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Determinants for materialism among adolescents in Singapore

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Determinants for Materialism among Adolescents in Singapore

Research Paper

Structured abstract (319 words)

Purpose—The purpose of this paper is to examine the influence of marketing communication factors (specifically advertising viewing and responses to marketing promotions) as well as social influence factors (specifically influences from peers and media celebrities) on adolescents’ endorsement of materialistic values in Singapore. As the Asian culture is said to be collective when compared with the Western culture, it is expected that social relations, both personal and celebrity-mediated, play an important role in the establishment of consumption values.

Design/methodology/approach—A survey of 190 high school students aged 13 to 18 was conducted using a structured questionnaire. Constructs were measured using established scales.

Findings—Imitation of media celebrities and perceived peer influence were positive predictors of materialistic consumption values while marketing communication factors were not significant predictors.

Research limitations—The data came from a convenience sample of one high school and may not be representative of adolescents in Singapore.

Practical implications—Desires to place restrictions on advertising exposure in order to decrease the level of materialistic values among children and adolescents are quite prevalent in many
societies. The paper found that in fact advertising regulation may not impact adolescent levels of materialism to the degree previously assumed. Visual literacy courses may be a better strategy of reducing the level of materialism through discouraging the desire to imitate media celebrities. In turn, this training and heightened awareness could potentially help to diminish some of the negative peer influences in relation to materialism. Media educators should help young consumers to reflect on how their purchase decisions can be influenced by their social relations, including both personal interaction and celebrity-media communications, while simultaneously providing them with the tools to critically assess the images they view.

**Originality/value**—The paper offers insights about the complex patterns of how consumption values develop in an Asian society. It is also a pioneer work on the study of the influence of media celebrities on materialistic value orientations.
Determinants for materialism among adolescents in Singapore

INTRODUCTION

The global youth market is important to international marketers and advertisers because of its size, homogeneity and its growing purchasing power. Giges’s (1991) study found the life styles and consumption habits of people age 14 to 34 around the world to be similar, especially in the consumption level of soft drinks, beer and footwear. Among the population of 1.8 billion youth aged 10 to 24 in the world, 1.0 billion (i.e. 61%) are in Asia (Nugent, 2006), making the Asian youth segment an important target market for products as well as social ideas. They also have a relatively higher disposable income than their Western counterparts because of more generous allowances and income from part-time jobs (Sharma, 2002). Within this region, Singapore is a major market with its strong economy, central location, and presence of international companies (Milligan, 2004; Stravens, 1996).

Materialism is an important consumption value because material possessions are often used by young people as an expression of the extended self (Belk, 1988). The adoption of materialistic values among young people will affect the balance between private and public choices children make throughout life (Goldberg et. al., 2003). Past research examining materialism among adolescents has focused on the relationship of personality traits and consumption patterns (Achenreiner, 1997; Goldberg et. al., 2003). The current study aims to build on this line of research by exploring marketing communications and social influence
factors that can contribute to the development of materialistic values among adolescents.

Materialism in this study is defined as the degree to which a person believes that the acquisition and possession of material objects are important to achieve happiness in life, as well as an indicator of his or her success in life (Richins and Dawson, 1992). The current study focuses on Singaporean youth responses to marketing communications (advertising consumption and participation in marketing promotions) as well as the social influences of peers and media celebrities on the development of materialistic values. Specifically, the following research questions are presented to guide the study.

1) How do adolescents in Singapore respond to social influences (peer influence and media celebrities) and marketing communications (advertising and marketing promotions)?
2) How are responses to levels of social influence and marketing communications associated with the endorsement of materialistic values?

Implications for adolescent researchers, educators and regulators of advertising flow out of the findings.

SCOPE OF THE STUDY: SINGAPORE

Singapore is a small island nation located in Southeast Asia between Malaysia and Indonesia – two of the world’s largest Muslim countries. English is the language of administration and is widely used by professionals, businesses, and in schools (U.S. Department of State, 2006). Singapore is considered a thriving economic success story in a volatile part of the world. Per capital GDP was similar to that of the USA’ and is higher than many developed economies including Australia and Germany (O’Cass and Lim,
Advertising expenditures in Singapore reached S$1.9 billion in 2006, with an increase of eight percent over the same period in 2005 (ACNielsen, 2007). The youth segment is a major market segment in Singapore. Five of the top ten advertisers in 2006 (including McDonald’s, KFC, Warner Music, Kids Central Live of MediaCorp TV, and MediaCorp TV) were for products and services targeted to children and youth. Singaporean youth consumers have been described as having six pockets of income, including income from parents, grandparents, and part-time jobs. They have been found to be more inclined to purchase small impulse items, and have a high interest in IT products, video games, karaoke, coffeehouses and clubs (Wang, 2006). The youth market in Singapore prefers fashion brands of a western origin over fashions brands of an eastern origin (O’Cass and Lim, 2002) and a survey about materialism found that adults in Singapore were more materialistic than adults in the U.S. (Swinyard, Kau and Phua, 2001).

However, Singapore is also seen by some as more of an authoritarian state where limiting free speech and political choice are encouraged in the name of bettering society as a whole. In order to promote collectivistic values, the Singapore government has traditionally rejected Western ideals of individualism and liberty. Instead, the Singapore government uses publicity campaigns to promote “shared” Asian values such as studiousness, achievement through hard work and respect for authority (Yuen, 1999). The former Deputy Prime Minister Goh Chok Tong
advocated that all Singaporeans should put the Nation before community and society before self, respect family as the basic unit of society, treasure consensus and not conflict, and maintain racial and religious harmony (Frith and Ho, 2006). In such a group reliant and harmony oriented society, with nation and society before the self, we might expect a deep interest in curbing materialistic values such as through advertising regulation, an industry often thought to enhance materialism (Phillips, 1997; Pollay, 1986).

LITERATURE REVIEW

*Social Influences on Materialistic Values: Parents, Peers & Celebrities*

The process by which children and adolescents acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace is defined as consumer socialization (Ward, 1974). Children learn consumer behavior patterns from various socializing agents including parents, peers, schools, stores, media, products, and even packages (Moschis, 1987). The two principal interpersonal sources from which children and young people learn about products and their consumption habits are parents and peers. During childhood, parents are children’s role models (Anderson et. al., 2001). Parents are probably the most instrumental in teaching young people the basic rational aspects of consumption such as understanding price-quality relationships, handling money wisely, and obtaining appropriate information before making purchases (e.g., McNeal, 1987; Ward, Wackman, and Wartella, 1977).

Due to the combination of rapid body growth and puberty, the early self-identity formed
in childhood is no longer appropriate, and teenagers enter a period of identity crisis (Erikson, 1980). During this phase, young people need to formulate a new identity and establish autonomy from their parents. As a result, young people tend to seek personal relationships that give value to their perspectives and ensure that their feelings are understood. Consequently, young people prefer to identify with their peer groups. The frequent interaction with peers, even more frequent than with parents, can lead to peers becoming the primary socializing agents for consumption values (Choi and La Ferle, 2004; La Ferle, Edwards, and Lee, 2000; Moschis, 1987; Shim, 1996).

Several studies have shown how young people learn the symbolic meaning of goods or expressive elements of consumption from their peers at school and at play (Moschis and Churchill, 1978; Moschis and Moore, 1982). Peers play an important role in the development of young consumers’ preferences for stores, products, brands of selected products, media, and television programs. However, previous studies found that those who communicate frequently with their peers and those who are more susceptible to the influence of peers are also known to be more materialistic (Achenreiner, 1997; Moschis and Churchill, 1978). Susceptibility to peer influence reflects a willingness to comply with the wishes of others (normative influence) and a willingness to accept and internalize information from others (informative influence). This susceptibility also reflects a person’s need to identify or enhance one’s image with significant others through material possessions (Bearden, Netemeyer, and
Teel, 1989). Young people who perceived higher peer influence were more likely to engage in social comparison of possessions and became more materialistic (Chan and Zhang, 2007). We therefore offer H1:

H1: Young Singaporeans who perceive a higher peer influence will be more materialistic.

In addition to relations with family and peers, young people often form secondary attachments to celebrities. In fact, celebrity worship has become common amongst young people around the world (Yue and Cheung, 2000) and may stem from a developmental need for identification and intimacy (Josselson, 1991). As adolescents transition to adulthood, celebrity attachments can facilitate the formation of a mature adult identity (Erikson, 1968) as well as influence consumer behavior. Using an ethnographic methodology, Caughey (1984; 1985) found that young admirers consider celebrity idols as their idealized self-images. Admirers want to develop or refine personality traits that are similar to their idols. Young people reported that they want to revise their physical appearance, abilities, values and attitudes in order to imitate that of their idols. Young people developed powerful emotions toward media celebrities even though they had no face-to-face interaction with them (Caughey, 1984). People’s “imaginary” relationships with media figures can therefore shape both their own self-identities and their subjective evaluation of self-worth (Caughey, 1985).

Boon and Lomore (2001) found that young people who shared a bond with their idols (all were media figures) were more likely to credit their idols in guiding their choice of identity,
shaping their feelings of self-worth, and influencing their attitudes and personal values.

Overall, the celebrity’s message becomes part of the individual’s social construction of reality (Alperstein, 1991). Celebrity worshipping could thus have a prevalent influence on shaping their followers’ values, attitudes and behaviors (Schultze et al., 1991). An empirical study indicated that both direct role models (e.g. fathers and mothers) and vicarious role models (e.g. favorite entertainers) affected adolescents in brand selection, brand switching and lodging consumer complaints (Martin and Bush, 2000). Young consumers reported that they were more likely to use products endorsed by entertainers or famous athletes (Lafferty and Goldsmith, 1999). La Ferle and Choi (2005) found celebrities to generally be more effective across Korean young adults in creating more favorable attitudes toward ads and brands than non-celebrities.

In fact, research on celebrity worshipping of young people has mainly focused on the antecedents to celebrity worshipping (e.g., Greene and Adams-Price, 1990) or the juvenile deviant behaviors resulting from celebrity worshipping (e.g., Martin, Clarke, and Pearce, 1993). Few studies have examined Asian consumer attitudes toward celebrity images and yet this area, along with social influencers, is particularly important in a collectivistic culture such as Singapore, where interpersonal relationships and group influence are quite prevalent (Hofstede, 1980). Furthermore, two recent studies in China and Hong Kong found that imitation of media celebrities was a positive predictor of materialism among young people in
these two markets (Chan and Prendergast, 2007; Chan and Zhang, 2007). Highly materialistic youth were more likely to purchase a product after seeing a famous person speak about it than less materialistic youths (Goldberg et. al., 2003). In light of the literature reviewed, we put forth the following hypothesis.

H2: Young Singaporeans who report a higher level of imitation of celebrities will be more materialistic.

Marketing Communication Influences on Materialistic Values: Advertising & Marketing Promotions

Advertising images are pervasive sources of materialistic values. Advertisements often encourage consumption by using images of attractive and/or famous product users, demonstrating social reward by using the products, and associating the products with wealthy lifestyles (Kasser et al., 2004). Advertising also provides a host of potential role models, who are attractive, powerful, and glamorous. Adolescents may adopt both real and fictional people shown in the advertisements as their role models because of their superiority in appearance and extravagant lifestyles (Yue and Cheung, 2000). When young people choose advertising information and characters as their role models, they may not only identify with them but also intend to copy them in terms of how they dress and what they are going to buy. Empirical data shows a positive correlation between the influence of vicarious role models such as favorite entertainers and adolescents’ purchase intentions (Martin and Bush, 2000).

A longitudinal study of adolescents found that television advertising exposure had both short and long-term effects on adolescents’ adoption of materialistic values (Moschis and
Moore, 1982). Recent studies in China and Hong Kong have also found that advertising viewing is a positive predictor of materialism (Chan and Prendergast; Chan and Zhang, 2007).

We therefore offer the following hypothesis.

H3: Young Singaporeans who have a high level of advertising viewing will be more materialistic.

Similarly, consumer-oriented marketing promotions such as coupons, free trials, rebates, lucky draws or gifts are often used by advertisers to boost up short-term sales. A previous study found that participation in marketing promotions had positive correlations with materialism among the youth (Goldberg et. al., 2003). We therefore offer H4:

H4: Young Singaporeans who participate in marketing promotions will be more materialistic.

THE STUDY

Studying social influences and marketing communications on levels of materialistic values in an Asian culture is important as it involves a context quite different from Western culture. Many scholars argue that Asian cultures are different because of the long-standing values concerning families and human relations (Zhao, 1997). As an example, in a recently developed Asian Values Scale consisting of four factors; conformity to norms, family recognition through achievement, emotional self control and collectivism (Kim, Atkinson, and Yang, 1999), all but one of these factors stressed the importance of social influence and yielding to social norms. Therefore, to better understand the adoption of materialistic values, it is essential to examine both the impact of social influence as well as marketing
communications, particularly among Asian adolescents. As different cultural environments can result in varied socialization processes (Choi and La Ferle, 2004), it is important to assess how marketing communications and social influences impact Singaporean youths’ levels of materialism. Systematic research on a country-by-country basis can enhance our understanding of the impact of marketing communications and social influences on youth consumer culture as well as enhance marketing efforts and public policy decisions.

Figure one provides a clear picture of our hypothesized relationships in predicting materialism. It was developed from the theoretical framework provided in our literature review of previous studies that have identified perceived peer influence, imitation of media celebrities, advertising viewing and marketing promotions as key variables in predicting the endorsement of materialistic values.

[FIGURE 1 ABOUT HERE]

RESEARCH METHOD

The data analyzed in this study were collected from a survey conducted in Singapore during October of 2005. The target population was young people aged 13 to 18. The sample was a convenience design. Students from a public high school located in the western part of the island were recruited to participate in a voluntary survey. Permission was obtained from the school authority. A draft of the questionnaire was prepared based on a previous study of consumer behavior among Hong Kong adolescents (Chan and Prendergast, 2007). The
questionnaire was pre-tested and revised for clarity and accuracy by personally interviewing five persons aged 13 to 16 in Singapore about its clarity. Questionnaires were distributed to students during class time and were self-administered by students using a paper and pencil format. It took about ten minutes to fill out the questionnaire. Altogether 200 questionnaires were distributed and 190 completed questionnaires were collected. The response rate was 95 percent. The demographic and media profile of the sample is summarized in Table 1.

Respondents on average spent 3 hours with TV and 3 hours on the internet.

[TABLE 1 ABOUT HERE]

**Measures**

The questionnaire consisted of statements about advertising viewing and participation in marketing promotions, perceived peer influence, imitation of media celebrities, and questions assessing materialistic values. The questionnaire closed by requesting media usage data and demographic information. All questions except those related to participation in marketing promotions were measured on a five point scale with a higher number indicating a more favorable attitude toward the construct (1=disagree very much; 5=agree very much).

Advertising viewing was measured by asking respondents to rate seven statements developed from the Moschis and Moore’s (1982) scale such as “I watch advertisements to know what brand has the product features I need.” The inter-item reliability was 0.83.

Response to marketing promotions was measured by asking “In the past three months,
have you ever bought something because of the following reasons?” Five types of promotions were selected, including free gifts/premiums, lucky draws, cash rebates, coupons, and free trials. Respondents could choose one of the following answers: no, one to three times, or four or more times. These answers were re-coded into a dichotomous variable with ‘0’ indicating no promotion participation and ‘1’ indicating participation in a promotion.

Perceived peer influence was measured by asking respondents to rate six items on a five point scale such as “if I don’t have a lot of experience with a product, I often ask my friends about it”. These items were used from a study by Mangleburg and Bristol (1998). The inter-item reliability was 0.80.

Imitation of media celebrities was measured by asking respondents to rate four statements such as “I want to be as smart as movie idols”. These statements were developed based on the concept of “exposure to materialistic models” presented in Kasser et al.’s (2004) framework. The inter-item reliability was 0.77.

Materialism was measured by asking respondents to rate six statements such as “buying things gives me a lot of pleasure.” These statements were from Richin’s (2004) shortened six-item materialism values scale. The inter-item reliability was 0.80.

Descriptive statistics of the constructs are presented in Table 2. Multiple regression analysis was used to test the proposed model in its ability to predict materialism values using the marketing communications and social influence factors as well as demographic
RESULTS

Findings regarding respondents’ advertising viewing, responses to marketing promotions, perceived peer influence, imitation of media celebrities, and materialism values are summarized in Table 2.

The mean score for advertising viewing was 2.9. Respondents agreed that they consumed advertisements for finding out where they can buy things they want as well as for information about product features. However, respondents did not use advertisements for knowing about products that impress others, for talking points, nor for identifying images of “hot” people.

Participation in marketing promotions was generally low among respondents (ranging from ten to thirty percents). Free gifts or coupons were more popular among respondents than other marketing promotions. Fifty-nine percent of the sample did not participate in any of the five marketing promotions while the remaining forty-one percent participated in at least one promotion in the past three months. In the subsequent regression, those who did not participate in any of the five marketing promotions were coded as zero for the variable “responses to marketing promotions”, and the remaining coded as one.

The mean score of perceived peer influence was 2.4. Although respondents agreed that they would seek advice from friends when they buy products that they were not familiar with, respondents showed a high level of autonomy in making purchase decisions. For example, 78
percent of the respondents disagreed or disagreed strongly that they would buy only the brands with peer approval. Sixty-four percent disagreed or disagreed strongly that they will look at what their friends are buying before they buy. Sixty-three percent disagreed or disagreed strongly that it is important for their friends to like the products they purchased.

The mean score of imitation of media celebrities was 2.7. Respondents did not agree that they would like to be as smart, popular, or trendy as media celebrities. They also reported that they did not aspire to the lifestyles of media celebrities.

The mean score of materialistic values was 3.2. Respondents agreed that they would be happier if they could buy or own more things and they enjoyed luxurious lives. However, they did not admire people with expensive possessions. Again, outward social concerns or impressions did not appear to be driving the choices of respondents.

In order to understand relationships between key variables, Pearson correlations were undertaken. As can be seen in Table 3, advertising viewing was strongly and positively correlated with perceived peer influence, imitation of media celebrities as well as endorsement of materialistic values. Perceived peer influence was also strongly and positively correlated with imitation of media celebrities and materialistic values. Although much weaker, participation in marketing promotions was found to be positively correlated with advertising viewing and perceived peer influence. The positive correlations between
materialism and marketing communications as well as social influence variables suggest that
it is fruitful to proceed with regression analysis.

[TABLE 3 ABOUT HERE]

Multiple regression analysis was conducted to test the proposed theoretical framework.

Two models of multiple regression analysis were carried out. The first model serves as the
control model. In the first model, age, sex and job status were used as predictors. In this
model, age was the only demographic variable that showed a significant standardized beta
value of -0.19 (significant at 0.05). In other words, older respondents were less materialistic
than younger respondents.

In the second model, the age variable was retained while the sex and the job status
variables were dropped. Four variables related with marketing communications (ad viewing
and participation in marketing promotions) and social influences (peer and celebrity) were
added as predictors. Altogether five predicting variables were used. Results are summarized
in Table 4.

In the second model, imitation of media celebrities and perceived peer influence were
positive predictors of materialistic values. Standardized beta values for imitation of media
celebrities and perceived peer influence were 0.42 (significant at 0.001) and 0.21 (significant
at 0.01) respectively. According to the partial regression coefficients, perceived peer
influence and initiation of media celebrities had a positive relationship with materialism.
Respondents who perceived a higher level of peer influence were more materialistic. As a result, H1 was supported. Similarly, respondents who had a higher level of imitation of media celebrities were more materialistic. As a result, H2 was supported.

Surprisingly, advertising viewing and responses to marketing promotions were not significant predictors of materialistic values at the 0.05 level. The standardized beta values for advertising viewing and responses to marketing promotions were 0.12 and -0.02 respectively. According to the partial regression coefficients, advertising viewing and responses to marketing promotions were not related to materialism. As a result, H3 and H4 were rejected.

The second model with five predictors was significant at the 0.001 level. Age remained as a significant negative predictor of materialistic values in this model. The R square value for the second model was 0.40. Therefore, age, imitation of media celebrities and perceived peer influence together explained 40 percent of the variance in materialistic values.

DISCUSSION AND CONCLUSION

A survey was conducted in Singapore to examine adolescents’ responses to marketing communications and social influence factors as well as to investigate the relative importance of these factors on adolescents’ materialism values.

Endorsement of materialistic consumption values, perceived peer influence and level of
advertising viewing among Singapore youths were similar to that among Hong Kong youths (Chan and Prendergast, 2007). Imitation of media celebrities and perceived peer influence were positive predictors of materialistic values. When these variables were controlled, responses to marketing communications were insignificant in predicting materialism values. This indicates that social influences played a more important role in predicting levels of materialism than marketing communications among adolescents in Singapore.

*Impact of Age*

Several additional findings are important to address. Endorsement of materialistic values was found to decrease with age. The result was consistent with a recent model proposing that materialism would achieve a maximum level in the early adolescent stage as adolescents experience a decline in self-esteem. By late adolescence, self-esteem is said to rebound and the tendency to use material possessions for self-definition decreases (Chaplin and John, 2007).

*Impact of Marketing Communications: Advertising & Marketing Promotions*

Adolescents in Singapore consumed advertisements mainly for information about product distribution channels and product features. This finding may be partially attributed to the fact that advertisements in Singapore tend to contain factual information about availability, performance and quality (Rehman, Aw, and Kennan, 1999).

With respect to the social use of advertising, respondents did not believe that they
watched advertisements to enhance buying confidence in relation to images of trendy people or to have something to talk about. Therefore, advertising in Singapore does not appear to emerge as an item in the youth’s agenda of public debate or personal communication. The current study indicates that respondents are more interested in product information than image information from advertisements and that they may not be too concerned about obtaining an ideal social self-image from advertising.

Most of the respondents did not participate in consumer marketing promotions. This may be because consumer marketing promotions targeting adolescents have not yet become prevalent in Singapore. As a result, marketing promotions did not play an important role in the formation of consumption values among adolescents. However, more research is needed in this area to assess the volume of teen marketing promotions, particularly as new technology continues to enhance the methods for directly reaching consumers of all ages.

Social Influences of Celebrities and Peers

Intentions to imitate media celebrities were low in the current study. This may be due to the perceived distance between respondents and media celebrities. However, given that the use of media celebrities for product endorsements involves a significant monetary investment, marketers and advertisers should rethink employing media celebrities to endorse products. With adolescents in the current study not having a high aspiration to imitate media celebrities, marketers already using celebrities to promote products targeting the youth should, at the
very least, design ways to measure the effectiveness of celebrity endorsements.

Perceived peer influences on purchase decisions were generally low among the respondents. Again, respondents were more likely to seek help about product information than to seek normative support from peers. Only a mere four percent of respondents agreed that they would only buy products approved by peers. The results are consistent with a survey undertaken in Hong Kong of 289 students in grade 7 through grade 13 (Chan, 2006). In that survey, 67 percent of respondents agreed that they often asked their friends when they purchased a product that they were not familiar with. However, only 13 percent agreed that they would buy only those products and brands that their friends would approve of. Although Asian societies are said to be collective, the findings of the current study support that adolescents in Singapore tend to have a strong individualistic side also impacting their consumer decisions.

From a societal perspective, peer influence and the influence of media celebrities were found to be significant predictors of materialistic values among respondents. The results are similar to those of a study involving Hong Kong young consumers (Chan and Prendergast, 2007). The influence of media celebrities was in fact, found to be a stronger predictor of materialism than peer influence. The finding may be attributed to the fact that media celebrities are more likely to be much wealthier than friends in the same social circle. Such a wide gap between wealth and ownership of possessions can trigger materialistic values. But
more research is necessary in the area to better understand this complex relationship.

In contrast to the typical criticism of advertising leading to materialistic values (Pollay, 1986; Philips, 1997), the findings did not indicate this outcome holding true with the current sample. When social influences of peers and media celebrities were present in the model, regression analysis did not support advertising viewing as a significant predictor of materialism. This may be because there was a high correlation between advertising and perceived social influences. Another possible reason is that advertisements in Singapore adopt predominantly informative appeals. Only 25 percent of television advertisements were found to use symbolic images or lifestyle appeals (Rheman, Aw, and Kennan, 1999). Therefore, advertisements in Singapore may not carry as many materialistic images of social status or wealth icons as can be found in other countries.

Although more research is necessary, the results do provide some serious considerations for public policy makers wanting to curb levels of materialism among adolescent consumers. For years, parents, educators, public policy officials, and consumer researchers have discussed restrictions on advertising as a way to diminish materialism among children and adolescents. Suggestions have gone as far as to ban advertisements targeted to children and adolescents (Chaplin and John, 2007). However, findings of the current study indicate that the restriction of advertising viewing may not be a promising communication strategy to achieve the desired goals. Intention to imitate media celebrities was found to be a strong
predictor of materialistic values, while advertising viewing was not a factor. Therefore, to
discourage materialism among adolescents, teaching young consumers visual literacy of
images may be a more effective path to follow than restricting the speech of honest, truthful
and potentially useful advertising information.

Celebrities are idolized by young people because celebrities are considered more
attractive than ordinary individuals. They are carefully packaged by the media through
makeup, photo-editing, glamorous clothing, flattering lighting and cosmetic surgery.
Celebrities are extremely wealthy, and demonstrate their wealth through expensive
possessions such as jewelry, and properties (Chan and Zhang, 2007). In fact, a recent survey
of Chinese adolescents in Hong Kong indicated social comparison with friends and media
celebrities together predicted endorsement of materialistic values (Chan and Prendergast,
2007). Television viewing further demonstrated a positive correlation with materialism
among adolescents in urban as well as in rural China (Chan, Zhang and Wang, 2006; Cai and
Chan, 2007). Therefore, teaching adolescents to critically assess the images they see in media
and of their favorite celebrities seems exponentially more beneficial than to simply ban
advertising.

Visual literacy education can level the playing field by providing children and teens
with new lenses with which to assess media images, celebrities and the cost of materialistic
goals. Frith (1998) provides an excellent starting place with lessons about undressing the ad
and media images to see the social and political power in society as well as to more accurately view what we are really seeing. Jean Kilbourne’s work further cues us in to the touching up and editing that takes place with models and famous celebrities prior to any image being presented to the public. Sut Jhally’s writings and videos such as “understanding globalization” round out the visual literacy learning process with harsh images of the outcome of pursuing materialistic values and consumption for the sake of consuming on both society and individuals.

In the end, we know that media and advertising have many benefits to offer society, but there are also unintended consequences (Pollay, 1986). The more we can keep the images we see in perspective, the healthier we can be as a society and the more promise we have for the positive development of our children and adolescents.

To conclude, the current study supported a model to predict the development of materialistic consumption values among adolescents in Singapore by employing marketing communications and social influence factors. A relatively small set of variables were able to predict over 40 percent of the variance of materialism values. When social influences from peer and media celebrities were controlled, advertising viewing was not significant in predicting materialism. Visual literacy was offered as a way to curb materialism by teaching adolescents the reality of the images they see in the media and especially in relation to the wealthy celebrities they often want to emulate.
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Table 1 Sample profile (n=190)

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<tr>
<td>Internet</td>
<td>178</td>
<td></td>
</tr>
<tr>
<td>Celebrity section of newspapers</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

* may not add to 100, due to rounding
Table 2 Descriptive statistics

<table>
<thead>
<tr>
<th>Construct</th>
<th>Scale</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived peer influence</td>
<td>1-5</td>
<td>2.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Imitation of media celebrities</td>
<td>1-5</td>
<td>2.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Advertising viewing</td>
<td>1-5</td>
<td>2.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Responses to marketing promotions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coupons</td>
<td>0-1</td>
<td>0.30</td>
<td>0.5</td>
</tr>
<tr>
<td>Gifts/premiums</td>
<td>0-1</td>
<td>0.29</td>
<td>0.5</td>
</tr>
<tr>
<td>Free trials</td>
<td>0-1</td>
<td>0.18</td>
<td>0.4</td>
</tr>
<tr>
<td>Lucky draws</td>
<td>0-1</td>
<td>0.12</td>
<td>0.3</td>
</tr>
<tr>
<td>Cash rebates</td>
<td>0-1</td>
<td>0.10</td>
<td>0.3</td>
</tr>
<tr>
<td>Materialism</td>
<td>1-5</td>
<td>3.2</td>
<td>0.8</td>
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</tbody>
</table>
Table 3 Pearson correlation coefficients

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>perceived peer influence (1)</td>
<td>0.42***</td>
<td>0.57***</td>
<td>0.16*</td>
<td>0.47***</td>
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</tr>
<tr>
<td>imitation of celebrities (2)</td>
<td></td>
<td>0.47***</td>
<td>0.13</td>
<td></td>
<td>0.58***</td>
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<tr>
<td>advertising viewing (3)</td>
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<td></td>
<td>0.18*</td>
<td></td>
<td>0.45***</td>
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<tr>
<td>responses to marketing promotions (4)</td>
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<td></td>
<td></td>
<td></td>
<td>0.12</td>
</tr>
<tr>
<td>materialism (5)</td>
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<td></td>
</tr>
</tbody>
</table>

* p<0.05, *** p<0.001
Table 4 Summary of regression analyses predicting materialism

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standardized beta</td>
<td>t-statistics</td>
<td>Standardized beta</td>
<td>t-statistics</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sex (0=M, 1=F)</td>
<td>0.17</td>
<td>0.2</td>
<td>Not entered</td>
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</tr>
<tr>
<td>age</td>
<td>-0.19</td>
<td>-2.4*</td>
<td>-0.16</td>
<td>-2.6*</td>
</tr>
<tr>
<td>part-time job (0=no, 1=yes)</td>
<td>0.13</td>
<td>1.5</td>
<td>Not entered</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>perceived peer influence</td>
<td>0.21</td>
<td>2.9**</td>
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</tr>
<tr>
<td>imitation of media celebrities</td>
<td>0.42</td>
<td>6.2***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>advertising viewing</td>
<td>0.12</td>
<td>1.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>responses to marketing promotions (0= no, 1= at least 1 promotion)</td>
<td>-0.02</td>
<td>-0.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p<0.01, ***p<0.001

Model 1: F(3,170=2.0, n.s.) R square=0.04;
Model 2: F(5,169=22.6, p<0.001) R square=0.40;
Figure 1. The theoretical framework.

Marketing Communication Factors:
- Responses to Marketing Promotions
- Advertising Viewing

Social Influence Factors:
- Imitation of Media Celebrities
- Perceived Peer Influence

Materialism

H1+: indicates positive correlation
H2+
H3+
H4+

+ indicates positive correlation