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## Materialism among children in urban China

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# **MATERIALISM AMONG CHILDREN IN URBAN CHINA**

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## **Abstract**

This study examines urban Chinese children's level of materialism through their response to a scale of 15 items. A quota sample of two hundred and fifty-six Beijing children, with nearly equal number of boys and girls ages six to thirteen, were surveyed in May 2004. The result indicates that Chinese children do not endorse a strong materialistic value. The materialism score was 2.4 on a five-point scale. 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. Boys were more materialistic than girls. Regression analysis indicates that younger children and children with high exposure to internet are more materialistic. The result was compared to a previous study of materialism among Hong Kong Chinese children.

## **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.

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 U.S. 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.

There are 57 million children aged 4-12 in urban China alone. The Chinese children have become the focal point of the family and they exerted tremendous influence on household purchases (McNeal and Yeh 1997). The new generation of young Chinese consumers is now exposing to and more open to commercial sources, rather than interpersonal sources, for new product information (McNeal and Ji 1999). Chinese children were subjected to the influence of (1) communistic values that emphasize on personal sacrifice and to contribute to the state and mankind (2) Confucian values about frugality and saving up for long-term needs, and (3) materialistic values about spending money for personal needs. China is going through a period of rapid economic development and important social changes are occurring. Chinese consumers were driven by the desire for global cosmopolitanism, but at the same time, concerned about traditional Chinese values in reading advertisements (Zhou and Belk 2004). The study of meaning and perception of material possessions among Chinese children will yield important insights into the evolution of value systems in developing nations and the socialization of such kind of values.

As younger children have limited ability to read, television serves as an important medium to obtain information about products and services. China Central Television (CCTV) is the only national television network in China. Children in China are exposed to a large amount of advertising, especially through television advertising. In a typical week on CCTV-1's afternoon programming for children, there are 571 commercials, of which 34 percent are aimed at children (Chan and McNeal 2004). A child spending two hours per day watching television may be exposed to 24,000 commercials every year. Research finding indicates that television viewing is positively related with endorsement of materialistic values among children (Buijzen and Valkenburg 2003; Kapferer 1986). However, most of the studies only include exposure to television or television advertising. So, the influence of media exposure other than television is not examined in most studies. Influence of other factors including age and socioeconomic status did not find consistent results (John 1999).

A number of researches on materialistic values and children have 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 endorse materialistic values and the influences of age, gender and media exposure factors on children's materialistic values. This 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 current 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 (Lee and Green 1991).

The objectives of this study are:

- a) to study whether Chinese children endorse materialistic value;
- b) to examine the influences of demographics and media exposure on children's endorsement of 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.

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 showed that children from the experimental groups were more likely to select a playmate with the new toy than respondents in a control group. 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. Again, children in the two experimental groups were more likely to select to play with the new toy than respondents in a control group. 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.

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”. 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). Goldberg and his colleagues constructed a ten-item Youth Materialism Scale and its Cronbach’s alpha recorded for a national U.S. sample of 9 to 14 years old was 0.75 (Gornberg, Gorn, Peracchio and Bamossy 2003).

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 1979). 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 1995). In a survey of 360 parent-child (8 to 12 years old) dyads in Netherlands, television advertising exposure is positively and directly related to children's materialism. Parent-child consumer communication and parental mediation of advertising were important moderators of the effects of advertising on children's materialism (Buijzen and Valkenburg 2003). In a survey of 246 Chinese children age six to thirteen in Hong Kong, the influence of television viewing on materialism was mediated through children's perceived functions of ads, perceived truthfulness of ads, and liking of ads (Chan 2003).

Age, socioeconomic status, and birth order have been included as factors in several studies but did not produce consistent results. The factor gender did generate consistent findings, with males reporting higher levels of materialism than females in the western societies (Achenreiner 1995; Churchill and Moschis 1979). No gender difference in materialism was reported for Chinese children in Hong Kong (Chan 2003).

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 is linked to gender, peer, parent-child communication pattern and television exposure. The influence of exposure to other media on materialism is seldom examined. There was a lack of study of materialism of children in the Asian context.

## Method

A draft questionnaire in Chinese was constructed based on a previous study of children in Hong Kong (Chan 2003). The author translated the questions into Chinese and the questionnaire was tested among four children aged seven to eleven in Beijing for clarity and children had no problem in understanding the questions. In addition to questions about children's endorsement of materialistic values, the questionnaire consisted of close-ended questions about amount of time children spent on various media, attention to advertising, and four demographic questions.

Questionnaires were administered in classroom settings to grade 1-6 students of an elementary school in Beijing during normal lesson period in May 2004. The total number of students in the school was 2,200. Most of the students are children or grandchildren of the faculties and staff of a University. Researchers read out the questions and answers to grade 1-2 students in Mandarin while students in grades 3-6 filled in the questionnaires by themselves. The younger respondents seemed to be no problem in coping with the survey. Two hundred and fifty seven questionnaires were distributed and the same numbers were collected. One questionnaire was found invalid as most of the questions were left blank. The response rate was 99.6 percent.

*Materialism* was measured by fifteen 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). One item in Chan's (2003) study was modified and one item about whether materialism possession will enhance children's self esteem was added. Children are asked to indicate on a five-point scale whether they agree with the statements (1=disagree very much, 5=agree very much). *Media exposure* was measured by asking children "On average, how much time do you spend on a particular medium (e.g. watching television) every day?" Altogether exposure to seven types of media was examined, including television, radio, newspapers/magazines, videotapes, videogames, books other than textbooks, and internet. Children were requested to select from five answers, "0 minute" (code as 1), "1 to 60 minutes", "61 to 120

minutes”, “121 to 180 minutes”, and “180 minutes or above” (code as 5). Demographic variables including sex, age, grade, and whether s-he is a single child were also collected.

## Results

All the children sampled were aged from six to thirteen, with a mean age of 9.7. Fifty-seven percent were boys and forty-three percent were girls. Eighty-six percent of the children were single-child in the family. Table 1 summarizes the media exposure of the respondents. Books, television and print media were more popular among the sample while videotapes, videogames and internet were less popular.

Table 2 summarizes children’s response to the statements about materialism. Twelve out of fifteen statements had mean scores below 3. The statements that they agreed most indicated that Chinese children perceived that they would be happier if they owned nicer things or if they had more allowance. The statements that they disagreed most indicated that they did not like to compare with friends to see who got the most unique possessions and they did not perceive a link between friendship and possessions. The mean of the fifteen statements forms the materialism score. The mean and the standard deviation for the materialism score was 2.4 and 0.7 respectively, indicating that the overall endorsement of materialistic values were low. Inter-item reliability (Cronbach’s alpha) for the measure was 0.82. All the fifteen items had high positive correlation with the materialism scale and the Cronbach’s alpha did not increase to more than 0.84 when either one of the statements was deleted. Factor analysis yielded a four-factor solution with eigen values 5.0, 1.6, 1.2 and 1.0. The four factors accounted for 58 percent of total variance of materialism scores.

Table 3 summarizes children’s materialism scores by sex and age group. One-way ANOVA F-tests are conducted to compare the response to the fifteen items and the materialism scores by the independent variables.

Out of the fifteen statements, six statements yielded significant F-statistics between boys and girls. Boys were more likely than girls to express their desire for newer and better stuff. Boys were more likely than girls to perceive a link between friendship and possession. Boys were more likely than girls to envy friends with cool stuff and want to be the envy of the friends through possession. The materialism scores for boys and girls were 2.5 and 2.3 respectively and were different significantly. Boys were more materialistic than girls.

Out of the fifteen statements, seven statements yielded 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. Children age six to seven were more likely than the older children to perceive that more allowance would make them happier. They were more likely to report that they like celebrating birthdays because of the presents. They were also more likely to perceive a link between friendship and possession and want to be the envy of the friends through possession. The materialism scores for children in the age groups six to seven, eight to nine, ten to eleven, twelve to thirteen were 2.9, 2.3, 2.4 and 2.4 respectively (F-statistic=7.3,  $p<0.001$ ). 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.

Out of the fifteen statements, only one statement yielded a significant F-statistic between single-child and non-single child. Non-single child were more likely to agree the statement “My friends like me because I have cool toys” than single-child (mean for single-child = 1.9, mean for non-single child = 2.4, F-statistics = 5.4,  $p<0.05$ ). The materialism scores for single-child and non-single child were 2.4 and 2.5 respectively and were not different significantly.

Table 4 summarizes the Pearson correlation coefficients between children’s materialism scores and media exposure. Out of the seven types of media examined, positive correlation coefficients were reported for four types of media, including radio, videotapes, videogames and internet.

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, whether s-he is a

single-child in a family, and media exposure as predictors. Table 5 shows the result of the regression analysis. Results indicated that among the ten predictors, only two (age group and internet exposure) had significant beta values. According to the absolute beta values, age variable was most important, followed by internet exposure. Materialism score was higher for the younger age group and children with higher level of internet exposure. The ten predictors together explained 12.5 percent of variation in children's materialism scores.

## **Discussion and Conclusion**

In the current study, the youngest children were the most materialistic. The itemized scores were over three for five out of fifteen 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. Our data supported this prediction as the youngest age Chinese children expressed that they would be happy if they had more allowance, birthday presents, and nice things. 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 possession based on social meaning and significance. What makes this age group different from the other three groups is their strong link between possession and friendship. They perceived that they like their friends because of their possessions and their friends liked them because they had cool toys. They liked to own things so that their friends would envy them.

John (1999) predicted that older children would appreciate the value of possession based on social meaning, significance, and scarcity. Contrary to John's (1999) model, our data found that older children did not express the desire to own things in order to make them feel good about themselves. Also, older children were not more likely to compare with friends to see who got the most unique stuff. This finding is similar to Chan's (2003) study of Chinese children in Hong Kong. Chan (2003) argued that older children are not more materialistic because they have more consumption experience and they may be disappointed with some of them. As a result, older children may come to realize that owning more does not necessarily means happier. Chan's (2003) study has the limitation that there are no items about the value of possession based on scarcity and items about possession and self-esteem. With the introduction of two items "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" in the current study, we expect that it will reflect the endorsement of materialistic values based on uniqueness and self-esteem of older children. Still the sample did not demonstrate higher materialism among older children. We speculate that there are other unknown reasons behind. One possible reason is older children's negative perception toward materialistic possessions in China. Older children perceived that owning a lot of possessions would lead to poor academic performance (Chan, 2004).

Compare to Chinese children in Hong Kong, materialism score of urban children in Mainland China was much lower ( $t=12.8$ ,  $df=500$ ,  $p<0.001$ ). Compared to children in Hong Kong, Mainland Chinese children were less likely to express desire for more allowance, newest and best things, things other kids have, and birthday presents. As Hong Kong is a much more affluent capitalistic society than its Mainland counterpart, the current study suggests that materialism will be more prevalent in a rich society than in a poor society. In other words, owning thing seems to encourage the desire for more and for better things. Further research is needed to investigate the difference of materialism in societies of different economic development.

From the regression model to predict materialism, the two significant predictors were age, and internet exposure. Internet exposure was positively related with materialism. As the model is not causal, influence might work both ways: materialistic children spent more time on internet. On the other hand, internet exposure will trigger materialistic values. As internet is a relatively new medium

in China, those children who get access to internet may represent those enjoying high social economic status. In Chan's (2003) study, children level of allowance was positively related with materialism. The finding of the current study seems to reinforce that wealth and current material possession are positively related with materialism. We suggest that further research should be conducted to study the media content of popular children's websites in China about its consumption content. The implication for advertising media planning is that children who are surfing on internet are more sensitive to new products and new models. Marketers can consider using internet to build up early adopters in the introduction of new products.

In the current study, television exposure is not related with materialism. A recent content analysis of children's television programs in China indicated that it is highly educational and it reflects mainly traditional values of collectivism, high power distance and masculine values (Chan and Chan 2004). We speculate that the prevalence of traditional values in children's television programs may explain why spending more time on watching television does not trigger more materialistic values.

Similar to the research literature in western societies, the current study found gender difference in materialistic values. Mainland Chinese boys are more materialistic than girls. Previous conclusion of boys being more materialistic comes mainly from study of adolescents. The current study indicates that such gender exist in early childhood in the Mainland Chinese in Hong Kong. Contrary to Chan's (2003) that gender difference was not reported in Hong Kong. We therefore have evidence that Mainland Chinese children were more likely to endorse traditional gender roles of masculinity and competitiveness. The finding was also in line with the more traditional gender portrayal found in Chinese children's television commercial found in a content analysis (Ji and McNeal 2001). Future research should investigate whether the gender difference in materialistic values reported during the perceptual stage and the analytical stage would carry over to the reflective stage.

To conclude, the current study shows the extent of endorsement of materialistic values of Mainland Chinese children and identifies factors that influence the materialistic values. The study also reconfirms a measurement of materialism for children with acceptable level of inter-item reliability in a different cultural context. A focus group study of parents conducted by the author in 2004 indicated that Chinese parents worried about the adoption of materialistic values among their children. They strongly perceived that materialistic values were contradictory to traditional Chinese values of frugality (personal communication, June 23, 2004). The study indicates that to safeguard children from being materialistic, parents and educators can pay attention to children's exposure to the internet. 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.

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**TABLE 1**  
Children's Media Exposure (N=256)

	Time spent on an average day (minute)					Total
	0	1-60	61-120	121-180	180+	
Television	13	59	15	7	6	100%
Radio	39	55	2	2	2	100%
Print	19	59	14	3	5	100%
Videotapes	62	29	7	1	2	100%
Videogames	62	28	4	2	4	100%
Books	4	57	23	7	9	100%
Internet	46	38	11	3	3	100%

**TABLE 2**  
Children's Response to Materialism Statements

	mean @	s.d.
1 It would not make me happier if I owned nicer things*	3.2	1.5
2 More allowance would not make me happier*	3.2	1.4
3 It's better to have more allowance	3.0	1.4
4 I want to have things that other kids like	2.8	1.3
5 My best friends have lot of good stuff	2.8	1.3
6 I like celebrating my birthday because I can get a lot of presents	2.6	1.4
7 When I want something, I usually get it	2.4	1.3
8 I like to own the newest things	2.3	1.3
9 I like to own the best things	2.3	1.3
10 I would be upset if my best friend had the toys I most wanted	2.1	1.2
11 I like to own things because they make me feel good about myself	2.1	1.2
12 I like to own a lot of things so that my friends will envy me	2.0	1.2
13 My friends like me because I have cool toys	2.0	1.2
14 I like my friends because they own a lot of good stuff	1.9	1.2
15 I like to compare myself with my friends to see who got the most unique stuff	1.8	1.0
Materialism score (mean of the above)	2.4	0.7

@ in five-point scale, higher value means more materialistic

\*reversed coded

**TABLE 3**  
Materialism by Sex and Age Group

Item (see TABLE 2)	mean@	Sex		F-stat	p	Age group				F-stat	p
		Boys (n=142)	Girls (109)			6-7 (40)	8-9 (69)	10-11 (100)	12-13 (42)		
1 #	3.2	3.1	3.3	1.1	n.s.	3.7	3.3	3.1	3.0	2.2	n.s.
2 #	3.2	3.2	3.3	0.4	n.s.	3.9	3.2	3.2	2.6	5.5	***
3	3.0	3.2	2.8	3.4	n.s.	3.4	2.7	3.0	3.3	2.8	n.s.
4	2.8	2.8	2.7	1.0	n.s.	2.7	2.5	2.9	2.9	1.4	n.s.
5	2.8	2.8	2.8	0.0	n.s.	3.2	3.0	2.5	3.0	2.9	n.s.
6	2.6	2.7	2.5	1.7	n.s.	3.5	2.6	2.5	2.2	6.7	***
7	2.4	2.3	2.5	1.0	n.s.	2.6	2.2	2.5	2.2	1.6	n.s.
8	2.3	2.4	2.0	5.3	*	2.7	2.0	2.3	2.1	2.3	n.s.
9	2.3	2.5	2.1	4.2	*	2.3	2.2	2.4	2.3	0.2	n.s.
10	2.1	2.2	1.9	4.3	*	2.5	2.0	1.9	2.0	2.2	n.s.
11	2.1	2.2	1.9	3.8	*	2.5	1.9	2.1	2.0	2.3	n.s.
12	2.0	2.1	1.8	5.4	*	2.8	1.7	1.9	2.1	6.7	***
13	2.0	2.2	1.7	10.2	**	2.5	2.0	1.7	2.0	4.4	**
14	1.9	2.1	1.7	4.6	*	2.6	1.9	1.6	2.0	7.4	***
15	1.8	1.9	1.6	2.8	*	2.1	1.8	1.6	1.8	2.0	n.s.
Materialism score	2.4	2.5	2.3	5.0	*	2.9	2.3	2.4	2.4	7.3	***

@ in five-point scale, higher value means more materialistic

# reversed coded

n.s.= not significant at 0.05 level; \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001

**TABLE 4**

Pearson Correlation of Materialism Score and Predictors

Measure	Sex	Age group	Single child	Television	Radio	Print	Videotapes	Videogames	Books	Internet
Materialism score	0.14*	-0.19**	-0.05	0.11	0.15*	0.09	0.17**	0.17**	0.07	0.18**
Sex (1=boys, 0=girls)		-0.04	-0.13*	0.03	0.17**	-0.17**	-0.01	0.3**	-0.13*	0.06
Age group			-0.11	0.03	0.03	-0.04	-0.11	0.01	0.09	0.17**
Single child (1=yes, 0=no)				0.05	-0.07	0.07	0.00	0.01	0.03	0.07
Media exposure:										
Television					0.25**	0.26**	0.26**	0.41**	0.26**	0.40**
Radio						0.30**	0.29**	0.21**	0.2**	0.28**
Print							0.26**	0.02	0.55**	0.19**
Videotapes								0.32**	0.28**	0.34**
Videogames									0.15*	0.36**
Books										0.26*
Internet										

\*p &lt;0.05; \*\*p &lt;0.01

**TABLE 5**

Prediction of Materialism Score

Factor	Standardized beta	t-stat for beta = 0	p
Sex	0.08	1.21	n.s.
Age group	-0.20	-3.00	**
Single child	-0.04	-0.70	n.s.
Media exposure:			
Television	0.02	0.26	n.s.
Radio	0.10	1.42	n.s.
Print	-0.05	-0.60	n.s.
Videotapes	0.03	0.47	n.s.
Videogames	0.02	0.20	n.s.
Books	-0.20	-0.26	n.s.
Internet	0.22	2.90	**

F(10,228 = 3.2, p<0.001)  
R-square = 0.125

n.s.= not significant at 0.05 level; \*\* p < 0.01

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