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Social comparison, imitation of celebrity models and materialism amongst Chinese youth

Keywords: Youth; Advertising; Materialism; Consumer Psychology

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ABSTRACT

Materialism is an important issue, especially amongst young people, and especially in a Chinese context. Based on a theoretical model of the endorsement of materialistic values amongst Chinese youth, the objectives were to examine the influence of interpersonal communication on social comparison, and the influence of advertising viewing on imitation of celebrity models. In turn, the study examined how both social comparison and imitation of celebrity models contribute to young people's endorsement of materialistic values. A mall intercept survey of 631 young people aged 15 to 24 in Hong Kong revealed that peer communication and susceptibility to peer influence had strong positive relationships to engagement in social comparison. Motivation for viewing advertisements had a strong positive relationship to imitation of celebrity models. In turn, both social comparison and imitation of celebrity models were positive predictors of materialism. (140 words)

Research Paper

Abstract (192 words)

Purpose—The purpose of this paper is to examine the influence of peers and media celebrities on young people's endorsement of materialistic values in China. As the Chinese culture is said to be collective, 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 299 university students aged 18 to 24 in Beijing was conducted using a structured questionnaire. Constructs were measured using established scales.

Findings—Peer communication and susceptibility to peer influence were positively related to social comparison. Motivation for viewing advertisements was positively related to imitation of celebrity models. In turn, both social comparison and imitation of celebrity models were positive predictors of materialism.

Research limitations/implications—The city selected for this study is highly advanced in terms of economical and advertising development when compared with most other Chinese cities.

Practical implications—As we argue that materialism is a negative value orientation, the current study sheds light on de-marketing to young consumers. Media educators should help young consumers to reflect on how their purchase decisions are influenced by the social relations, including both personal interaction and celebrity-media communications. Discouraging upward social comparison and imitation of idols is expected to discourage the endorsement of materialistic values.

Originality/value—The paper offers insights about the complex patterns of youth attitudes in a former socialist society migrating to a capitalist society. It is a pioneer work on the study of influence of celebrities on materialistic value orientations.

Social comparison, imitation of celebrity models and materialism amongst Chinese youth

Introduction

Materialism 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 or are an indicator of his or her success in life (Richins and Dawson 1992). Longitudinal studies among college and high school students indicate dramatic increases in the endorsement of materialistic values (Korton 1999), and recent research shows that 95% of adults consider children to be overly focused on consuming and buying things (Centre for a new American Dream 2004). Material possessions are often used by young people as an expression of the extended self (Belk 1988), and the adoption of materialistic values affects the balance between the private and public choices that they make throughout life (Goldberg, Gorn, Peracchis & Bomossy 2003). While some may view materialism as a positive value, others suggest that it is an undesirable value which in part is caused by advertising (John 1999). In our opinion materialism is a negative value because it works against interpersonal relationships and it is negatively associated with happiness and subjective well being (Kasser 2002). High levels of materialistic values have been found to create tension between the individual orientation toward materialistic values and a collective orientation toward family and religious values (Burroughs & Rindfleisch 2002).

A central issue in studying materialism, especially amongst young people, is that of social comparison and the intention to imitate media figures. Due to the combination of rapid body growth and puberty, the early self-identity formed in childhood is no longer appropriate, and adolescents enter a period of identity crisis (Erikson 1980). Young people need to formulate a new identity and establish autonomy from their parents. They become more independent in decision making. As a result, young people tend to seek personal relationships that give value to their perspectives and ensure that their feelings are understood. Peer groups, with their shared experience, are an inevitable source of these relationships. Consequently, young people prefer to

identify with peers. The frequent interaction with peers, even more frequent than with parents, can lead to peers becoming the primary basis for social comparison. A generalized social comparison theory states that individuals compare their own material possessions with those owned by significant others to ascertain their social status (Saunders 2001).

Apart from comparing themselves to peers, young people may also compare themselves to celebrities. Celebrity worship has become common amongst young people around the world (Yue & Cheung 2000) and may stem from a developmental need for identification and intimacy (Josselson 1991). Response to celebrity appearances in television commercials sometimes goes beyond emulation. For instance, some research suggests that young admirers spoke of celebrities as if they had a “real” relationship with them. The celebrity’s messages became 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). Advertisers and marketers also capture the opportunity to encourage young followers to consume the products endorsed by their celebrities. Research on celebrity worshipping of young people focuses mainly on antecedents to celebrity worshipping (e.g. Greene & Adams-Price 1990; Sobel 1981) or the juvenile deviant behaviors resulting from celebrity worshipping (e.g. Martin, Clarke & Pearce 1993).

Studying materialism, social comparison and celebrity worship in a Chinese culture involves a context quite different from Western culture. Many scholars argue that mass consumption in Chinese society is different from that in Western societies because of the long-standing values concerning families and human relations (Zhao 1997). The Confucian characteristics of Chinese culture cultivate strong habits of thrift, filial piety, group orientation, good manners, face, and an emphasis on academic achievement (Chan & McNeal 2003; Yau 1988). As hierarchy is legitimate and conformity to group norms is acceptable in Confucian tradition (Wong & Ahuvia 1998), social comparison of goods as a means to locate an

individual's position in the social hierarchy is therefore encouraged. The value of social face will encourage the owning of symbolic goods to improve personal visibility within the social hierarchy (Wong & Ahuvia 1998). The collective characteristic of Chinese culture encourages the use of material possessions to identify associates for establishing long-term social relations.

At issue, then, is whether social comparison and imitation of celebrity models contributes to the endorsement of materialistic values among young Chinese people. Based on a theoretical model of the endorsement of materialistic values among Chinese youth, we examine the influence of interpersonal communication on social comparison and the influence of advertising viewing on imitation of celebrity models. In turn, we examine how both social comparison and imitation of celebrity models contribute to young people's endorsement of materialistic values.

Literature review

Our basic thesis is that interpersonal communication influences social comparison while advertising communication influences imitation of celebrity models. And both social comparison and imitation of celebrity models, in turn, influence materialistic values. This is consistent with Kasser *et al.*'s (2004) argument that individuals learn to adopt materialistic values through social learning from family members, peers, and the materialistic messages that are frequently found in television programs and their commercial messages.

According to Kasser *et al.*'s (2004) model, consumers (including young people) develop materialistic value orientation through experiences that induce feelings of insecurity, and from exposure to materialistic models and values. When the psychological needs of individuals are not met, they tend to move toward materialism as a type of compensatory strategy to lessen the distressing effects of insecurity. Kasser *et al.*'s (2004) model focuses on the individual's internal status. This study attempted to replace the insecurity and exposure to materialism in that model with variables related to social comparison and imitation of media celebrities. This is because social comparison and imitation of media celebrities are variables that measure the active mental

processing of incoming messages about materialistic value. Figure 1 shows the proposed theoretical framework.

[FIGURE 1 ABOUT HERE]

Social comparison

Studies have shown that the family environment affects the endorsement of materialistic values. Parental styles and practices that do not fully meet young people's needs are associated with materialism (Kasser *et al.* 1995). Young people growing up in families that use socially-oriented communication patterns, which stress harmony among family members and the avoidance of conflict, demonstrate higher levels of materialism (Moschis & Moore 1979). Young people growing up in families that use concept-oriented communication patterns, which encourage independent thinking, demonstrate lower levels of materialism (Moore & Moschis 1981). Mothers' involvement in parenting reported by young people was negatively related to materialism while fathers' involvement was not related to materialism (Flouri 2004). Young people who communicate less frequently with their parents about consumption have been found to be more materialistic (Moore & Moschis 1981).

Those who communicate frequently with their peers (Moschis & Churchill 1978) and those who are more susceptible to peer influence are also known to be more materialistic (Achenreiner 1997). Young people in Hong Kong reported that they seldom engaged in family communication about consumption, and the engagement of concept-oriented as well as socially-oriented communication had no impact on materialism (Chan & Prendergast 2007). 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). It also reflects a person's need to identify or enhance one's image with significant others through material possessions (Bearden, Netemeyer & Teel 1989).

According to social comparison theory (Festinger 1954), people have a drive to evaluate themselves by comparing with others for accurate self-evaluation when objective means are not available. Consumer researchers extend the theory to include the comparison of material possessions to determine individuals' relative social standing. Individuals can decide to compare themselves with others who are worse off (downward comparison) to bolster their self-esteem, with others who are better off (upward comparison), or with idealized media images (Schiffman & Kanuk 2004). Individuals can engage in social comparison for self-evaluation as well as for self-improvement and self-enhancement (Swann, Seroussi & Giesler 1992; Wood 1989). Research showed that female respondents often compared their physical attractiveness with models in advertisements (Richins 1991). People who engage in social comparison with remote referents such as idealized media images create inflated and unrealistically high expectations of their models' standards of living. The larger gap between the ideal and their actual standard of living triggers the desire for materialistic possessions (Sirgy 1998). A study in Japan found that engagement in upward social comparison was positively related with a higher desire for more possessions and higher consumption intentions (Ogden & Venkat 2001).

Imitation of celebrity models

Young people often form secondary attachments to media figures in addition to relations with family and peers. These attachments facilitate adolescents' transition to adulthood and the formation of a mature adult identity (Erikson 1968). Using the ethnographic analysis, Caughey (1978; 1985; 1994) 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 wanted to revise their physical appearance, abilities, values and attitudes in order to imitate that of their idols. Caughey (1985) concluded that people's "imaginary" relationships with media figures will shape both their own self-identities and their subjective evaluation of self-worth.

A survey found that young people who reported that they shared a bond with their idols (all were media figures) were more likely to attribute their idols in guiding their choice of identity and shaping their feelings of self-worth. A majority of the sample reported that their idols had influenced their attitudes and personal values, in particular beliefs about work ethic and morality (Boon & Lomore 2001). Empirical research indicated that direct role models (e.g. fathers and mothers) and vicarious role models (e.g. favorite entertainers) affected young people in brand selection, brand switching and lodging consumer complaints (Martin & Bush 2000). Young consumers reported that they were more likely to use products endorsed by entertainers or famous athletes (Lafferty & Goldsmith 1999).

The effectiveness of celebrity endorsement and young people's endorsement of materialistic values can be explained by several models. First, the source attractiveness model predicts that a physically attractive source will be more persuasive than a source perceived as not so attractive (Kahle & Homer 1985). Second, the match-up hypothesis proposes that the physical attractiveness of the celebrity endorser may only enhance product-based and ad-based evaluations if the product's characteristics "match-up" with the image portrayed by the celebrity (Kamins 1990). Third, young people are attracted to brands endorsed by their idolized celebrities because they want to acquire the idealized self-identity for self-enhancement (Swann et al. 1982). This can also be seen as a need to compensate for the particular image that young people do not possess (Woodruff-Burton & Elliott 2005).

Overall, social comparison (with friends and media figures) and imitation of celebrity models (through advertising consumption) may influence the youth to be more materialistic. In this study, social comparison and imitation of celebrity models were proposed to be mediating variables that reflect the active processing of information from parents, teachers, peers and the media. By internalizing the information and making choices, social comparison and imitation of celebrity models leads to the endorsement of materialistic or non-materialistic values.

The Hong Kong context

Hong Kong is an ideal place for the study of consumer socialization and, in particular, materialism. This is because Hong Kong is an affluent city with abundant advertisements. Per capita advertising expenditure in Hong Kong in 2002 was US\$511, the second highest in the world (after US\$535 in the United States) (Frith & Mueller 2003). Wealth is highly visible, and high-end luxury brands are marketed aggressively. Shopping malls are in close proximity to schools and residential areas. Because of good public transportation, young consumers can easily go shopping alone or with peers. Materialistic values are prevalent in Hong Kong's mass media. The core themes of television dramas are often about striving for success and status. Characters on television enjoy a standard of living that is far more affluent than an average member of the working class (Cheung & Chan 1996). Hong Kong youth, in particular, are keen to own things. A survey of over two thousand secondary school students (aged 15-18) revealed that two thirds of Hong Kong adolescents felt satisfied after their purchase because they could now own things that they wanted. Thirteen percent reported an increase in self-esteem after consumption. Twelve percent perceived that they could enhance their personal image through consumption (Ming Pao 2004). A study of 826 high school and university students in Hong Kong indicated that respondents often selected idealism – romanticism – absolutism oriented celebrities in model selection (Yue & Cheung 2000). A qualitative study of Hong Kong adolescents' purchase of luxurious brands found that they often had a high aspiration to follow the lifestyles and consumption patterns of celebrity models (Chan 2005). These studies indicated that social comparison of consumption is high amongst Chinese youth in Hong Kong.

Research hypotheses

Several studies have shown that family communication about consumption and advertising would increase young people's defenses against advertising, and mitigate advertising-induced materialism (Moschis & Churchill 1978; Moschis & Moore 1982). Empirical studies of U.S.

adolescents found that respondents who communicate less frequently with parents about consumption are more materialistic (Moore & Moschis 1981). However, a survey of secondary school students in Hong Kong found that the engagement of concept-oriented as well as socially-oriented communication about consumption had no correlation with respondents' engagement in social comparison (Chan & Prendergast 2007). It indicates that there is no consistent pattern regarding the influence of family communication on social comparison. So, we offer the following null hypothesis:

H1: Communication with parents about consumption is not related with social comparison.

The school plays a role in consumer socialization by teaching young people knowledge and attitudes for good citizenship (Campbell 1969). Consumer education in schools is supposed to teach children about the operation of business, money management, and the ability to select and use goods and services wisely (Gavian & Nanassy 1955). There is little research about the role of teachers in consumer socialization in Hong Kong. However, teachers are consumers and they may influence the engagement of social comparison of students through role models as opinion leaders (Fitzmaurice & Comegys 2006). So, we suggest the following null hypothesis:

H2: Communication with teachers about consumption is not related with social comparison.

Peer communication reflects the level of interaction with friends. Young people who communicate frequently with peers may be exhibiting a strong need for peer approval. Therefore we offer the following hypothesis:

H3: Communication with friends is positively related to social comparison.

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). It also reflects a person's need to identify or enhance one's image with significant others through material possessions (Bearden, Netemeyer & Teel 1989). As susceptibility to peer influence reflects the need to enhance the image that significant others hold

of the individual, we expect that it will be positively related to social comparison. Therefore we offer H4:

H4: Susceptibility to peer influence is positively related to social comparison.

According to the Kasser *et al.* (2004) model, materialistic values are frequently found in popular culture, the media, and advertisements. People who are exposed to materialistic models are more likely than those who are not to take on materialistic values through modeling (Bandura 1971) and internalization (Ryan & Connell 1989). According to the cultivation theory of Gerbner and his colleagues, repeated television viewing shapes viewers' attitudes to be more consistent with the world presented in television programs (Gerbner, Gross, Morgan & Signorielli 1986). As television often portrays an idealized picture of celebrities and their lives, it will encourage viewers to imitate the lifestyles of celebrity models. Empirical data shows that television exposure is positively correlated with materialism amongst children and adolescents in Western societies (Buijzen & Valkenburg 2003; Churchill & Moschis 1979; Kapferer 1986; Moschis & Moore 1982) and in Asian societies including those of China, Hong Kong, and South Korea (Chan 2003; Cheung & Chan 1996; Kwak, Zinkhan & DeLorme 2002; Yang & Ganahl 2004). Empirical data also shows a positive correlation between the influence of vicarious role models (favorite entertainers, favorite athletes) and adolescents' purchase intentions (Martin & Bush 2000). Therefore we offer the following hypotheses:

H5: Young people who watch television more often will be more likely to imitate celebrity models.

H6: Young people who read youth magazines more often will be more likely to imitate celebrity models.

Another pervasive source of materialistic models is advertising messages. Advertisements encourage consumption by using images of attractive and/or famous product users, demonstrating social reward through using products, and associating products with wealthy lifestyles (Kasser *et*

al. 2004). Empirical data demonstrates that young adult females often compare their physical attractiveness with that of the models in fashion and cosmetic advertisements (Richins 1991). Not all advertisements use celebrity models. However, young people who are more often exposed to advertisements will be more likely to come across advertisements using celebrities and be affected by these advertisements. We therefore suggest the following hypotheses:

H7: Young people who attend more to television commercials will be more likely to imitate celebrity models.

H8: Young people who have a higher motivation to view advertisements will be more likely to imitate celebrity models.

People who engage in upward social comparison have inflated expectations of their models' standards of living. The large gap between the ideal and actual standard of living triggers the desire for material possessions (Sirgy 1998). Also if young people find the models in advertisements appealing and want to imitate these models, they will be more materialistic. Hence, we offer the following two hypotheses:

H9: Social comparison will be positively related to materialism.

H10: Imitation of celebrity models will be positively related to materialism.

Methods

Sample and procedure

A survey was conducted in Hong Kong in a three-week period in July and August 2005. The target population was young people aged 15-24. The sample was a quota design based on age and sex to represent the age-sex distribution of the Hong Kong population. Six field workers conducted the survey at various shopping areas in Hong Kong Island, Kowloon and New Territories. The survey was conducted from 1 p.m. to 8 p.m. on weekdays as well as weekends. They identified target persons, approached them to check if they were within the age bracket, and delivered questionnaires to eligible ones. Questionnaires were self-administered by the

respondents. It took about eight to ten minutes to fill in the questionnaire. Altogether 631 completed questionnaires were collected. A research assistant randomly visited the enumerators and monitored the survey process.

There were almost equal distribution of males and females in the sample, and equal numbers of respondents aged 15-19 and 20-24. Nearly 78 percent were students and the remaining were working (18 percent) or unemployed (4 percent). Thirty-five percent of the respondents lived in public housing and 17 percent lived in Home Ownership Scheme housing. The remaining 48 percent lived in private housing. The sample consisted of a higher percentage of respondents living in public housing than that of the Hong Kong population, which is 32 percent (Census and Statistics Department 2006).

All of the constructs in the model were measured by multiple items, with the exception of respondents' reported attention to television commercials. That construct was measured by responses to the item "How often do you watch television commercials?" on a five-point scale (1 = never, 5 = nearly every time). Generally, the respondents were asked to indicate on a five-point scale the extent to which they agreed with the statements (1 = disagree very much, 5 = agree very much) or how frequently they engaged in a specific form of behavior (1 = never, 5 = nearly every time). Media consumption variables including their number of hours of television viewing per day, and their number of hours of reading youth magazines per week were collected.

Materialism was measured using the Richins and Dawson's (1992) conceptualization of materialism as a mind-set of attitudes regarding possessions as symbols of success, possessions occupying a central part of lives, and the belief that more possessions lead to more happiness. A shortened six-item revalidated version suggested by Richins (2004) was used. The inter-item reliability (Cronbach's alpha) was 0.74. This was lower than the Cronbach's alpha value of 0.81 that was reported by Richins (2004) in cross-validation of a six-item scale, but higher than that obtained with Richins's (1987) abridged scale used in Hong Kong with adults (Prendergast &

Wong 2003). The mean formed the measure of materialism, with higher scores indicating stronger endorsement of materialistic values.

Communication with parents/teachers (when studying)/friends about consumption were measured by asking respondents to rate two items: “I discuss with my parents/teachers (when studying)/friends about advertisements”, and “I discuss with my parents/teachers (when studying)/friends about buying things” on five-point scales (1 = never, 5 = nearly every time). These items were selected from the Moschis and Moore (1982) study. The inter-item reliability scores for family, teacher and peer communication were 0.73, 0.71 and 0.57 respectively. Because of the low inter-item reliability for peer communication, only the item “I discuss with my friends about buying things” was used.

Susceptibility to peer influence was measured by asking respondents to rate six items: “if I don’t have a lot of experience with a product, I often ask my friends about it”, “I usually ask my friends to help me choose the best product”, “I look at what my friends are buying and using before I buy”, “it is important that my friends like the products and brands I buy”, “I only buy those products and brands that my friends will approve of”, and “I like to know what products and brands make a good impression on my friends”. These items were from a study by Mangleburg and Bristol (1998). The inter-item reliability was 0.70.

Motivation for viewing advertisements was measured by asking respondents to rate seven statements such as “I consume advertisements to know what brand has the product features I need” on five-point scales. Other motives include “...to know what I can buy to impress others”, “...to help me decide what things to buy”, “...to find out where I can buy some things I want”, “...to learn about the in-things”, “...to have something to talk about with others”, and “...to learn about the images of the hot-people”. These statements were selected and modified from those in the Moschis and Moore (1982) study. The item “...to see people on TV ads who are examples of the way I wish I were” in Moschis and Moore’s scale was modified to “...to learn about the

images of hot people”. This is because the original item can only be used for TV advertisements. The item “...to find out how good a product is” in Moschis and Moore’s scale was modified to “...to know which brand has the product features I need”. This is because the revised item is more neutral. The inter-item reliability was 0.76.

Social comparison was measured by asking respondents to rate four statements: “I pay attention to what my close friends buy”, “I pay attention to friends who are richer than me, and see what they buy”, “I pay attention to what brands my favorite movie stars and pop singers are using” and “I pay attention to the fashion styles of celebrities”. These statements were developed from the statement “I tend to pay attention to what others are wearing” in Lennox and Wolfe’s (1984) scale of attention to social comparison information. The inter-item reliability was 0.72.

Imitation of celebrity models was measured by asking respondents to rate four statements: “I want to be as smart as movie idols”, “I want to be as stylist as people appearing in ads”, “I want to be as trendy as models in magazines” and “I do not aspire to the lifestyle of celebrities (reverse coded)”. These statements were developed based on the concept “exposure to materialistic models” in Kasser *et al.*’s (2004) framework. The inter-item reliability was 0.65. The inter-item reliability with the last item deleted was 0.70. To ensure the high reliability of predictors, the fourth statement was dropped in the measure.

Television viewing was measured by calculating the average number of hours spent watching TV per day. Youth magazine reading was measured by calculating the average number of hours spent reading youth magazines per week. For obvious reasons, radio was not included in this study since radio carries no visuals, hence making imitation of celebrity models difficult.

Using these scales, a draft questionnaire was prepared. One of the authors translated the questionnaire from English to Chinese and it was back-translated by a graduate employed as research assistant to check for translation accuracy. The questionnaire was pre-tested and revised for clarity and accuracy by personally interviewing six young people aged 15-20.

Results

Respondents, on average, watched television for 2.8 hours per day (equivalent to 19.6 hours per week). The mean hours of reading youth magazines was 1.6 hours per week. About 22 percent of respondents reported that they have never read youth magazines. Descriptive statistics on the measured variables are summarized in Table 1. Paired t-tests indicated that the respondents communicated more frequently with their peers about advertising and consumption than with their parents ($t = 24.6$, $df = 630$, $p < 0.001$). Respondents also communicated more frequently with parents about advertising and consumption than with their teachers ($t = 16.6$, $df = 630$, $p < 0.001$).

The respondents' mean score on the materialistic values scale was 3.1 and the standard deviation was 0.6.

[TABLE 1 ABOUT HERE]

Table 2 shows the correlation matrix of all variables involved in the regression analysis. Path analysis was used to examine the theoretical model shown in Figure 1. There were three steps in the regression models. In the first step, communication with parents, teachers and friends, and peer influence were used to predict social comparison. In the second step, television viewing, reading of youth magazines, attention to television commercials and motivation for viewing advertisements were used to predict imitation of celebrity models. In the third step, social comparison and imitation of celebrity models were used to predict the materialism scores of the respondents. Table 3 shows the results of the multiple regression analysis, and Figure 2 shows the resulting path diagram.

[TABLE 2 ABOUT HERE]

In the first step of the regression analysis, the four variables accounted for 23 percent of the variance in social comparison. Three predictors were significant. Communication with parents was positively related to social comparison (standardized $\beta = 0.08$, $p < 0.05$). As a result, H1 was

rejected. Communication with teachers was positively related to social comparison (standardized beta=0.13, $p<0.001$). As a result, H2 was rejected. Peer communication was positively related to social comparison (standardized beta=0.29, $p<0.001$). Those respondents who frequently engaged in communication with their friends were more likely to compare possessions with others. As a result, H3 was accepted. Susceptibility to peer influence was the most significant predictor of social comparison (standardized beta=0.30, $p<0.001$). Respondents who reported higher levels of peer influence were more likely to engage in social comparison. As a result, H4 was accepted.

In the second step of the regression analysis, the four variables together accounted for 15 percent of the variance in imitation of celebrity models. Only one predictor, motivation for viewing advertisements, had a positive and significant beta value, whereas the other three predictors were not significant. The average hours of watching television, the average hours of reading youth magazines and the attention to television commercials were not related to the imitation of celebrity models (standardized beta=0.02, 0.07, 0.00 respectively, all $p<0.05$). As a result, H5, H6, and H7 were rejected. However, respondents who had a high motivation for viewing advertisements were more likely to imitate celebrity models (standardized beta=0.38, $p<0.001$). As a result, H8 was accepted.

In the third step of the regression analysis, the two variables accounted for 29 percent of the variance in materialism. Both social comparison and imitation of celebrity models had significant beta values. Respondents who frequently compared possessions with others were more materialistic (standardized beta=0.28, $p<0.001$). As a result, H9 was accepted. Respondents who had a high intention to imitate celebrity models were more materialistic (standardized beta=0.37, $p<0.001$). Therefore, H10 was accepted.

As the R^2 s of all three steps of regression analysis were significant at the 0.05 level, the model shown in Figure 1 was not rejected. The total effect of a particular path can be compiled by multiplying the corresponding standardized beta coefficients. According to the total effects

compiled, the effect of motivation for viewing advertisements via imitation of celebrity models had the highest total effect (0.14), followed by the effect of susceptibility to peer influence via social comparison (0.08). The materialism scores were higher for those who had a higher motivation for viewing advertisements and who were more eager to imitate the lifestyles of celebrity models, as well as those who had a higher level of susceptibility to peer influence and social comparison.

[TABLE 3 ABOUT HERE]

[FIGURE 2 ABOUT HERE]

Discussion

To restate our basic thesis, we predicted that interpersonal communication influences social comparison while advertising communication influences imitation of celebrity models. And both social comparison and imitation of celebrity models, in turn, influence materialistic values. We found that communications with teachers and parents had a positive but weak influence on social comparison. Parents and teachers are consumers and they can also engage in social comparison behaviors. Research indicates that opinion leaders often demonstrate materialistic orientations by encouraging others to consume (Fitzmaurice & Comegys 2006). The Chinese culture puts much emphasis on social face and social comparison of possessions is encouraged (Wong & Ahuvia 1998). The presence of the effects of all interpersonal communication sources on social comparison of youth shows that social comparison can be a phenomenon so strongly embedded in the Chinese culture that any kind of interpersonal communication will reinforce the comparison behaviors.

As we hypothesized, peer communication was positively correlated with social comparison. Indeed, consistent with our overall hypothesizing, it was more positively correlated with social comparison than communication with parents and teachers. The level of peer communication reflects the frequency of peer interaction. Respondents who frequently

communicate about consumption with friends are more likely to engage in social comparison. This may be because much of their communication is about possessions and brands. A qualitative study of 64 adolescents in Hong Kong found that they often communicate about the features of branded electronic goods, such as mobile phones. One interviewee mentioned that, “When polyphonic ring tones were first introduced into mobile phones, many of my friends bought new phones with this new feature. I am still using my old monotonic model. I am so ashamed of it that I switch it to the silent mode” (Chan 2005). This illustrates that communication about consumption with friends triggers social comparison.

The findings indicate that, of all the predictors of social comparison, susceptibility to peer influence was the strongest. This shows that respondents who attempted to comply with the expectation of friends were more likely to engage in social comparison. This may be because when someone needs to comply with others, s/he will have a higher need for information about the desirable images from others.

Contrary to what we hypothesized, exposure to television and youth magazines had no correlation with imitation of celebrity models. We think this may be because first, when young people are watching television, they may not pay full attention to the possessions owned or used by celebrities. Second, celebrity models do not often appear in youth magazines. A content analysis of 210 print advertisements in youth magazines found that only 19 percent employed celebrity endorsements (Chan 2007). Attention to television commercials also had no correlation with imitation of celebrity models. However, attention to television commercials was measured by only one item. Amongst the four variables, motivation for viewing advertisements was the only significant predictor of imitation of celebrity models. The result demonstrates that imitation of celebrity models is an active choice for those with high motivation to consume advertising images for self-enhancement. It is not an automatic effect arising from media exposures alone. As far as we know, the current study is the first one to develop a measure of young people’s intention

to imitate celebrity models and to investigate its relationship with materialism. The findings indicate that Hong Kong's young people have a medium level of motivation to consume advertisements (the mean value was 3.0). However, respondents who had a strong motivation to consume advertisements were more likely to adopt celebrities as their role models. This indicates that advertisements were used by respondents as forms of information about idealized self-images.

As we hypothesized, social comparison had a positive correlation with materialism. Respondents who compare their possessions with the possessions of friends and media celebrities come to believe that possessions are related to success and happiness, and that possessions occupy a central position in life. It can also be interpreted as showing that those who place a high importance on material possessions are keen to engage in social comparison. The measurement of social comparison in this study included upward comparison only. So, the findings support the idea that upward social comparison encourages materialistic aspirations.

Also as we hypothesized, imitation of celebrity models had a positive correlation with materialism. Media celebrities are heavily used by advertisers to endorse products. A focus group study of adolescents in Hong Kong found that young people admire the images and trendy appearance of media celebrities. An interviewee reported that "those celebrity models occurring in fashion advertisements looked so glamorous. You feel that if you own those brands, you will be equally trendy, happy and successful" (Chan 2005). Imitation of celebrity models was a better predictor of materialism than social comparison. This may be because celebrity models are more likely to be associated with upscale spending and consumption of luxurious brands. Therefore, it will have a closer link with the importance of possessions than social comparison.

Implications

Before discussing the implications, some limitations need to be mentioned. First, it is important to note that the sample used in this study was not a probability sample, so the findings cannot be generalized to an entire target population. Second, the use of reverse-worded statements

may cause confusion in the East Asian context (Wong, Rindfleisch & Burroughs 2003). Also, our research obtained only a snapshot of the materialistic values of Chinese youth. Perhaps it would be useful for future researchers to engage in cross-cultural studies that compare materialism amongst young people and adults to examine whether there is a significant change with important life events, such as entering the work force or forming a new family. Further work also needs to explore the social comparison construct in greater depth, including whether same-sex or opposite-sex models are being used for comparison. Finally, to complement our quantitative work, the types of goods being compared and the motivation for social comparison could be explored with qualitative methods.

Limitations aside, this study has a number of important theoretical and practical implications. Looking at the theoretical implications, we have developed and found support for a proposed model of materialistic values. Since we found relationships among social comparison, imitation of celebrity models and materialism, we have offered some explanation for materialism and possibly aided in predicting its future occurrence. More specifically, our findings show that all interpersonal communication contributes to social comparison. This finding challenges previous arguments (such as those by Moore & Moschis 1981, Chan & Prendergast 2007) that parents and teachers either have no influence on or even tend to discourage social comparison and materialistic values. Second, this study found that only goal-oriented consumption of advertising images contribute to imitation of celebrity models while consumption of television programs and youth magazines in general had no influence. This indicates that young people are active media users who make choices about the media contents. Media exposure itself does not have an influence on the endorsement of materialistic values.

Apart from the theoretical implications, this study has several important practical implications which are of relevance to all levels in society: parents, educators, marketers and public policy makers. Knowing the antecedents of materialism enables concerned members of

society to develop strategies to reduce materialism. After all, as mentioned earlier, materialism is essentially an undesirable trait in the sense of it being negatively associated with happiness and personal well being (Kasser 2002), and its reduction would therefore seem to be a desirable thing to achieve. For instance, socially responsible marketers might consider placing less emphasis on celebrity models when advertising to youth, since youth seem to be modeling their consumption on the consumption of celebrities. Marketers might even consider strategies to encourage youth to follow themselves rather than others. The problem, of course, is that in a financial sense, some marketers may not consider high materialistic values amongst youth to be a problem. Therefore, perhaps to neutralize the materialistic values being promoted by some marketers, parents, educators and public policy makers need to emphasize to youth the importance of setting their own standard and being an individual, rather than engaging in excessive social comparison. This is especially important since this study showed that communication with peers and susceptibility to peer influence were the most significant predictors of social comparison. In line with the ideas of Chaplin and John (2007), strategies aimed at increasing the self-esteem amongst adolescents may be an effective way to reduce materialism, since researchers have found that self esteem and susceptibility to interpersonal influence are negatively correlated (Bearden, Netemeyer & Teel 1989; Clark & Goldsmith 2005; Kropp, Lavack & Silvera 2005; McGuire 1968; Petty & Cacioppo 1981; Stafford & Cocanoughe 1977). In other words, if the youth have self-worth, and if they value accepting themselves more than they value being accepted by others, they will be less likely to be influenced by others.

Conclusion

Our study has shown that when youth have higher levels of communication with peers, and are more vulnerable to their influence, they tend to engage in social comparison more often. And, when youth are highly motivated to use advertisements as a guide for what products to buy, they tend to have a stronger desire to imitate celebrity models. In turn, both social comparison and

imitation of celebrity models predicted materialism. Based on our argument that materialism is a negative trait, our study has shed light on the possible influences that might be the focus of attention of those who are interested in reducing levels of materialism among youth.

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Figure 1

Theoretical framework

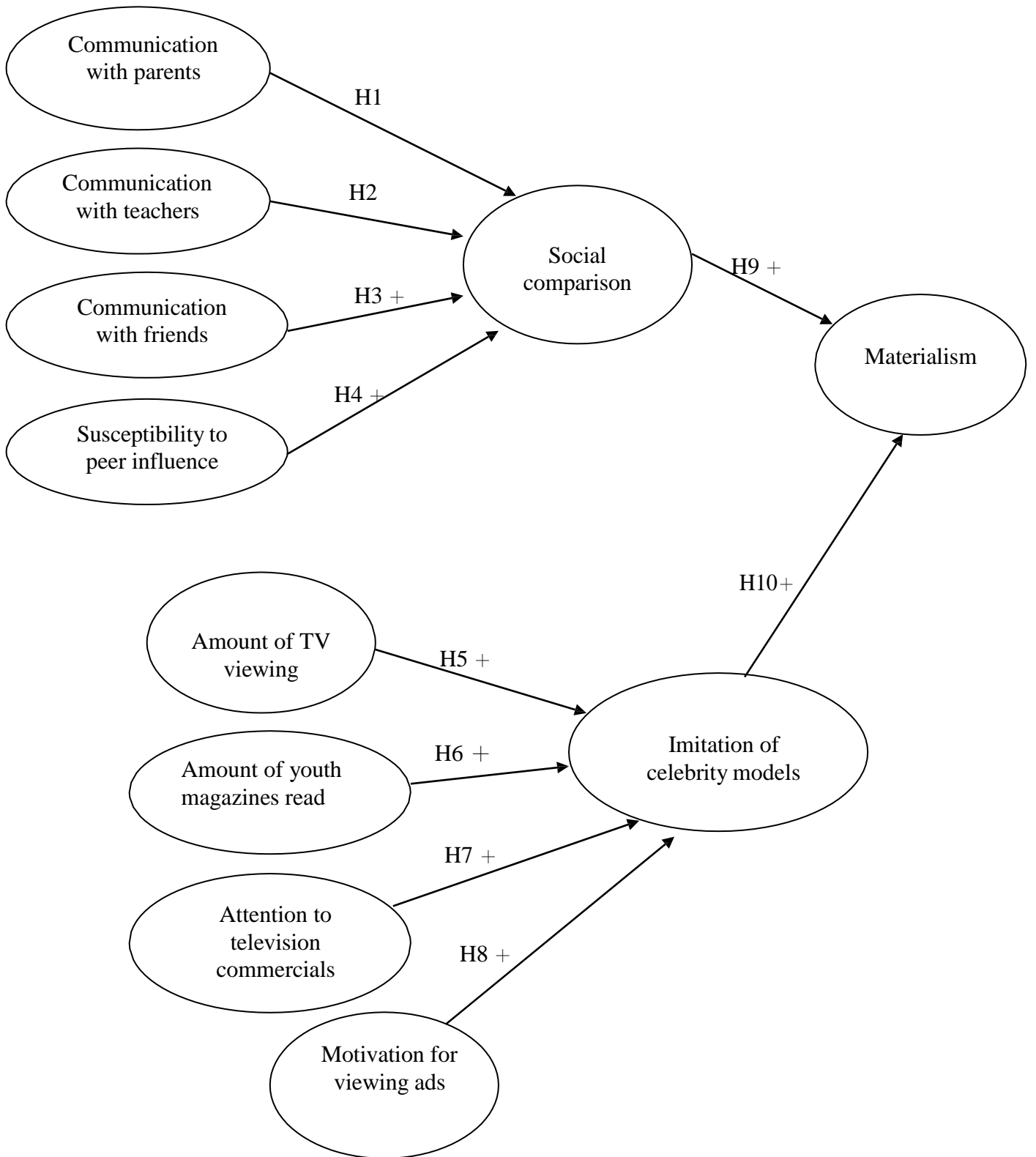
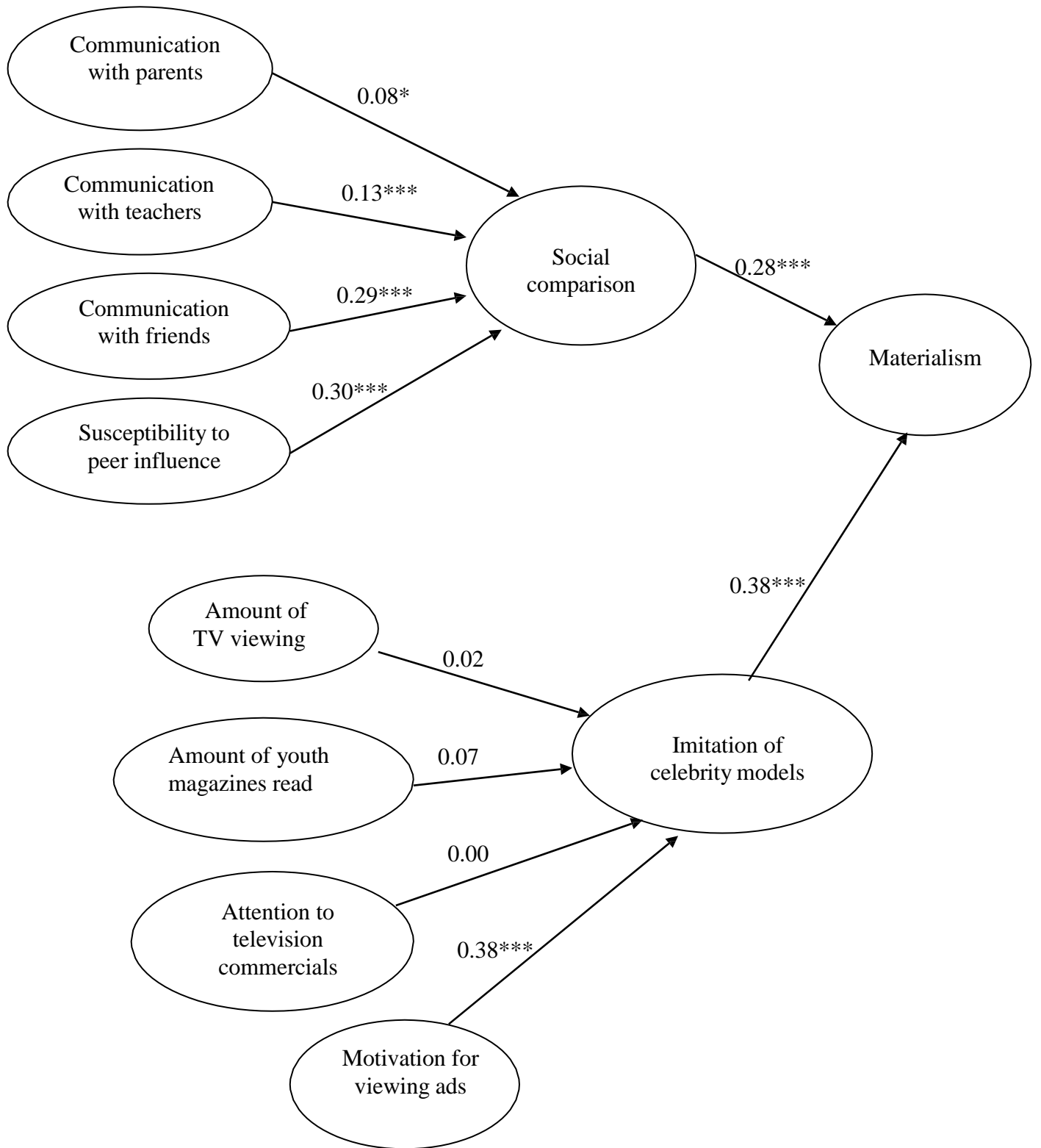


Figure 2

Results of path analysis



*p < 0.05

**p < 0.01

***p < 0.001

Table 1 Summary of descriptive statistics

Construct	Mean	Standard deviation	Skewness
Communication with parents	2.4	0.7	0.3
Communication with teachers	1.8	0.7	0.6
Communication with friends (1-item)	3.4	0.7	-0.6
Susceptibility to peer influence	2.9	0.6	-0.1
Social comparison	2.7	0.6	0.2
Amount of TV viewing (hours per day)	2.8	2.1	2.0
Amount of youth magazines read (hours per week)	1.6	2.5	6.5
Attention to television commercials	3.0	0.8	0.0
Motivation for viewing advertisements	3.0	0.6	-0.5
Imitation of celebrity models	2.4	0.7	0.3
Materialism	3.1	0.6	-0.1

Table 2 Pearson correlation of variables

	1	2	3	4	5	6	7	8	9	10	11
Materialism, 1		0.05	0.07	0.19**	0.31**	0.01	0.01	0.12**	0.34**	0.42**	0.48**
Communication with parents, 2			0.21**	0.30**	-0.08	0.07	0.06	0.11**	0.03	0.16**	0.02
Communication with teachers, 3				0.18**	0.14**	0.04	0.08*	0.12**	0.21**	0.21**	0.12**
Communication with friends, 4					0.06	0.03	0.12**	0.13**	0.10**	0.34** *	0.04
Peer influence, 5						0.06	0.00	0.06	0.41**	0.32**	0.34**
TV viewing, 6							0.09*	0.15**	0.07	0.04	0.05
Youth magazines read, 7								0.10 *	0.04	0.16**	0.09*
Attention to TV commercials, 8									0.13**	0.15**	0.06
Motivation for viewing ads, 9										0.40**	0.38**
Social comparison, 10											0.36**
Imitation of celebrity models, 11											

* p < 0.05 ; ** p < 0.01; ***<0.001

Table 3 Summary of the regression analysis for the theoretical model

Step/predictors	Standardized beta	t statistic
<i>Step 1 (to predict social comparison)</i>		
Communication with parents	0.08	2.1*
Communication with teachers	0.13	3.4***
Communication with friends	0.29	8.0***
Susceptibility to peer influence	0.30	8.3***
<i>Step 2 (to predict imitation of celebrity models)</i>		
Amount of TV viewing	0.02	0.6
Amount of youth magazines read	0.07	1.8
Attention to TV commercials	0.00	-0.1
Motivation for viewing advertisements	0.38	10.2***
<i>Step 3 (to predict materialism)</i>		
Social comparison	0.28	7.7***
Imitation of celebrity models	0.37	10.4***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

R square = 0.22 for Step 1 ($p < 0.001$); R square = 0.15 for Step 2 ($p < 0.001$);
R square = 0.29 for Step 3 ($p < 0.001$)