically significant, but less than "1". All these statistics moderately support the psychometric properties originally identified by the authors of this scale. The survey also included standard demographic measures of gender, age, income, marital status, major, and occupation.

3. Analysis and results

3.1. Defining materialism groups. Respondents who scored in the top third of the Richins and Dawson's (1992) materialism scale were categorized as having high levels of materialism, and respondents who scored in the bottom third of the scale were categorized as having low levels of materialism. The demographic characteristics of the resulting high and low materialism groups were compared to assess equality on these variables. There were no significant differences on any of the measured variables except "major", as can be seen in Table 2.

Table 2. Demographic characteristics for the sample, low materialism, and high materialism respondents

Characteristic	Total sample (N=264)	Low materialism (N=86)	High materialism (N=101)	χ^2
<i>Gender</i>				2.44
Male	56% (147)	23% (43)	33% (62)	
Female	44% (117)	23% (43)	21% (39)	
<i>Age (years)</i>				1.41
15-19	29% (78)	15% (28)	16% (30)	
20-24	54% (142)	21% (39)	29% (54)	
Above 25	17% (45)	10% (19)	9% (17)	
<i>Marital status</i>				2.90
Never married	83% (219)	36% (67)	46% (85)	
Married/Living with partner	16% (42)	9% (17)	8% (15)	
Divorced or separated	1% (2)	1% (1)	0% (0)	
Widowed	0% (1)	0% (0)	1% (1)	
<i>Income (\$)</i>				0.60
Under 10 000	59% (153)	24% (44)	32% (58)	
10 001-20 000	30% (79)	16% (29)	17% (31)	
Above 20 001	11% (28)	6% (11)	6% (11)	
<i>Major</i>				40.5*
Commerce	35% (95)	8% (14)	21% (40)	
Economics/Law	15% (40)	4% (7)	14% (26)	
Forestry/Engineering	16% (45)	8% (15)	10% (18)	
Arts	18% (50)	19% (36)	6% (11)	
Accounting/Math/Science	12% (32)	6% (11)	3% (6)	
Other	1% (3)	2% (3)	2% (3)	

* Significant at $p < 0.001$.

3.2. Examination of extraneous variables. Three potential confounds, mood, brand familiarity, and order effects, were examined to see if they provided alternative explanations for the results. Across the five ads, both mood and order effect had no effect on attitude toward the ad (Aad) scores ($p > .05$). Brand familiarity had a significant effect on Aad score for only two ads (investment fund and toothpaste). For these two ads, mean Aad scores were compared for low and high materialism groups, before and after adjusting for covariate effects. For the investment fund ad dealing with achievement appeals, the mean scores were 13.44 and 11.02 for low and high materialism groups, respectively, before adjustment, 13.37 and 11.10 after adjustment. For the toothpaste ad focusing on appearance appeal, the mean scores for the low and high materialism groups were 13.50 and 11.36 before adjustment, 13.54 and 11.32 after adjustment. The effect sizes were .34 before adjustment and .35 after adjustment. In sum, results indicate no order or mood effects on Aad scores. While brand familiarity had an effect in only two out of five ads, this effect was marginal. Hence, it seems reasonable to assume that the potential confounds of mood, brand familiarity, and order effects do not provide an alternative explanation for the results.

3.3. Content analysis. Two judges independently categorized 4344 thoughts according to the 36 possible thought categories (the above 12 categories each with

a positive, neutral or negative valence). Overall, both judges identically classified 3452 of the 4344 thoughts, a 79% agreement rate. For disagreements in the categorizing process, an attempt was first made to resolve all conflicting categorizations through the negotiated agreement of both judges (cf. Batra and Ray, 1986). A third judge was used to resolve only one disagreement for all of the 4344 thoughts that were classified.

3.4. Number of thoughts elicited. Each respondent listed, on average, a total of 16.1 thoughts across the six advertisement stimuli or 2.69 thoughts per advertisement. Respondents with high levels of materialism provided an average of 3.00 thoughts per ad and respondents with low levels of materialism provided 2.48 thoughts per ad. The average number of thoughts elicited for each ad is shown in Table 3.

Table 3. Average number of thoughts elicited for each stimuli

Advertisement	Mean Number of Thoughts Elicited: Total Sample (N=274)	Mean Number of Thoughts: High Materialism (n=88)	Mean Number of Thoughts: Low Materialism (n=85)
Control: Margarine	2.49	2.66	2.31
Family Appeal: Toyota	2.72	2.72	2.77
Prestige/Luxury Appeal: Jaguar	2.92	3.41	2.57

Table 3 (cont.). Average number of thoughts elicited for each stimuli

Advertisement	Mean Number of Thoughts Elicited: Total Sample (N=274)	Mean Number of Thoughts: High Materialism (n=88)	Mean Number of Thoughts: Low Materialism (n=85)
Appearance-related: Toothpaste	2.57	2.88	2.25
Appearance-related: Clothing	2.80	3.20	2.42
Achievement Appeal: Investment Fund	2.62	2.91	2.39
Overall average	2.69	3.00	2.48

3.5. Hypothesis testing: H1 (family/interpersonal appeal). To test the first hypothesis that people with low levels of materialism (in comparison to people with high levels of materialism) will have more favorable attitudes toward advertisements that use interpersonal appeals, two different analyses were conducted. First, analysis of variance was used to compare the Aad scores for respondents with low levels of materialism with the Aad scores for respondents with high levels of materialism for the advertisement using a strong interpersonal appeal. The Toyota ad (see Appendix 1) was chosen for its use of a strong interpersonal appeal. The second test of H1 centered on the free elicitation thoughts listed by members of the two groups. Chi-square analysis was used to test whether the Toyota ad elicited more “positive” thoughts that were interpersonal in nature from the low materialistic group versus the high one.

Analysis of variance indicated that respondents with low levels of materialism had significantly higher Aad scores for the Toyota ad than those with high levels of materialism ($F = 38.81$, $p < .001$), as can be seen in Table 4A. This result indicates that respondents with low levels of materialism appear to like the Toyota advertisement much more than respondents with high levels of materialism. Assuming that the interpersonal appeal of the advertisement is the cause for this difference, the result supports Hypothesis 1. However, without examining the thoughts provided by the respondents, it is impossible to know whether this assumption is valid or not.

Table 4A. ANOVA for attitude towards the family appeal ad

Attitudes toward the ad					
	N	Mean	Std. Deviation	F-stat	Sig.
High materialism	101	12.90	3.19	38.81	.001
Low materialism	86	16.45	4.57		

A Chi-square analysis was conducted to examine the thoughts elicited by the Toyota ad. Results of this analysis indicate that respondents with low levels of materialism were significantly more

likely to have “positive”, interpersonal thoughts than people with high levels of materialism ($\chi^2 = 33.74$, $df = 2$, $p < .001$) (see Table 4B). This result provides additional support for H1. Consistent with the methodology used by Andrews, Lysonski and Durvasula (1991) to analyze advertising thoughts, we also computed net thoughts, which represent the valence of thoughts (i.e., positive thoughts minus negative thoughts). The mean scores on these net thoughts were .44 for the high materialism group and 1.37 for the low materialism group, indicating that the low materialism group had significantly more positive interpersonal thoughts about the family appeal ad as compared to the high materialism group ($t = 5.24$, $p = 0.00$), providing further support to H1.

Table 4B. Chi-square analysis for family appeal advertisement

		Number of thoughts listed				
		Negative	Neutral	Positive	χ^2	Sig.
Interpersonal	High materialism	19% (32)	23% (26)	68% (65)	33.74	.001
Thoughts	Low materialism	5% (7)	6% (8)	89% (125)		

Note: Net thoughts showing the difference between positive and negative thoughts were also computed. The mean scores for net thoughts were .44 for the high materialism group and 1.37 for the low materialism group. The difference in these mean scores was statistically significant ($t = 5.24$, $p = 0.00$).

3.6. Hypothesis testing: H2 (prestige/status appeal). In order to test the second hypothesis that people with high levels of materialism (in comparison to people with low levels of materialism) will evaluate advertisements that use prestige/status appeals more favorably, Aad scores for the Jaguar advertisement and the prestige/status references elicited when respondents were exposed to the advertisement were examined. As shown in Table 5A, there were significant differences between the high and low materialism respondents with respect to their Aad scores for this ad ($F = 84.87$, $p < .001$).

Table 5A. ANOVA for attitude toward the prestige/status appeal ad

Attitudes toward the ad					
	N	Mean	Std.Deviation	F-stat	Sig.
High materialism	101	16.87	3.07	84.87	.001
Low materialism	86	11.56	4.72		

In addition, Chi-square analysis suggests that when exposed to the Jaguar ad, respondents with high levels of materialism had significantly more prestige/status thoughts that were positive in valence than respondents low in materialism ($\chi^2 = 52.00$, $df = 2$, $p < .001$) (see Table 5B). Ninety-four percent of the respondents with high levels of

materialism recorded thoughts that were positive, compared to only 10 percent of the low materialism respondents. Analysis of net thoughts also indicates that on the average, the high materialism group had significantly greater positive thoughts over negative thoughts, as compared to the low materialism group. The result of the analysis of variance, Chi-square analysis, and analysis of net thoughts strongly support H2.

Table 5B. Chi-square analysis for prestige/status advertisement

Number of thoughts listed					
		Negative	Neutral	Positive	χ^2 Sig.
Prestige/status	High materialism	6% (2)	0% (0)	94% (31)	52.00 .001
References	Low materialism	85% (35)	5% (2)	10% (4)	

Note: Net thoughts showing the difference between positive and negative thoughts were also computed. The mean scores for net thoughts were .31 for the high materialism group and -.38 for the low materialism group. The difference in these mean scores was statistically significant ($t = 6.91$, $p = 0.00$).

3.7. Hypothesis testing: H3 (achievement appeal). To test the third hypothesis that people with high levels of materialism (in comparison to people with low levels of materialism) will evaluate advertisements that use achievement appeals more favorably, Aad scores for the investment fund advertisement and thoughts related to this ad were examined. Analysis of variance, as shown in Table 6A, indicates that respondents with high levels of materialism had significantly higher Aad scores for this ad than respondents with low levels of materialism ($F = 27.02$, $p < .001$). Once again, assuming that the achievement appeal of the advertisement is the cause for the difference, H3 is supported.

Table 6A. ANOVA for attitude towards the achievement appeal ad

Attitudes toward the ad					
	N	Mean	Std.Deviation	F-stat	Sig.
High materialism	101	13.44	3.37	27.02	.001
Low materialism	86	11.02	2.89		

Analysis of the thoughts listed for the ad on the investment fund provides additional support for H3. As featured in Table 6B, a Chi-square analysis indicated that respondents with high levels of materialism were significantly more likely to provide positive, achievement-related thoughts than respondents with low levels of materialism ($\chi^2 = 24.80$, $df = 2$, $p < .001$). Analysis of net thoughts also supports this conclusion.

Table 6B. Chi-square analysis for achievement advertisement

Number of thoughts listed					
		Negative	Neutral	Positive	χ^2 Sig.
Achievement	High materialism	6% (1)	0% (0)	94% (17)	28.44 .001
Thoughts	Low materialism	72% (13)	22% (4)	6% (1)	

Note: Net thoughts showing the difference between positive and negative thoughts were also computed. The mean scores for net thoughts were .32 for the high materialism group and -.14 for the low materialism group. The difference in these mean scores was statistically significant ($t = 5.16$, $p = 0.00$).

3.8. Hypothesis testing: H4 (appearance-related appeals). To test the final hypothesis that people with high levels of materialism (in comparison to people with low levels of materialism) will have more favorable attitudes toward advertisements that use appearance-related appeals, Aad scores for two advertisements (toothpaste and clothing) and the thoughts related to each of these ads were examined. Analysis of variance indicated that respondents with high levels of materialism had significantly higher Aad scores for both ads than respondents with low levels of materialism ($F = 24.56$, $p < .001$ for the toothpaste ad; $F = 94.31$, $p < .001$ for the clothing ad) (see Tables 7A and 7B). Once again, assuming that the appearance-related nature of the appeal was the cause for the difference, H4 is supported.

Table 7A. ANOVA for attitude towards the toothpaste ad

Attitudes toward the ad					
	N	Mean	Std. Deviation	F-stat	Sig.
High materialism	101	13.50	3.17	24.56	.001
Low materialism	86	11.36	2.66		

Table 7B. ANOVA for attitude towards the clothing ad

Attitudes toward the ad					
	N	Mean	Std. Deviation	F-stat	Sig.
High materialism	101	16.02	3.14	94.31	.001
Low materialism	86	10.71	4.31		

Analysis of the thoughts listed for the both the toothpaste advertisement and the clothing advertisement provide additional support for H4. As shown in Table 8A and Table 8B, both Chi-square analyses indicated that respondents with high levels of materialism were significantly more likely to provide positive, appearance-related thoughts than respondents with low levels of materialism when exposed to these ads ($\chi^2 = 15.57$, $df = 2$, $p < .001$ for the toothpaste ad; $\chi^2 = 25.01$, $df = 2$, $p < .001$ for the clothing ad). Similar conclusion can be drawn by examining the results of net thought analysis, as shown in Tables 8A and 8B.

Table 8A. Chi-square analysis for toothpaste advertisement

		Number of thoughts listed			χ^2	Sig.
		Negative	Neutral	Positive		
Appearance-related	High materialism	14% (7)	27% (13)	59% (29)	15.57	.001
Thoughts	Low materialism	38% (18)	42% (20)	21% (10)		

Note: Net thoughts showing the difference between positive and negative thoughts were also computed. The mean scores for net thoughts were .23 for the high materialism group and -.10 for the low materialism group. The difference in these mean scores was statistically significant ($t = 3.74$, $p = 0.00$).

Table 8B. Chi-square analysis for clothing advertisement

		Number of thoughts listed			χ^2	Sig.
		Negative	Neutral	Positive		
Appearance-related	High materialism	20% (9)	24% (11)	57% (26)	25.01	.001
Thoughts	Low materialism	1% (1)	8% (7)	91% (83)		

Note: Net thoughts showing the difference between positive and negative thoughts were also computed. The mean scores for net thoughts were .81 for the high materialism group and .23 for the low materialism group. The difference in these mean scores was statistically significant ($t = 2.13$, $p = 0.02$).

Discussion and implications

The purpose of this empirical study is to determine if an individual's level of materialism was related to his/her evaluations of advertising appeals. Findings indicate that consumers with high levels of materialism not only evaluate prestige/status, achievement, and appearance-related appeals more favorably than consumers with low levels of materialism, but also the thoughts that these appeals elicit are significantly more positive for consumers with high levels of materialism. When advertisements used interpersonal appeals, however, consumers with low levels of materialism recorded significantly more positive thoughts and liked the ads better than consumers who are highly materialistic. All of these findings are consistent with the existing conceptual definitions of materialism and add further validation to the work in this area (e.g., Belk, 1985; Richins, 1994).

Thus, the research reported herein not only supports current conceptualizations of materialism, but also it does so by examining the construct within a new context – that of advertising. As a result, the findings provide new insight in several areas concerning how materialism may operate in the way consumers process advertisements. First, this research provides evidence of the relationship between individual values (i.e., materialism) and attitudinal reactions to specific advertising appeals, and, thus, persuasive communication. The

relationship between values and the evaluation of specific advertising appeals also provides insight into effective target marketing strategies for either low or high materialism consumers. Ensuring that the advertising appeal is salient or employs powerful and meaningful values for a particular market segment appears to be one way of enhancing the evaluation, and, thus, the effectiveness of the message.

Another implication deals with the design and selection of specific appeals to provoke the desired response. As Brown and Stayman (1992) state, the liking of an advertisement may be the best indicator of advertising effectiveness. Hence, if an interpersonal appeal is used to target consumers who have high levels of materialism, a negative or unfavorable evaluation of the appeal could result. This unfavorable evaluation could result in consumer aversion and consequently non-effective persuasive communication. Therefore, when advertising and positioning a product, marketers must assess the target market in terms of their values (in this instance, materialism). If the target market is found to be high in materialism, employing an interpersonal appeal may prove to be less effective than other appeals and also may result in an unfavorable positioning strategy for the product. This scenario may in fact have been evident for the Toyota ad. Over 20 percent of the respondents did not like the Toyota ad and over 40 percent had neutral or negative feelings about it. Comments such as “So what?” and “Not relevant” were common, highlighting the importance of having advertising appeals that are appropriate for the product category.

Methodologically, the paper highlights the complementary nature of the two techniques used to obtain attitudes toward advertising. As Boles and Burton (1992) noted, using both measurement approaches – free elicitation and forced choice Aad scales – provides substantial advantages over using only one of the methods when gauging responses to advertising. Used individually, each has its advantages and disadvantages; however, when used together, the amount of information obtained is considerably greater and the level of understanding that can be gained is considerably improved.

Public policy implications

Advertising is viewed in some circles as a means of mind control and as a device to manipulate vulnerable audiences (Arrington, 1982; Crisp, 1987; Jacobson and Mazur, 1995; Opress, 2014). This view is made especially clear by Lasch (1979) who asserts that advertising “manufactures a product of its own: the manufactures a product of its own: the

consumer perpetually dissatisfied, restless, anxious and bored. Advertising serves not so much to advertise products as to promote consumption as a way of life". Critics charge that advertising contributes to and induces materialism among young people (Buijzen and Valkenburg, 2003). Schwartz (1994) maintains that some consumers can become "addicted" to a materialistic lifestyle and that such addiction is actively promoted and encouraged through advertising. Advertising, then, is charged as a perpetrator of a social and individual ill to wit materialism.

The results of this study provide some evidence (although in an experimental environment) that a consumer's trait of materialism does affect their processing of certain kinds of advertising appeals. Hence, opponents of such advertising may assert that the results of this research validate their claim that advertising may unleash materialistic forces on those with a materialistic proclivity. It is important, however, to emphasize that one's perceptions of an ad does not necessarily lead to purchases. Indeed, consumers are exposed to a welter of forces that seek to persuade them. There are many intervening factors at work between observing an ad and the decision to buy the product featured in the ad. The link between perceptions and actual behavior is equivocal. Nonetheless, these results do suggest that one's level of materialism does explain some of the cognitive processing of consumers.

Limitations and future research

As with any research effort, the study reported herein has limitations. First, as the goal of this study is theory testing and examining the relationships between variables, we considered the student sample to be appropriate. However, such a sample is recognized as a potential limitation when generalizing the results to other populations. A second limitation of the study focuses on the experimental environment. As in many advertising experiments, subjects were faced with forced exposure to the advertisements without other contexts such as articles and editorials. Forced exposure is generally accepted in advertising experiments (Stafford and Day, 1995), but may have

put the subjects in an evaluative state. Furthermore, the classroom setting may have created a higher level of task involvement than may exist when subjects look at advertisements in more natural settings, such as the home. Although the subjects were encouraged to look at the advertisements in the way that they would normally read a magazine, this attempt to emulate a naturalistic setting cannot be guaranteed.

Thus, even though this elevated level of task involvement poses no threat to the internal validity of the research findings, it could potentially limit the external validity of the findings.

In sum, the findings of this research must be qualified by the recognition that they are of value primarily in assisting us to understand the effects of materialism on how consumers evaluate advertising appeals under advertising-pretest conditions. That is, under forced exposure, it appears consumers with high levels of materialism view prestige/status, achievement, and appearance-related advertising appeals more favorably than consumers with lower levels of materialism, while consumers with low levels of materialism favor advertising that employs interpersonal appeals. However, additional research is needed which replicates and expands upon these findings. For example, the use of a broader array of products is needed to establish the generalizability of the results. In the same vein, future studies that present the advertising stimuli in more naturalistic conditions, coupled with advertisements from different types of media (e.g., social media apps) are also of interest in establishing the external validity of our findings.

Additional research could examine the use of a non-student sample. Finally, a natural extension of this research is to examine the influence of the different advertisement appeals in relation to other outcome measures such as purchase intention, actual purchase and repurchase. Doing so would increase the practical implications of these findings for both marketers and advertising practitioners and the social concerns of public policy advocates, something that is often overlooked in academic research.

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Appendix 1

The interpersonal appeal: the family

The advertisement for a family sedan automobile was selected as the interpersonal appeal stimuli based on the results of both the preliminary and pilot testing. The preliminary testing involved ten judges assessing the applicability of the three potential family appeal advertisements. Not only was this advertisement selected by all three judges, but the pilot testing also confirmed the judges' selection of this advertisement. Results indicated that of the fifty-one subjects who viewed the two family appeal advertisements in the pilot testing, 58% of them made references to 'family' for this advertisement, compared with 18% of the respondents recording 'family' thoughts for the second 'potential' stimuli.

The prestige/status/luxury appeal

The advertisement of a prestige brand of automobile was selected as the stimuli for the prestige/status/luxury appeal based on the results of both the preliminary and pilot testing. Eight judges assessed six potential advertisements for their applicability for this particular appeal. This advertisement was selected by six of the eight preliminary testing judges. From the pilot test, 85% of the subjects who viewed the advertisements for this appeal made relevant comments about prestige, status and/or luxury, compared with 41%, 33% and 8% for the remaining three 'potential' stimuli.

The achievement appeal

The advertisement for a financial consulting firm was selected as the achievement appeal stimuli due to both the preliminary and pilot testing. Only two potential achievement appeal stimuli could be found at the time of stimuli collection. Of the five judges who assessed the advertisements' applicability during the preliminary testing stage, three selected this advertisement as being the most applicable of the two potential advertisements. The pilot test results did not prove to be extremely different, with 15% of the respondents who viewed this advertisement commenting about achievement, compared with 8% commenting about achievement for the second 'potential' stimuli.

The appearance-related product appeal

The advertisement for a tooth whitening toothpaste was selected as the stimuli for the appearance related product hypotheses due to the results of the preliminary and pilot testing stages of this research. Of the six potential stimuli, four of the six judges selected this advertisement as being the most applicable stimuli for testing hypotheses eight and nine. In addition, of the five appearance-related product appeal advertisements employed in the pilot testing, 50% of respondents recorded appearance-related thoughts, compared with 31%, 44%, 27% and 23% for the other four 'potential' stimuli.