

Materialism among Chinese children in Hong Kong

CHAN, Kara K W

Published in:
Young Consumers

DOI:
[10.1108/17473610310813988](https://doi.org/10.1108/17473610310813988)

Published: 01/09/2003

[Link to publication](#)

Citation for published version (APA):

CHAN, K. K. W. (2003). Materialism among Chinese children in Hong Kong. *Young Consumers*, 4(4), 47-61.
<https://doi.org/10.1108/17473610310813988>

General rights

Copyright and intellectual property rights for the publications made accessible in HKBU Scholars are retained by the authors and/or other copyright owners. In addition to the restrictions prescribed by the Copyright Ordinance of Hong Kong, all users and readers must also observe the following terms of use:

- Users may download and print one copy of any publication from HKBU Scholars for the purpose of private study or research
- Users cannot further distribute the material or use it for any profit-making activity or commercial gain
- To share publications in HKBU Scholars with others, users are welcome to freely distribute the permanent publication URLs

Materialism among Chinese children in Hong Kong

Keywords: materialism--Hong Kong—children--survey

Dr. Kara Chan
Associate Professor
Department of Communication Studies
Hong Kong Baptist University
Kowloon Tong, Hong Kong

Fax: (852) 3411-7890
Telephone: (852) 3411-7836
E-mail: karachan@hkbu.edu.hk

Journal of Advertising and Marketing to Children
4(4): 47-61

Dr Kara Chan is Associate Professor at the Department of Communication Studies, Hong Kong Baptist University where she teaches course in advertising. She worked in the advertising and public relations profession and as a statistician for the Hong Kong Government. She is author of over 10 articles on advertising and consumer behaviour in Hong Kong and China. She is a Fulbright Scholar at Bradley University, Illinois for 1999 to 2000.

Acknowledgement: I would like to thank my students at Hong Kong Baptist University for their help in the data collection of the project.

Running head: Materialism
March 2003
materialism/JAMC Hong Kong children materialism.doc

Materialism among Chinese children in Hong Kong

keywords: children, materialism, cognitive development

Abstract

This study examines Chinese children's level of materialism through their response to a scale of 14 items. A quota sample of two hundred and forty-six children (aged six to thirteen), with nearly equal number of boys and girls from grade two to six, were personal-interviewed in March to April 2002. The result indicates that Hong Kong children do not endorse a strong materialistic value. Contrary to John's (1999) model of consumer socialization, it is found that even the youngest children aged six to seven developed an understanding of value of possessions that based on social significance. Regression analysis indicates that younger children and children with higher level of allowance are more materialistic. The influence of television viewing on materialistic values is mediated through children's perceived functions of ads, perceived truthfulness of ads, and liking of ads.

INTRODUCTION

Advertising today penetrates into the life of every person, including children. The children's market is important to advertisers because of the enormous purchasing power of the children and their parents. According to [McNeal \(1998\)](#), the marketing efforts put to children aged 4 to 12 made the expenditures and purchase influence of this age group doubled in the last 10 years. Increasing stress to differentiate children who 'have' from children who 'have not' may sometimes be so strong that pushes children into illegal ways to possess products. In the first two months in 2002, shoplifting cases in Hong Kong increased by twenty-two percent. Close to one thousand reported crime cases involved children suspects aged seven to fifteen. Media reports attributed the youth crime to the down turning economy, poor educational system and increasing materialism among young people (Sun Daily 2002). A recent survey of 1,500 teenagers aged 15 to 18 in Hong Kong, Macau and Guangzhou in Southern Mainland China found that Hong Kong teenagers have the lowest spending on study or books among three cities (Chow 2002).

One of the concerns about consumer socialization is the undesirable influence of advertising on children's preference for material goods as a means of achieving success, happiness, and self-fulfillment. Longitudinal studies of materialistic values indicate a dramatic shift increase in private materialism as a life goal and a sharp decline in emphasis on personal self-fulfillment among US high school students from the early 1970s through the 1980s ([Easterlin and Crimmins 1991](#)). Materialism has been treated as a negative value, connected to possessiveness, envy, lack of generosity, greed and jealousy ([Belk 1983](#)). Developmental psychologists, marketers, and policy makers are interested to understand how children develop materialistic values over age, and what factors are related with the adoption of materialistic values.

As younger children have limited ability to read, television serves as an important medium to obtain information about products and services. Children in Hong Kong are exposed to a large amount of advertising, especially through television advertising. According to a weekly AC Nielsen's television rating report, the average rating of TVB-Jade, the dominant Chinese channel, from 5 p.m. to 10 p.m. on a school day in February 2002 for children 4 to 14 was 25 rating points (equivalent to an audience size of 227,000). Children watched a lot more television during school holidays. A child spending three hours per day watching television may be exposed to 12,000 commercials every year. Research finding indicates that television viewing is positively related with endorsement of materialistic values among children ([Kapferer 1986](#)). Influence of other factors including age and socioeconomic status did not find consistent results ([John 1999](#)).

A lot of research on materialistic values and children has been conducted with adolescents. John (1999) pointed out that there is lack of studies with younger children directly address the issue of materialism. The current study attempts to fill this gap.

Do children become more materialistic when they grow up? How does television viewing influence children's materialistic values? What are the factors influencing children's endorsement of materialistic values? This study attempts to examine to what extent Chinese children in Hong Kong endorse materialistic values and the influences of age, gender and other factors on children's materialistic values. The study adopts John's (1999) model of consumer socialization of children. The model suggests that children in different ages adopt different consumption motives and values.

The study is of major interest to both marketers and to public policy officials. Marketers are keen to know if their advertising is effective while policy makers are concerned with protecting the interests of the children. The study is particularly important as there is a paucity of empirical evidence on the topic within the context of children from Asian cultures.

This is surprising at a time when marketing academics make continuous pleas for international studies on marketing concepts and consumer behaviors ([Lee and Green 1991](#)). Some of the factors which are important in the consideration of the interaction between advertising and children in the Chinese context include a strong historically cultivated habits of thrift, emphasis on academic achievements and good social relationships, and the mass transportation system that facilitates children go shopping with their peers from early childhood.

The objectives of this study are:

- a) to study whether Chinese children endorse materialistic value;
- b) to examine the influences of demographic and economic factors on children's materialistic values

LITERATURE REVIEW

One of the frequent accuses of advertising is that advertising encourages materialistic values. [Pollay \(1986\)](#) summarizes the themes of materialism to include belief that consumption is the route to happiness, meaning, and the solution to most personal problems; displacement of feeling from people to objects ([Leiss 1976](#)); displacing spiritual development with secular hedonism ([Skolimowski 1977](#)); distorted gross economic goals vs. justice and peace, and the ecological wastefulness. In a survey of 691 adults in Hong Kong, fifty-six percent agreed that television advertising is making us a materialistic society that interested in buying and owning things. Forty-six percent agreed that television sometimes makes people live in a world of fantasy ([Chan 1995](#)).

Integrating Piaget's theory of cognitive development (1970) and Selman's theory of social developments (1980), [John \(1999\)](#) proposes a model of consumer socialization. In the model, consumer socialization is viewed as a developmental process that proceeds through different stages as children mature into adult consumers. During the perceptual stage (ages 3-7), children are characterized by a general orientation toward the immediate and readily

observable perceptual features of the marketplace. The value of possession is based on surface features, such as having more of something. During the analytical stage (ages 7-11), children are characterized by mastering some consumer knowledge and skills. Concepts such as product categories or prices are thought of in terms of functional or underlying dimensions. Children begin to understand the value of possession based on social meaning and significance. As the children enter the reflective stage (ages 11-16), they possess comprehensive knowledge about marketplace concepts such as branding and pricing. They understand fully the value of possession based on social meaning, significance, and scarcity.

In Goldberg and Gorn's study (1978), materialistic value is demonstrated through an experiment that examines the relationship between seeing a commercial for a new toy and the selection of playmates. Three groups of boys aged four to five (the first two groups saw an ad for a new toy while the third group as a control) were asked to choose between two hypothetical playmates, one described as "very nice" that did not own the new toy, and one described as "not so nice" but own the new toy. The results show that 43-65 percent of the first two groups and one third of the control group selected the playmate with the new toy. In a similar setting, children were also asked to choose between two play situations: either playing alone with the new toy or playing in a sandbox with friends. About one third of the control group chose to play with the new toy, while the majority of the two experimental groups selected to play with the new toy. The study demonstrated that children in very young age value the possession of material goods and accessing a new toy could sometimes be favored over playing with friends.

Children's changing understanding of the value of possession with age is illustrated in Baker and Gentry's (1996) study of collecting hobby among first and fifth graders. Children across grades enjoyed collecting items but attributed to different reasons. Younger appreciated collecting as it makes them felt they own more than others. Older children appreciated

collecting as a way of making themselves unique and feeling good about themselves. Younger children often compared their possessions to those of others in terms of quantity while older children compared in terms of specialty. [John \(1999\)](#) elaborated that at the age of eleven, children were moving into the analytical stage. They would place value on material possessions that help them to develop social relations, achieve social status and self-fulfillment.

Seeing the importance of the concept of materialism in consumer socialization, scholars have proposed various operational definitions and measurement scales. Some of these scales were used mainly for adults while some scales were specifically designed for children. Ward and Wackman (1971, p.426) operationally defined materialism as “orientation emphasizing possessions and money for personal happiness and social progress”. It was measured by summing responses (strongly disagree to strongly agree) to six items like “It is really true that money can buy happiness.” This measure has been used in later research by Moschis and his colleagues (Churchill and Moschis 1979; Moschis and Moore 1982). In Kapferer’s (1986) study of children and their parents, materialism was measured by single item of agreement to the statement “people are much happier if they can buy a lot of things”. Belk (1984) defined materialism as the importance a consumer attaches to worldly possessions, and whether such possessions assume a central place in the consumer’s life. Belk’s (1985) measure of materialism consisted of three traits (envy, nongenerosity, and possessiveness) and has been used in a number of studies (O’Guinn and Faber 1989; Wallendorf and Arnould 1988). Richins’s (1987) measure of materialism for adults consisted of seven items like “It is important to have really nice things”, “The things I own give me a great deal of pleasure”. The measure demonstrated moderate to high Cronbach alpha reliability (0.3 to 0.7) in a cross-cultural study of consumers and university students in five countries including United States, Canada, Australia, Turkey, and China ([Sirgy et al. 1998](#)). Richins and Dawson (1990) constructed the Material Values Scale that consists of eighteen items, concerning feelings

about possessions in general and loading on the three factors, success, centrality, and happiness that have been identified as important aspects of materialism by Fournier and Richins (1991). People who score high in the Material Values Scale tend to believe that possessions define success, possessions are at the center of one's life and that happiness depends on the possession of goods. Cronbach's alpha was 0.78, indicating that the scale was reliable (Browne and Kaldenberg 1997).

Kapferer (1986) surveyed 362 children aged eight to fifteen and their parents and found high mother-child correlation on materialism ($r = 0.48$). Positive correlation was reported between television viewing and materialistic values of children, even after controlling for mother's endorsement of materialistic values. He explained that influence might work both ways: materialistic children tend to expose themselves more to television programs or television programs may reinforce materialistic values.

In surveys of adolescents in U.S., amount of television viewing was positively related with materialistic values (Churchill and Moschis 1979; Moschis and Moore 1982). Adolescents in families with a socio-oriented communication pattern, which stresses deference and harmony among family members while avoiding controversy, exhibited higher levels of materialism (Moschis and Moore 1979b). Children from families with concept-orientated communication pattern held lower level of materialistic values (Moore and Moschis 1981). Communication outside the family also contributes to the difference in the level of materialism among children. Studies showed that materialism is higher in children who communicate with peers more frequently (Churchill and Moschis 1979; [Moschis and Churchill 1978](#)) and are more susceptible to their influence (Achenreiner 1997).

Age, socioeconomic status, and birth order have been included as factors in several studies but did not produce consistent results. However, the factor gender did generate consistent

findings, with males reporting higher levels of materialism than females (Achenreiner 1997; Churchill and Moschis 1979).

To conclude, the review of literature shows that children understand the concept of possession and value it from a very young age. The development of children's materialistic values are linked to gender, peer, parenting communication style and level of exposure to television. Past studies on children's materialistic values seldom adopt a pen and pencil measurement scale and there was a lack of study in the Asian context.

METHODOLOGY

Communication studies students of Hong Kong Baptist University enrolled in the course "Advertising and Social Communication" were recruited and, through personal sources, interviewed two hundred and forty-six Chinese children in Hong Kong. A structured questionnaire consisted of twenty-four close-ended questions were constructed based on a doctoral student's work in this topic (Heerey et al. 2002). Materialism was measured by fourteen items that prompt whether children desire more money and more toys, whether they feel happier if they have more toys, and whether they often compare their possessions with friends (see Table 1 for the list of items). The author translated the questionnaire from English to Chinese and a psychology grade research assistant translated it back into English. The two English versions were matched to clear the discrepancy by the author. Student interviewers were trained on the purpose of the study, the structure of the interview and the skills in soliciting responses. Interviews were conducted at public libraries, churches, restaurants and parks near school areas in March to April 2002. Each interview took about ten to fifteen minutes. Efforts were made to minimize interruptions and intrusions by other family members or friends present. The children were from a quota sample of equal number of boys and girls for each school year from elementary school grade two to grade six. Due to an error, students have interviewed twenty boys and twenty-eight girls in grade five (instead of twenty-four boys

and twenty-four girls). The questionnaire consisted of fourteen questions on materialism, three questions on perceived function of advertising, two questions on perceived truthfulness of advertising, and one question on liking of advertising. Children are asked to indicate on a five-point scale whether they agree with the statements (1=disagree very much, 5=agree very much). Demographic and other variables such as household size, number of hours of TV viewing in weekdays and weekends, co-viewing with parents, and amount of allowance received per week were also collected.

FINDINGS

Sample profile

All the children sampled were aged from six to thirteen, with a mean age of 9.3. Forty-nine percent were males and fifty-one percent were females. Ninety percent of them were living in small household with equal to or less than five members (including the child). One quarter of the sample did not receive any allowance. One quarter of the children received less than HK\$20 (US\$2.50) per week. Forty percent received HK\$21 to \$60 (US\$2.70 to 7.70) per week and the remaining ten percent received HK\$61 up to \$300 (US\$7.80 to 38.50) per week. Sixty percent of the sample on average watched 14 to 35 hours of television a week. Thirty percent of children reported that they never or seldom watch television with their parents. Forty-seven percent reported that they sometimes watch television with their parents, while the remaining twenty-three percent always watch television with their parents.

Materialism

Table 1 summarizes children's response to the statements about materialism. The statements that they agreed most indicated that Chinese children in Hong Kong want more allowance, enjoy birthday because of the presents, want to own things that other children like, want to own the newest things and the best things. The statements that they disagreed most indicated that they did not think their friends like them because of their toys, and they would

not be upset even if their best friends had their most wanted toys. The mean of the fourteen statements forms the materialism score. The mean and the standard deviation for the materialism score was 3.1 and 0.5 respectively. The result indicates that Hong Kong children do not endorse a strong materialistic value. Inter-item reliability (Cronbach's alpha) for the measure was high (0.80). All the fourteen items had high positive correlation with the materialism scale and the Cronbach's alpha did not increase to more than 0.81 when either one of the statements was deleted.

[TABLE ONE ABOUT HERE]

Materialism and demographic variables

Table 2 summarizes children's materialism scores by sex, age group, and household size. One-way ANOVA F-tests were conducted to compare the response to the fourteen items and the materialism scores by the independent variables.

Out of the fourteen statements, only one statement yielded a significant F-statistic between boys and girls. Boys agreed more to the statement "I like to own the newest things" than girls (mean for boys=3.8, mean for girls=3.4, F-statistics = 10.5, $p < 0.001$). The materialism scores for boys and girls were 3.1 and 3.1 respectively and were not different significantly.

Out of the fourteen statements, ten statements yield significant F-statistics between children of different age groups. Duncan pair-wise tests indicated that in most of the cases with significant F-statistics, the age group six to seven was the most materialistic. The materialism scores for children in the age groups six to seven, eight to nine, ten to eleven, twelve or above were 3.6, 3.1, 3.0 and 3.0 respectively (F-statistic=12.7, $p < 0.0001$). Again, Duncan pair-wise test indicated that children in the age group six to seven were the most materialistic. There was no significant difference in materialism scores between children in the other three older age groups.

Household size was recoded into two levels: small for households with less than four members, and large for households with more than four members. Out of the fourteen statements, four statements yield significant F-statistics between children in different household sizes. Children from small families were more likely to agree with the statements “I want to have things that other kids like”, “My friends like me because I have cool toys”, “I like to own a lot of things so that my friends will envy me”, and “I like to compare myself with my friends to see who got more toys”. The materialism scores for children in small and big families were 3.2 and 3.0 respectively (F-statistic=6.6, $p<0.05$). The results suggested that children from small families were more materialistic.

[TABLE TWO ABOUT HERE]

Table 3 summarizes children’s materialism scores by level of TV viewing, degree of co-viewing with parents, and allowance they have. Level of TV viewing was recoded into three levels: low for watching less than 21 hours a week, medium for watching 22 to 29 hours a week, and high for watching more than 30 hours a week. Co-viewing with parents was recorded into three levels: never or seldom, sometimes, and always. Allowance was recoded into three groups: low for less than \$14 per week, medium for \$15 to \$40 per week, and high for \$41 or more per week. One-way ANOVA F-tests were conducted to compare the response to fourteen items and the materialism scores by the independent variables.

Out of the fourteen statements, only two statements yielded a significant F-statistic between children with different levels of TV viewing. Duncan pairwise tests indicated that children with medium to high level of TV viewing were more materialistic. Children with medium to high level of TV viewing agreed more to the statement “It’s better to have more allowance” than children with low level of TV viewing (mean for medium level = 4.2, mean for high level = 4.1, mean for low level = 3.6, F-statistics = 11.4, $p<0.0001$). Children with medium to high level of TV viewing also agreed more to the statement “I like to own the

newest things” than children with low level of TV viewing (mean for medium level = 3.7, mean for high level = 3.8, mean for low level = 3.3, F-statistics = 4.3, $p < 0.05$). The materialism scores for children with low, medium and high level of TV viewing were 3.0, 3.2 and 3.1 respectively and were not different significantly.

Out of the fourteen statements, four statements yield significant F-statistics between children with different degrees of co-viewing with parents. Duncan pairwise tests indicated that in most of the cases with significant F-statistics, children in the group never or seldom co-viewing with parents were the most materialistic. The materialism scores for children in the co-viewing groups never or seldom, sometimes and always were 3.2, 3.1 and 3.0 respectively (F-statistic=4.4, $p < 0.05$). Again, Duncan pair-wise test indicated that children that never or seldom co-viewing with parents were the most materialistic. There was no significant difference in materialism scores between children in the other two groups.

Out of the fourteen statements, four statements yield significant F-statistics between children got different amounts of allowance. Children who got more allowance were more likely to agree with the statements “It’s better to have more allowance”, “I like celebrating my birthday because I can get a lot of presents”, “I like to own a lot of things so that my friends will envy me”, and “I like to own the best things”. The materialism scores for children with low, medium, and high level of allowance were 3.0, 3.1 and 3.2 respectively (F-statistic=3.5, $p < 0.05$). The result indicated that children who got more allowance were more materialistic.

[TABLE THREE ABOUT HERE]

Predicting children’s materialism scores

How do various factors related to children’s endorsement of materialistic values? Multiple regression analysis is used to predict materialism scores using gender, age group, household size, television viewing, co-viewing with parents, and allowance as predictors. Table 4 summarizes the Pearson correlation coefficients between the materialism scores and

the predictors and Table 5 shows the result of the regression analysis. Results indicated that among the six predictors, three (age group, television viewing, and allowance) had significant beta values. According to the absolute beta values, age variable was most important, followed by allowance, then by television viewing. Materialism scores would be high for the younger age group, high level of television viewing, and high level of allowance. Gender, household size, and co-viewing with parents had no significant beta values, indicating that these three factors had no significant correlation with materialism scores when they were partialled out. The six factors together explained nineteen percent of variation in children's materialism scores. The three factors (age, TV viewing, and allowance) together explained eighteen percent of variation in children's materialism scores.

[TABLE FOUR ABOUT HERE]

[TABLE FIVE ABOUT HERE]

A second multiple regression model is used to predict materialism scores. In addition to the six variables discussed above, another six variables including perceived functions of advertising, perceived truthfulness of ads, and liking of ads as predictors. The result is displayed in Table 6. Results indicated that among the twelve predictors, seven had significant beta values. Age group and allowance remained as significant predictors, while television viewing was no longer significant. According to the absolute beta values, the perceived manipulating function of ads ("More ads make you want to have more toys") was the most important predictor, followed by age variable, then by allowance. Other significant predictors included agreeing to the items "ads always tell the truth", "ads tells me about what things I should have", "ads helps me to know which toys are good", and "I like watching ads". Materialism scores would be high for the younger age group, children with high level of allowance, children acknowledging manipulative and knowledge functions of advertising, children putting more trust on ads, and children like ads more. Gender, household size, TV

viewing and co-viewing with parents had no significant beta values, indicating that these factors had no significant correlation with materialism scores when they were partialled out. The twelve factors together explained forty-eight percent of variation in children's materialism scores.

[TABLE SIX ABOUT HERE]

DISCUSSION AND CONCLUSION

The current study found that Chinese children in Hong Kong do not endorse materialistic values strongly as the materialism score is slightly over the mid point of 3. General speaking, Chinese children in Hong Kong had a strong desire for possession of money and the newest things. However, possessions did not play a central role in development of social relations. This can be seen from the low agreement to items related with displacement of friendship to possessions. Competing with friends on possessions and envying friends for good stuff were not strong too.

In the current study, the youngest children were the most materialistic. The itemized scores were over three for thirteen out of fourteen items. According to John's (1999) model of consumer socialization, children in younger age tended to judge the value of possession from surface attributes, such as quantity. So, it was not surprising that children in the youngest age had the strongest desire for more allowance, things that other kids like, and the best things. Similar to Baker and Gentry's (1996) finding, the youngest children were more likely to compare with friends to see who got more toys. To them, the more is the better. Contrary to John's (1999) model, the current study indicates that the youngest children demonstrate an understanding of value of possessions based on social meaning and significance. What makes this age group different from the other three groups is their strong link between possessions and friendships. They perceived that they like their friends because of their possessions and

their friends liked them because they had cool toys. They also perceived that their best friends have lots of good stuff and they like to own things so that their friends will envy them.

Why older children are not more materialistic? There are three possible explanations. First, older children have more consumption experience (and therefore possessions experience). They may be disappointed with some of the possessions that they realize owning more does not necessarily mean happier. F-statistic indicates that older children are less likely to compare with friends on quantity. So, the second explanation is that they have developed an understanding of value of possession that goes beyond quantity. It is a limitation that the current materialism scale neither has items about the value of possessions based on scarcity nor items about the value of material goods in terms of personal fulfillment and social status. In future studies, items such as "I like to compare myself with my friends to see who got the most unique stuff" and "I like to own things because they make me feel good about myself" should be added. The third explanation deals with the social desirability issue. It is possible that older children are more aware of the negative connotation of materialism. They are less willing to agree to materialistic values in a personal interview setting. Future studies can use self-administered questionnaires for older children in order to avoid the influence of social desirability in the data collection.

From the first model of prediction, the three significant predictors were age, allowance, and television viewing. The level of allowance was positively related with materialism. Influence might work both ways: materialistic children have a greater need for products and services and they will request for more allowance. On the other hand, children with more allowance will have more chances of consumption. During the consumption process, they will come into contact with more alternatives and therefore have a stronger desire for more money to buy the best things.

Contrary to the research literature, the current study does not find gender difference in materialistic values. Chinese girls are equally materialistic as boys. Previous conclusion of boys being more materialistic comes mainly from study of adolescents. The current study indicates that in early childhood, there is no such gender difference, at least in the Chinese context in Hong Kong. A recent survey of 8,379 children and youths indicates that male and female students generally accept that women have a career. While young males were more rigid and inflexible in their definition of masculinity, young females were much more open in gender equality, and acceptance of non-traditional male roles (Equal Opportunities Commission, 2002). The lack of gender difference may be attributed to the fact that girls and boys in Hong Kong have an equal aspiration of good materialistic life. Future research should investigate why there is a lack of gender difference in materialistic values during the perceptual stage and the analytical stage, and how does the gender difference evolve in the reflective stage.

Comparing the results of the first and the second prediction model sheds insight on the influence of television viewing on materialistic values. In the first model, television viewing was positively correlated with materialistic values. In the second model when statements about perception of advertising are added, television viewing became insignificant. The result indicates that mere exposure to television programs and commercials does not contribute to more materialistic values. What influences materialistic values is the specific type of perceptions children holds about advertising. In the second prediction model, the strongest predictor of materialism score was the understanding of the manipulative power of advertising. The direction of prediction was positive, indicating that children who perceived the manipulative power of advertising strongly were more materialistic. This implies that perceiving advertising has the manipulative power does not build up a defensive shield for the children. Children admit the manipulative power of advertising and yield to its influence.

In the second prediction model, age and level of allowance remained as important predictors. Children who put more trust on advertising and like advertising more were more materialistic. Perhaps this represents the group of children most easily persuaded by selling messages. Media education on critical reading and viewing of persuasive messages is mostly needed for this audience segment.

To conclude, the current study shows the extent of endorsement of materialistic values of Chinese children in Hong Kong and identifies factors that influence the materialistic values. The study also establishes a measurement of materialism for children with acceptable level of inter-item reliability. Suggestion for further improvement to the scale has been made. As there is a lack of study of children's materialism, it is often difficult to compare the existing result with materialism of children in other societies. Further study is needed for comparison across different cultures. For parents and educators, the study indicates that to safeguard children from being materialistic, they can restrict the allowance for children, teach children that friendship goes beyond possessions, and educate them that ads do not always tell the truth. For marketers, they should tailor-make their messages according to the children's understanding of values of possessions. For younger children, encourage them to get more may work but for older children, advertising should encourage the instrumental materialism of how to use material goods to achieve satisfaction and self-defining goals.

Table 1. Children's response to materialism statements

	mean@	s.d.
It's better to have more allowance	4.0	0.9
I like celebrating my birthday because I can get a lot of presents	3.7	1.1
I want to have things that other kids like	3.7	0.9
I like to own the newest things	3.6	1.0
I like to own the best things	3.4	1.1
It would not make me happier if I owned nicer things*	3.1	1.0
My best friends have lot of good stuff	3.1	1.0
I like to own a lot of things so that my friends will envy me	3.1	1.1
More allowance would not make me happier*	3.0	1.0
I like to compare myself with my friends to see who got more toys	2.7	1.1
When I want something, I usually get it	2.6	1.0
I like my friends because they owns a lot of good stuff	2.6	1.0
I would be upset if my best friend had the toy I most wanted	2.5	1.0
My friends like me because I have cool toys	2.5	1.0
Materialism score (mean of the above)	3.1	0.5

@ five-point scale, higher value means more materialistic

*reversed coded

Table 2. Materialism by gender, age group, and household size

Item	mean@	Sex		F-stat	p	Age Group				F-stat	p	HH Size		F-stat	p
		Boys	Girls			6-7	8-9	10-11	12-13			Small	Large		
It's better to have more allowance	4.0	3.9	4.0	0.3	0.62	4.1	3.7	4.1	4.0	2.9	0.04	4.0	3.9	0.1	0.71
I want to have things that other kids like	3.7	3.7	3.7	0.3	0.60	4.3	3.6	3.6	3.7	6.6	0.000	3.8	3.5	6.3	0.01
I like celebrating my birthday because I can get a lot of presents	3.7	3.6	3.8	1.2	0.27	4.2	3.5	3.7	3.8	3.5	0.02	3.8	3.6	1.5	0.23
I like to own the newest things	3.6	3.8	3.4	10.5	0.001	3.8	3.6	3.5	3.8	1.2	0.30	3.7	3.5	2.4	0.13
I like to own the best things	3.4	3.3	3.4	0.3	0.58	3.97	3.3	3.2	3.3	3.5	0.02	3.4	3.3	0.3	0.61
It would not make me happier if I owned nicer things*	3.1	2.9	2.8	0.3	0.60	3.1	3.0	2.7	2.7	2.4	0.07	2.9	2.8	0.9	0.35
I like to own a lot of things so that my friends will envy me	3.1	3.2	3.0	1.7	0.19	3.9	2.9	3.0	3.5	9.0	0.000	3.3	2.8	9.1	0.003
My best friends have lot of good stuff	3.1	3.1	3.2	0.3	0.59	3.6	3.2	2.9	3.0	4.4	0.005	3.1	3.2	0.1	0.75
More allowance would not make me happier*	3.0	3.0	3.1	0.1	0.70	3.1	2.9	3.1	3.0	0.8	0.48	3.0	3.0	0.00	1.00
I like to compare myself with my friends to see who got more toys	2.7	2.8	2.6	3.8	0.05	3.5	2.6	2.6	2.1	9.9	0.000	2.8	2.5	6.0	0.02
When I want something, I usually get it	2.6	2.6	2.6	0.0	0.88	3.0	2.7	2.5	2.5	3.1	0.03	2.7	2.5	3.0	0.08
I like my friends because they owns a lot of good stuff	2.6	2.7	2.4	2.7	0.10	3.2	2.7	2.3	2.2	9.7	0.000	2.6	2.4	2.2	0.14
My friends like me because I have cool toys	2.5	2.5	2.5	0.3	0.60	3.3	2.7	2.1	2.2	18.1	0.000	2.6	2.3	8.1	0.005
I would be upset if my best friend had the toy I most wanted	2.5	2.5	2.5	0.0	0.89	2.8	2.5	2.4	2.6	2.1	0.10	2.6	2.5	0.4	0.51
Materialism score	3.1	3.1	3.1	0.9	0.35	3.6	3.1	3.0	3.0	12.7	0.0001	3.2	3.0	6.6	0.01

@ five-point scale, higher value means more materialistic

* reversed coded

Table 3. Materialism by TV viewing, co-viewing with parents, and allowance

Item	TV Viewing						Co-viewing					Allowance/wk				
	mean@	L	M	H	F-stat	p	Never/seldom	Sometimes	Always	F-stat	p	L	M	H	F-stat	p
It's better to have more allowance	4.0	3.6	4.2	4.1	11.4	0.000	4.0	4.0	3.8	1.7	0.19	3.7	4.0	4.2	6.9	0.001
I want to have things that other kids like	3.7	3.5	3.7	3.8	2.3	0.11	3.8	3.7	3.5	1.4	0.25	3.5	3.8	3.7	1.5	0.23
I like celebrating my birthday because I can get a lot of presents	3.7	3.5	3.8	3.8	2.0	0.14	3.5	3.9	3.5	4.2	0.02	3.2	3.8	4.1	14.0	0.000
I like to own the newest things	3.6	3.3	3.7	3.8	4.3	0.01	3.8	3.5	3.5	2.3	0.11	3.6	3.5	3.6	0.2	0.86
I like to own the best things	3.4	3.3	3.5	3.4	0.7	0.48	3.6	3.3	3.2	2.9	0.06	3.1	3.5	3.6	5.0	0.008
It would not make me happier if I owned nicer things*	3.1	3.0	2.8	2.8	1.0	0.39	3.0	2.9	2.8	0.7	0.52	2.8	2.8	3.0	1.7	0.19
I like to own a lot of things so that my friends will envy me	3.1	3.0	3.1	3.3	1.4	0.24	3.5	3.0	2.9	7.0	0.001	3.0	3.0	3.5	4.7	0.01
My best friends have lot of good stuff	3.1	3.3	3.0	3.1	2.1	0.13	3.2	3.1	3.1	0.1	0.92	3.2	3.2	3.0	1.0	0.38
More allowance would not make me happier*	3.0	2.9	3.2	3.0	2.3	0.11	3.0	3.1	3.0	0.4	0.67	2.9	3.1	3.1	0.9	0.39
I like to compare myself with my friends to see who got more toys	2.7	2.6	2.8	2.8	0.9	0.42	2.9	2.7	2.6	1.8	0.17	2.7	2.6	2.8	0.6	0.57
When I want something, I usually get it	2.6	2.8	2.7	2.5	2.1	0.13	2.9	2.5	2.7	4.2	0.02	2.6	2.6	2.8	1.1	0.35
I like my friends because they owns a lot of good stuff	2.6	2.4	2.7	2.5	2.0	0.14	2.8	2.5	2.4	3.3	0.04	2.6	2.4	2.7	1.4	0.25
My friends like me because I have cool toys	2.5	2.5	2.5	2.4	0.5	0.59	2.7	2.5	2.2	4.6	0.01	2.4	2.5	2.6	0.4	0.68
I would be upset if my best friend had the toy I most wanted	2.5	2.4	2.6	2.5	0.7	0.49	2.7	2.5	2.5	1.2	0.32	2.5	2.6	2.4	0.8	0.44
Materialism score	3.1	3.0	3.2	3.1	2.0	0.14	3.2	3.1	3.0	4.4	0.01	3.0	3.1	3.2	3.5	0.03

@ five-point scale, higher value means more materialistic

* reversed coded

Table 4 Pearson correlation of materialism score and predictors

Measure	Sex	Age Group	Household Size	Level of TV Viewing	Co-viewing	Allowance
Materialism score	-0.06	-0.29	-0.17	0.09	-0.19	0.17
Sex		0.004**	-0.009**	-0.03*	0.22	0.006**
Age Group			0.14	0.28	0.18	0.27
Household Size				0.08	0.17	-0.09
Level of TV viewing					-0.09	0.16
Co-viewing						-0.05*

*p<0.05

**p<0.01

Table 5 Prediction of materialism score (model 1)

Factor	Standardized beta	t-stat for beta=0	p
Sex	-0.04	-0.66	0.51
Age group	-0.38	-5.86	0.000
HH size	-0.09	-1.51	0.13
Level of TV viewing	0.16	2.56	0.01
Co-viewing with parents	-0.04	-1.14	0.26
Allowance	0.24	3.83	0.000

F(6,239)=6.59, p=0.000)
R-square = 0.19

Table 6 Prediction of materialism score (model 2)

Factor	Standardized beta	t-stat for beta=0	p
Sex	0.03	0.57	0.57
Age group	-0.21	-3.81	0.000
HH size	-0.06	-1.15	0.25
Level of TV viewing	0.04	0.76	0.45
Co-viewing with parents	-0.06	-1.10	0.27
Allowance	0.16	3.05	0.003
Ads help me to know which toys are good	0.12	2.17	0.03
Ads make me want to have more toys	0.33	5.70	0.000
Ads tell me about what things I should have	0.14	2.50	0.01
Ads always tell the truth	0.15	2.53	0.01
Ads sometimes lie to make their toys look good*	-0.03	-0.53	0.60
I like watching ads	0.11	2.16	0.03

F(12,232)=17.9, p=0.000) R-square = 0.48

* reversed coded

References:

- Achenreiner, Gwen Bachmann (1995), 'Children's reliance on brand name heuristics: A developmental investigation', unpublished dissertation, Department of Marketing and Logistics Management, University of Minnesota, Minneapolis, MN 55455.
- Baker, Stacey Menzel and James W. Gentry (1996), 'Kids as collectors: a phenomenological study of first and fifth graders', in *Advances in Consumer Research*, Vol. 23, ed. Kim P. Corfman and John G. Lynch, Jr., Provo, UT: Association for Consumer Research, 132-137.
- Belk, R. (1983), 'Worldly possessions: Issues and criticisms', *Advances in Consumer Research*, 10, eds. Bagozzi, R.P., Tybout, A.M., Ann Arbor: Association for Consumer Research, 514-519.
- Belk, Russell W. (1984), 'Three scales to measure constructs related to materialism: Reliability, validity, and relationships to measures of happiness,' in *Advances in Consumer Research*, Vol. 11, ed. T. Kinnear, Provo, UT: Association for Consumer Research, 291-297.
- Belk, Russell W. (1985), 'Materialism: Trait aspects of living in the material world,' *Journal of Consumer Research*, 12 (December), 265-280.
- Browne, B.A. and Kaldenberg, D.O. (1997), 'Conceptualizing self-monitoring: Links to materialism and product involvement', *Journal of Consumer Marketing*, 14(1), 31-44.
- Chan, K. (1995). *Hong Kong Television Advertising: The Good, the Bad, and the Ugly*. Hong Kong: Hong Kong Baptist University.
- Chow, C.Y. (2002), 'Teens' cash goes on karaoke, not books,' *South China Morning Post*, April 29, 3.
- Churchill, Gilbert A., Jr. (1979), 'A paradigm for developing better measures of marketing constructs,' *Journal of Marketing Research*, 16 (February), 64-73.
- Easterlin, Richard and Eileen Crimmins (1991), 'Private materialism, personal self-fulfillment, family life, and public interest: the nature, effects, and causes of recent changes in the values of American youth,' *Public Opinion Quarterly*, 55 (Winter), 499-533.
- Equal Opportunities Commission (2002), 'EOC research findings on stereotyping: A call for diversity', New Release Archives, download from http://www.eoc.org.hk/CE/latest/latest_b.asp on April 26.
- Fournier, S. and Richins, M.L. (1991), 'Some theoretical and popular notions concerning materialism', *Journal of Social Behavior and Personality*, 6, 403-414.
- Goldberg, Marvin E. and Gerald J. Gorn (1974), 'Children's reactions to television advertising: An experimental approach,' *Journal of Consumer Research*, 1 (September), 69-75.
- Heerey, C., Hunt, S., Lukey-Smith, A., and Winter, S. (2002). Advertising to children and materialism: a comparative study between England and Sweden. Exeter, The University of Exeter: Unpublished final year undergraduate project.

- John, Deborah Roedder (1999), 'Consumer socialization of children: A retrospective look at twenty-five years of research', *Journal of Consumer Research*, 26 (December)
- Kapferer, J.N. (1986), 'A comparison of TV advertising and mothers' influence on children's attitudes and values', in S. Ward, T. Robertson, R. Brown (eds.), *Commercial Television and European Children*. Hants, England: Gower Publishing Company Limited.
- Lee, C. and Green, R.T. (1991), 'Cross-cultural examination of the Fishbein Behavioral Intentions Model', *Journal of International Business Studies*, 22(2), 289-305.
- Leiss, W. (1976). *The Limits of Satisfaction*. Toronto: University of Toronto Press.
- McNeal, James U. (1998), 'Tapping the three kids' markets', *American Demographics*, 20 (April), 37-41.
- Moore, Roy L. and George P. Moschis (1981), 'The role of family communication in consumer learning', *Journal of Communications*, 31 (Autumn), 42-51.
- Moschis, George P., and Roy L. Moore (1979b), 'Family communication and consumer socialization', in *Advances in Consumer Research*, Vol. 6, ed. William L. Wilkie, Ann Arbor, MI: Association for Consumer Research, 359-363
- Moschis, George P., and Roy L. Moore (1982), 'A longitudinal study of television advertising effects,' *Journal of Consumer Research*, 9 (December), 279-286.
- Moschis, George P., and Gilbert A. Churchill, Jr. (1978), 'Consumer socialization: A theoretical and empirical analysis', *Journal of Marketing Research*, 15 (November), 599-609.
- O'Guinn, Thomas C., and Ronald J. Faber (1989), 'Compulsive buying: A phenomenological exploration,' *Journal of Consumer Research*, 16 (September), 147-157.
- Piaget, J. (1970), 'The stages of the intellectual development of the child,' in P.H. Mussen (ed.), *Readings in child development and psychology*. New York: Harper and Row.
- Pollay, R. W. (1986), 'The distorted mirror: Reflections on the unintended consequences of advertising,' *Journal of Marketing*, 50(April), 18-36.
- Richins, Marsha L. (1987), 'Media, materialism, and human happiness', in *Advances in Consumer Research*, Vol. 14, eds. M. Wallendorf and P. Anderson, Provo, UT: Association for Consumer Research, 352-356.
- Richins, M.L. and Dawson, D. (1990), ' Measuring material values: A preliminary report on scale development,' *Advances in Consumer Research*, 17, eds. Goldberg, M.E., Gorn, G., Pollay, R.W., UT: Association for Consumer Research, 169-175.
- Selman, Robert L. (1980). *The Growth of Interpersonal Understanding*. New York: Academic Press.
- Sirgy, M. J., Lee, D., Kosenko, R., Meadow, H. L., Rantz, D., Cicic, M., Xi Jin, G., Yarsuvat, D., Blenkhorn, D. L. and Wright, N. (1998). Does television viewership play a role in the perception of quality of life?', *Journal of Advertising*, 27 (1), 125-142.

Skolimowski, H. (1977) The semantic environment in the age of advertising. In Thomas H. Ohlbren and L.M.Berk (eds.), *The New Languages: A Rhetorical Approach to the Mass Media and Popular Culture*. Englewood Cliffs, NJ: Prentice-Hall, 91-101.

Sun Daily (2002) Increasing youth crime becomes the society's burden. March 24, A02.

Wallendorf, Melanie, and Eric J. Arnould (1988), 'My favorite things': A cross-cultural inquiry into object attachment, possessiveness and social linkage,' *Journal of Consumer Research*, 14 (March), 531-547.

Ward, S., and Wackman, D.B. (1971), 'Family and media influences on adolescent consumer learning,' *American Behavioral Scientist*, 14, 415-427.

