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## Children's Understanding of Television Advertising: A Revisit in the Chinese Context

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**ABSTRACT.** The authors conducted a survey of 1,758 elementary school children (6–14 years old) from December 2001, to March 2002, in 3 Chinese cities with different levels of television advertising. The authors used D. R. John's (1999) model of consumer socialization as the theoretical framework for their study. More than half of the children whom the authors interviewed were able to understand that television stations broadcast commercials to earn money. Their understanding of the purposes of television commercials and the persuasive intention of television commercials developed with age. The authors examined the influence of gender, level of advertising, and level of television viewing on children's understanding of television advertising by using 3-way factorial models.

**Keywords:** Chinese children, consumer socialization, television advertising, understanding

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THERE HAS BEEN GREAT CONCERN expressed among parents, public policy makers, and marketers about the right to advertise products and services to young consumers. On the basis of theories developed by child psychologists and findings by consumer researchers, it has been shown that young children might not understand the persuasive intent of advertising. Young children generally think that television advertising is informative, truthful, and entertaining (e.g., Ward, Levinson, & Wackman, 1972). As a result, parents and some consumer pro-

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tection groups have argued that advertising to children is unfair and unethical.

Integrating Piaget's (1970) stage theory of cognitive development and Selman's (1980) stage theory of social development, John (1999) proposed a model of consumer socialization that has been shown to be particularly useful in characterizing children's responses to advertising. In the model, learning to be a consumer is a developmental process from the perceptual stage (3–7 years old) to the analytical stage (7–11 years old) to the reflective stage (11–16 years old). In terms of advertising knowledge, children in the perceptual stage can distinguish commercials from programs on the basis of perceptual features such as length. Children in the analytical stage can distinguish commercials from programs based on persuasive intent. Children in the reflective stage are able to understand persuasive intent as well as the specific advertising tactics and appeals used in the commercials (John).

Studies have generally supported the proposition that children's understanding of advertising intent increases with age among American, German, and Chinese children (Bever, Martin, Bengen, & Thomas, 1975; Chan, 2000; Furnham, 2000; Rubin, 1974). A meta-analysis of 23 studies of children's understanding of advertising intent and age with a total group of 2,934 children resulted in an estimate of effect size of .37 (Martin & Gentry, 1997). Most of the literature on children's understanding of advertising is based on research conducted in Western societies, and there are almost no comparable studies from China, which is the country with the largest population of children.

China adopted a one-child-per-family policy in 1979, and today it is the rule in urban China (Zhang & Yang, 1992). As children without siblings, Chinese children act like "little emperors or empresses" (Shao & Herbig, 1994, p. 17). There are 290 million children younger than 14 years old in China (State Statistical Bureau, 2000), as compared, for example, with approximately 56 million children younger than 14 years old in the United States. It is estimated that Chinese children living in urban areas constitute a market potential of US \$67 billion for their own spending and their influence on family spending (McNeal & Zhang, 2000). The one-child-per-family policy and the rapid economic development in China have enabled the commercialization of childhood to unfold at a fast pace and across all social strata (Davis & Sensenbrenner, 2000).

Advertising is relatively new to Chinese consumers. It appears that there is no media literacy program in Chinese schools to explain it. Researchers have indicated that Chinese parents seldom discuss television advertising with their children (Greenberg, Li, Ku, & Wang, 1991). In addition to cultural factors, children's advertising in China has several unique characteristics. First, the development of advertising is highly uneven within China. Beijing, Shanghai, and the Guangdong province in the South account for nearly half of all national advertising (Fan, 2001). Although China's advertising law applies to the whole nation, there is some indication that the law is less strictly followed in provinces where advertising is less developed. Second, during children's programming, children in

China are exposed to an abundance of commercials aimed at adult viewers and relatively few commercials aimed at children. The implication of that aim is that children in China may not perceive many advertising messages as messages for them but rather for their parents. Third, television program sponsorship is common in China. There are separators between television programs and subsidizers' messages using billboards and voice-overs of the programs' names.

On the basis of John's (1999) model of consumer socialization, which was previously described, we hypothesized that:

*Hypothesis 1:* Chinese children's understanding of the persuasive intent of television advertising will increase with age. (Previous studies have found that cumulative exposure to commercials has a positive but weak relationship with understanding of advertising intent [Oates, Blades, & Gunter, 2002]).

*Hypothesis 2:* When the age factor is controlled, Chinese children who watch television more often will have a better understanding of television advertising intent.

*Hypothesis 3:* When the age factor is controlled, Chinese children living in a city with a higher level of television advertising will have a better understanding of television advertising intent than will children living in a city with a medium or low level of advertising.

## Method

### *Participants and Procedures*

Participants were 1,758 students in Grades 1 to 6 (6–14 years old) whom we recruited from six schools in Beijing, Nanjing, and Chengdu, cities which represent high, medium, and low levels of advertising, respectively. Fifty-one percent of the participants were boys, and 49% of the participants were girls. The mean age of the students was 9.6 years old ( $SD = 1.8$  years).

We asked the children to fill out a pretested questionnaire in their classrooms. For children in Grades 1 and 2, the researchers read the questions as well as the answers to the children and asked them to mark the most appropriate answers. Several completed questionnaires were not usable because of missing information, leaving a net total of 1,751 usable questionnaires.

### *Instrument*

We measured children's understanding of television advertising by the following verbal method. Children were told, "When we watch television, some messages occur before or after the television program that are not related to the program. They are called commercials." (*Guangguo*, in Chinese). Children then

were asked: (a) "What are television commercials?" (b) "What do television commercials want you to do?" and (c) "Why do television stations broadcast commercials?" For each question, five to six answers were presented (Table 1). We proposed that selected answers (the answers are indicated by <sup>a</sup> in Table 1) be classified as demonstration of understanding of television advertising.

We measured television viewing by asking the children how many hours they watch television on weekdays and weekends. We compiled the total number of hours of television watching per week and classified the responses into nearly three equal groups. Children in low, medium, and high television viewing groups watched 0 to 3.5 hours, more than 3.5 hours to less than 11 hours, and 11 hours or more of television per week, respectively.

## Results

Table 1 summarizes Chinese children's responses to the three questions about understanding of commercials by age group. With increasing age, there was a gradual increase in understanding of the question "What are television commercials?" Understanding of "What do television commercials want you to do?" also improved with the increasing age of the children. A large percentage of the children were able to tell that the television stations advertised to earn money (37%) or that advertising subsidizes the programs (17%). Chi-square statistics were not significant. As a result, Hypothesis 1 was partially supported.

We used three general linear models to predict children's understanding of television advertising, with age group, gender, level of advertising, level of television viewing, and their interactions as predictors. For the understanding of "What are television commercials?" the full factorial model was significant at the .0001 level. Both age group and gender were significant. Girls showed a better understanding than boys did. The interaction of age group and level of advertising was significant at the .05 level. An increase in understanding with increasing age was found in Nanjing, a city with a medium level of advertising (Spearman correlation = .27,  $p < .001$ ) and in Chengdu, a city with a low level of advertising (Spearman correlation = .18,  $p < .001$ ), but not in Beijing, a city with a high level of advertising. For the understanding of "What do television commercials want you to do?" the full factorial model was not significant. Among the four main effects, only age was significant. The interaction between age and level of advertising was also significant at the .01 level. A decrease in understanding with decreasing age was found in Chengdu (Spearman correlation = .08,  $p < .05$ ). For the understanding of "Why do television stations broadcast commercials?" the full factorial model was significant at the .05 level. Among the four main effects, only the level of advertising was significant. Understanding of television advertising among children residing in Beijing was lower than that of children residing in Nanjing or Chengdu. The interaction effect of gender and level of advertising was also significant at the .05 level.

**TABLE 1. Children's Understanding of Television Advertising by Age (all answers)**

Answers	Percentage of answers by age (in years) and cognitive stage				Total (N = 1,730)
	6-7 perceptual (n = 293)	8-9 early analytical (n = 507)	10-11 late analytical (n = 637)	12-14 reflective (n = 293)	
<i>What are television commercials?<sup>a</sup></i>					
Funny messages	15	11	11	8	11
Messages for us to take a break	37	31	26	20	28
Introduction to products	29	25	21	28	25
Promotions of products <sup>b</sup>	16	29	41	43	34
Don't know	2	4	1	2	2
Total	100	100	100	100	100
<i>What do television commercials want you to do?<sup>c</sup></i>					
Evaluate which commercial is good and which is poor	8	9	9	9	9
Check out the products at stores	20	25	18	19	21
Tell parents about the products <sup>b</sup>	34	27	21	16	24
Buy the products <sup>b</sup>	33	33	49	53	42

	6	5	3	3	4
Don't know	100	100	100	100	100
Total	100	100	100	100	100
<i>Why do television stations broadcast commercials?<sup>a</sup></i>					
Not waste time	16	16	14	11	14
Help the audience	9	12	10	12	11
Care for the public	18	16	17	16	17
Subsidize the programs <sup>b</sup>	13	16	17	22	17
Make money <sup>b</sup>	40	35	39	35	37
Don't know	3	5	4	4	4
Total	100	100	100	100	100

Note. Answers are in the order of their presentation in the questionnaire.

<sup>a</sup> $\chi^2(12, N = 1,730) = 91.6 (p < .0001)$ ; Spearman correlation = .17 ( $p < .0001$ ). <sup>b</sup>Answers classified as demonstration of understanding of television advertising.  $\chi^2(12, N = 1,729) = 71.6 (p < .0001)$ ; Spearman correlation = .08 ( $p < .0001$ ).  $\chi^2(15, N = 1,729) = 16.7 (ns)$ ; Spearman correlation = .02 (*ns*).

To test Hypothesis 2, we examined the effect of television viewing as a main effect and as an interaction effect with age in the three factorial models. None of these predictors were found to be significant. In other words, when the age effect was controlled, children who watched more television did not have a better understanding of television advertising intent. As a result, Hypothesis 2 was not supported.

To test Hypothesis 3, we examined the effect of the level of advertising as a main effect and as an interaction effect with age in the three factorial models. Results indicated that the actual level of advertising as a main effect was significant in one factorial model, and the level of advertising as an interaction effect with age was significant in two factorial models. Children 10 to 11 years old who resided in cities of low and medium levels of advertising (i.e., Nanjing and Chengdu) showed a better understanding of "What are television commercials?" than did those who resided in areas with high levels of advertising (i.e., Beijing). Children 8 to 9 years old who resided in a city with a low level of advertising demonstrated a lower understanding of "What do television commercials want you to do?" than did those residing in cities with medium and high levels of advertising (i.e., Nanjing and Beijing). In the understanding of "Why do television stations broadcast commercials?" the level of advertising alone had a significant effect. Children in all age groups who resided in cities with low and medium levels of advertising had a better understanding of "Why do television stations broadcast commercials?" than did those children residing in cities with a high level of advertising. In conclusion, our results suggested that when the age effect was controlled, children residing in cities with low and medium levels of advertising had a better understanding of television advertising than did children residing in a city with high levels of advertising. As a result, Hypothesis 3 was not supported.

### Discussion

Similar to research results regarding Western children, our study found that Chinese children's age has a substantial positive effect on their understanding of what television commercials are and what their purposes are. Contrary to findings among Western children, our study found that in China, a child's age had little effect on the child's understanding of why television stations broadcast commercials. Young Chinese children's high understanding of the institutional function of television advertising (to sponsor television programs and to make money) deviates from Piaget's (1970) or Selman's (1980) model of cognitive development. Because young children are thought to be egocentric, they should be unable to see how advertising is related with other social systems such as the television stations. Perhaps what triggers their responses is the mentioning of earning money. Results indicated that less than 45% of older children (12-14 years old) knew that television commercials were messages used to promote products. The low percentage also deviated from John's (1999) model of con-



sumer socialization. Children at the reflective stage are expected to have an understanding of the persuasive intent of advertising. We speculate that they may not have this understanding because most of the commercials shown during Chinese children's programs are not targeted for children, but rather for adults, and therefore are difficult for children to understand.

The present study provides some support for the developmental change in the understanding of television advertising as proposed in John's (1999) model of consumer socialization, but at the same time, it also creates new concerns. One concern is about the inconsistency in the children's responses to the three questions about advertising. The third question "Why do television stations broadcast commercials?" generated a higher level of understanding than did the other two questions. In the Western literature, the understanding of television stations carrying commercials for money usually generates the lowest level of understanding (e.g., Henriksen, 1997). This difference between West and East may be attributed to the drastic change in the media economy in China during the past two decades. Television stations used to be the Communist Party's mouthpiece, but now stations have begun to broadcast mass entertainment and have imported programs to satisfy their audiences. To the mass audience, including children, there is an awareness of the sharp increase in the number of commercials.

The relatively lower proportion of children who reported correct answers to the first two questions may suggest that comprehending the idea that television stations broadcast commercials for money does not imply an understanding of the persuasive intent of commercials. Children have an awareness of the existence of an advertiser who needs to pay money to deliver messages on television, but they may not be able to assume the perspective of the advertiser in a meaningful way.

The results from the present study indicate that the amount of television viewing has little effect on children's understanding of television advertising. Contrary to what we expected, children residing in cities where advertising is less developed generally had a better understanding of television commercials than did children living in a city where advertising is more developed. We think that this result can be attributed to the presence of public service announcements (PSAs) in Beijing but their absence in Nanjing and Chengdu. Children residing in Beijing were more likely to believe that commercials were messages to help people. Further research is needed to examine whether exposure to PSAs may have an impact on children's understanding of television commercial messages.

The present study also found that age, gender, and the interaction between age and advertising development have a significant effect on children's understanding of commercials. Those findings suggest that children's cognitive development also depends on the environment. Our study has several limitations. First, one should be cautious about interpreting the Spearman correlations reported between age and understanding of television advertising. Although the correlations may be significant, they may be attributed to the relatively large sample size. Second, we provided three to four incorrect options in each question that may

have confused younger children. Finally, because of the cross-sectional nature of the study, it cannot trace the change in understanding with age for the same birth cohort.

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