2009

Influence of television advertising on adolescents in China: An urban-rural comparison

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This document is the authors' final version of the published article.
Link to published article: http://dx.doi.org/10.1108/17473610910964714

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Keyword: Cultivation theory – materialism – consumer psychology – survey – youth

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November 25, 2008

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Research Paper

Abstract (243 words)

Purpose—The purpose of this paper is to examine the cultivation effects of television advertising viewing on the perceived affluence in society and the materialistic value orientations among adolescents in urban and rural China.

Design/methodology/approach—A survey of 646 adolescents aged 11 to 17 in Guangzhou city and in a rural county of Henan province were conducted in 2006.   Constructs were measured using established scales.

Findings—Television advertising viewing demonstrated first and second order cultivation effects among urban as well as rural respondents. Heavy television advertising viewers were more likely to have a higher perceived affluence than light television advertising viewers. Heavy television advertising viewers were also more materialistic than light television advertising viewers. When television advertising viewing was controlled, urban respondents have a higher perceived affluence while rural respondents had a higher level of materialism.

Research limitations—Students in grades 7 and 8 were examined only. A convenient sampling method was adopted. The city selected for this study is highly advanced in terms of economical and advertising development when compared with most other Chinese cities.

Practical implications—Rural adolescents did not hold strong belief about prevalence of affluence in the society. Popularity appeal may not be a fruitful marketing communication

strategy for durable goods for them. Different marketing communication strategies should be

adopted for the urban and rural adolescents as target audience.

Originality/value—The paper is a pioneer work on the study of consumption values of

adolescents in urban and rural China.

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Introduction

Advertising, designed to attract attention, to guide attitudes, and to facilitate behavioral

change, is considered possessing profound influence of the attitudes and values in modern

society. Not unexpectedly, the social consequences of advertising have been subject to

frequent condemnatory comments (Pollay, 1986). One of the accusations is that advertising

presents unrealistic or idealized images of people and their lives. Such images can alter the

expectation of living standards of heavy television viewers because they often compare

themselves with what they to saw and try to catch up through increased consumption

(Richins, 1991). Many studies found there is a positive and significant relationship between

materialism and advertising viewing (Buijzen and Valkenburg, 2003; Liebert, 1986; Moschis

and Moore, 1982; Pollay, 1986; Wulfemeyer and Mueller, 1992; Yoon, 1995). As persuasion

messages, advertising provides a worldview with a value scheme that presents consumption

as commonplace. Commercial persuasion appears to influence not only our shopping and

product use behavior but also the largest domain of our social roles, including use of

language, goals, values, and the sources of meaning in our culture (Pollay, 1986). Even

families in remote parts of China experience television advertising as a new form of cultural

authority in instilling the idea that consumption leads to a happy childhood (Jing, 2000).

The household penetration rate for television in China in 2005 was 120 percent

(National Bureau of Statistics of China, 2006). This indicates that nearly every Chinese

family has at least one TV set. With the explosion of the number of television households and a parallel increase in the amount and type of television programming, television was ranked the most useful information source for new products among urban as well as rural children (Chan and McNeal, 2007).

Television's cumulative long-term contribution to viewers' conceptions of social reality is the main focus of the cultivation analysis conducted by Gerbner and his colleagues. They propose that highly stable, repetitive, and coherent set of images and messages cultivates the common perceptual estimates of social reality and mainstream values (Gerbner *et al.*, 2002). Heavy television viewers are more likely to internalize the central messages and the perspectives of reality in television (Signorielli and Morgan, 1996).

China has a population of 350 million children under age 15 with approximately 40 percent urban, 60 percent rural distribution (Population Reference Bureau, 2006). In 2005, the per capita annual income of urban households was 10,493 yuan. The per capita disposal income of rural households was 3,255 yuan. Urban household income was more than three times that of rural household income. The Engel coefficients (which refer to the proportion of expenditure on food to the total expenditure of households) were 36.7 percent for urban households and 45.5 percent for rural households (National Bureau of Statistics of China, 2006). There are obvious differences in the economic situation and the patterns of consumption between urban and rural areas.

Children and adolescents deserve our special attention as they represent three markets.

They have their own money to spend. They influence the family purchase decisions. They are also the target of a wide range of products and services for adults (McNeal, 1987). A content analysis of China's advertising indicated that modernity and individualism values were more pervasive in magazine advertisements that target the Chinese X-Generation (aged 18-35 years with high education and income) than in television commercials for the mass market (Zhang and Shavitt, 2003). In other words, marketers are promoting western consumer values among the young and the affluent group. Capitalistic reform and the single-child household nourish the seeds of individualism and materialism among Chinese youth (Doctoroff, 2005). There have been studies about the adoption of materialistic value orientations among urban youth (Chan and Zhang, 2007; Chan *et al.*, 2006). Extending the study to include rural youth is essential as the rural comprises of nearly two thirds of China's population (Population Reference Bureau, 2006). To our best knowledge, the current study is the first study on communication and consumer values among rural as well as urban adolescents in China.

When an adolescent in an urban city watches a television commercial and likes the product, s-he will just go out to buy the advertised products or ask his/her parents to buy it. An adolescent in a rural country watches the same television commercial and likes the product however, may not be able to locate the product in the rural market. The rural market suffers from poor retailing, distribution system and economic situation (Chan and McNeal, 2006b). Rural adolescents do not have the opportunities to enjoy and experience the modern

city life styles. So it would be interesting to see how television advertising cultivates the

belief about the prevalence of affluence in society and materialistic value orientations in

different socio-economic contexts. The current study attempts to examine if television

advertising may have differential impact on rural and urban adolescents.

Literature Review

Cultivation Theory

The current study adopts the cultivation theory as the theoretical framework. The idea

grew out of George Gerbner's Cultural Indicators Project. Employing media violence as a

focus for his research, it was found that U.S. audience over-estimated the actual incidence of

violence in the real world as 80 percent of the television programs contained acts of violence

(Gerbner *et al.*, 1979).

Cultivation theorists argued that television has long-term effects which are gradual and

indirect, but cumulative and significant. Specifically, they view mass media as a socializing

agent and hypothesize that compared to light television viewers; heavy television viewers

are more likely to perceive the world in ways that more closely mirror reality as presented on

television than objective measures of social reality. Television is seen as dominating our

"symbolic environment". McQuail and Windahl (1993) remarked that the cultivation theory

presents television as not only a window of the world, but a world in itself. Some

adolescents who grow up in remote rural areas may have never visited a metropolis. In such

a case, the media portrayal of the idealized images of the city life became the perceived

reality for them. By virtue of inexperience, young viewers may depend more on television for information than other viewers do (Van Evra, 1990).

There are two types of cultivation effects, named as the first and the second-order effects of cultivation (Hawkins and Pingree, 1982). First-order cultivation effect represents the relationship between television exposure and the quantitative estimates of frequency or probability of events in the social reality. Second-order effect represents the relationship between television exposure and value judgments or general attitudes about the state of the world at large (Shrum, 1995). Whereas some studies have found a significant correlation between first- and second-order effects, the evidence so far is somewhat mixed (Hawkins, *et al.*, 1987). Hawkins *et al.* (1987) claimed no relationship between first-order and second-order beliefs. In contrast, Potter (1991) found evidence of first-order cultivation effects affecting second-order effects.

There have been refinements to the cultivation theory by examining variables that may moderate the relationship between television viewing and cultivation effects. Life experience of the viewer was proposed as the moderating variable in two refinements conceptualized as mainstreaming and resonance. In these two refinements, life experience or direct experience was predicted to have opposite direction of influence on cultivation effects (Shrum and Bischak, 2001). Mainstreaming is the view that those whose life experiences are more discrepant from the television world are the most likely to be influenced by the television reality. This is because the television reality will override differences in perspectives from

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other factors and influences (Gerbner *et al.*, 1980). Resonance takes the opposite view. Resonance is the view that if the life experiences of the viewer are similar to the world portrayed by television, television will provide a "double dose" of the messages that "resonate" and amplify cultivation effects (Hawkins and Pingree, 1982). Resonance suggests that viewers' with more direct experience will be more affected by television viewing than those with less direct experience. Empirical findings indicated that television showed a stronger relation to the estimates of crime among those with more direct experience with crime than those with less direct experience with crime (Shrum and Bischak, 2001). As a result, there was support for resonance and not mainstreaming.

The cultivation theory was tested in a variety of contexts, including racism (e.g., Gerbner *et al.*, 1982; Morgan, 1986), alienation (e.g., Morgan, 1986), prevalence of violence (Gerbner, 1977; Gerbner and Gross, 1976), and gender stereotypes (Gross and Jeffries-Fox, 1978).

Rubin *et al.* (1988) found that the effects of television viewing on perception of social reality were program specific. Viewers who watched more day-time serials tended to score lower in perceptions of altruism and trust in others. Viewers of evening dramas tended to have lower feelings of political efficacy. Viewers of action and adventure television showed more concerns of their own safety. This indicates that the contents of the television messages, specifically whether it is television programs or television advertising, should be studied separately. Previous studies indicate that values endorsed in Chinese television programs are

very different from those in Chinese television commercials. A content analysis found that

children's television programs in Mainland China reflected more of its traditional Chinese

values of high power distance and emphasis on education (Chan and Chan, 2004). Children's

television commercials, on the other hand, represented a mixture of traditional Chinese

values and western values (Ji and McNeal, 2001). As western consumption values occur

more frequently in Chinese television advertising than in television programs, the current

study will focus on the cultivation effects of television advertising viewing.

Materialism

Some scholars view materialism as a personality trait encompassing the characteristics

of envy, non-generosity, possessiveness and preservation (Belk and Pollay, 1985). Some

scholars consider materialism as a system of personal values stressing the importance of

owning material possessions (Richins, 1991). Others see materialism as a chronic focus on

lower needs for material comfort and physical safety (Inglehart and Abramson, 1994). Most

definitions of materialism focus on the extent to which the acquisition and possession of

material objects is important to a person. In this study, materialism is defined as the personal

value orientations about the association between object attachment and a desirable state of

well-being (Richins, 1991). The Materialism Value Scale developed by Richins and Dawson

(1992) is primarily an assessment of respondents' cognitive beliefs about the relative

importance of various personal priorities. The Materialism Value Scale consisted of three

dimensions: the use of possessions to judge the *success* of others and oneself, the *centrality*

of possessions in a person's life, and the belief that possessions and their acquisition lead to *happiness* and life satisfaction (Richins and Dawson, 1992).

Empirical research indicates that a high level of materialism is associated with family disruptions (Burroughs and Rindfleisch, 1997; Roberts and Tanner, 2005). Children who grow up in economic hardship tend to hold strong materialistic values (Inglehart and Abramson, 1994). Studies also found positive correlation between consumption of commercial communication and endorsement of materialistic values. For example, Goldberg and Gorn's (1978) study of preschoolers suggested that television advertising directed at children might lead children to choose material objects over social-oriented alternatives. Churchill and Moschis (1979) found that the amount of television viewing was positively correlated with materialistic values. In a longitudinal study of television advertising effects on 6th to 12th graders, Moschis and Moore (1982) found that increased advertising exposure contributed to the development of materialistic values among those who had not yet developed such predispositions. A survey of 246 Chinese children aged 6 to 13 in Hong Kong found positive correlation between amount of television viewing and materialism (Chan, 2003). Chinese urban adolescents who reported higher levels of social motives for advertising viewing and adolescents who communicate frequently with peers about consumption were more materialistic (Chan *et al.*, 2006). Chinese college students in Beijing with higher motivation for viewing advertising showed stronger tendencies to imitate celebrity models, and endorsed a higher level of materialistic values (Chan and Zhang, 2007).

A survey of 2,860 urban Chinese adolescents aged 15 to 19 found that exposure to television and the Internet was a significant factor contributing to materialistic consumption values (Gu *et al.*, 2005).

Hypotheses

According to the cultivation theory, television would cultivate both quantitative estimates of frequency or probability of events and people's value judgments or general attitudes about the state of the world (Hawkins and Pingree, 1982). Television advertising does not claim to mirror reality as it is but reality as it should be (Schudson, 1984). Belk and Pollay (1985) found that the level of wealth or material comfort displayed in many television advertisements was well beyond what was available to most middle-class households. When we apply the cultivation theory to the specific context of television advertising, the probability of events will be the perceived ownership of the advertised products. As a result, television advertising viewing is related to the perceived affluence in the society. We therefore hypothesize that:

H1: Television advertising viewing will have a positive correlation with the perceived affluence in the society among adolescents in both urban and rural China.

The intention of advertising is to preoccupy the society with material concerns, seeing commercially available goods or services as a path to happiness and a solution to virtually all problems and needs. When the cultivation theory is applied to the specific context of television advertising, the value judgments or general attitudes about the state of the world

will correspond to the materialistic value orientations. We therefore offer the following hypothesis:

H2: Television advertising viewing will have a positive correlation with the level of materialism among adolescents in both urban and rural China.

Since empirical evidence about the relationship between the first-order and the second-order cultivation effects is inconclusive, we will propose a null hypothesis. We hypothesize that:

H3: Perceived affluence in society will have no correlation with the level of materialism among adolescents in both urban and rural China.

Previous research findings supported the resonance moderating effect of life experience. Viewers with life experiences more congruent with the television world will be more affected by the television messages than viewers with life experiences very different from the television world. Content analysis of a popular children's TV program indicated that urban lives were often portrayed in China's children programs (Xia *et al.*, 2004). In other words, the life experiences of urban children will be more congruent with the television world than rural children. As a result, urban viewers will be more likely to adopt the television reality than rural viewers. We therefore hypothesis that:

H4: The residence of the respondents will moderate the relation between television advertising viewing and the perceived affluence in the society.

H5: The residence of the respondents will moderate the relation between television

advertising viewing and the level of materialism.

Methodology

A survey of 646 adolescents aged 11 to 17 was conducted from October to December 2006. The urban sub-sample consisted of 379 respondents studying grade 7 and 8 from a secondary school in Guangzhou city. The mean age was 13.3 (S.D.=0.8). The rural sub-sample consisted of 267 respondents studying grade 7 and 8 from two rural secondary schools in Henan province. The mean age was 14.2 years (S.D.=1.0). A convenience sample of schools and classes was used because of the limitation in resources and availability of personal contacts. Questionnaires were distributed at normal class sessions and one of the authors was present to collect the questionnaires. Questionnaires were self-administered by the respondents and the data collection took about ten minutes. Guangzhou is a southern city in Guangdong province that is linked to Hong Kong. Guangzhou is selected to represent Chinese cities with advanced development in advertising. Henan province is situated in the eastern part of China and it has the largest rural population (National Bureau of Statistics of China, 2006). Henan is selected to present typical rural provinces in China. The Gross Regional Products of Guangdong and Henan provinces in 2005 were 1,203,925 million yuan and 553,000 million yuan respectively (National Bureau of Statistics of China, 2006). Table 1 shows the sample profile. The urban sub-sample comprised of a higher proportion of adolescents from single-child families. Over 97 percent of the sample had at least one television set at home. On average, they reported watching 0.4 hour of television on

weekdays and 5.2 hours of television on weekends.

〔INSERT TABLE 1 ABOUT HERE〕

A structured questionnaire was self-administered by the respondents. The questionnaire includes measurements of television advertising viewing, belief about the prevalence of affluence in society, materialism and demographic information. All the constructs surveyed were measured by multiple items. Television advertising viewing was measured by using Moschis and Moore's (1982) scale. Respondents were asked to indicate how often they watch television advertisements for seven different motives, such as "to find out how good a product is" using five-point scale (1=never, 5=almost every time). The inter-item reliability (Cronbach's alpha for inter-item reliability) was 0.80. Perceived affluence in society was measured by asking the respondents to estimate the percentage of households in Mainland China that own a car, an air conditioner, a personal computer, a camera and a cell phone. These five possessions were often portrayed as products for modern lifestyles in advertisements. Official statistics indicated that the household penetrations of these products showed great disparities among high and low income households (National Bureau of Statistics of China, 2006). Five choices were given, including 20 percent or below, 21 to 40 percent, 41 to 60 percent, 61 to 80 percent and 81 or more percent. These five answers were coded as 1 to 5 respectively and were treated as quasi-interval data.   Perceived affluence in the society was constructed by taking the mean values of the estimates of households with the selected modern products. The inter-item reliability was 0.80. Materialism was measured

using Richins' (2004) shortened nine-item Materialistic Value Scale using five-point scale (1= disagree strongly, 5=agree strongly). The inter-item reliability was 0.75.

As television advertising viewing, perceived affluence, and materialism are interval scales and the residency of respondents is nominal scale, t-tests are conducted to examine the differences among urban and rural respondents. To examine the influence of television advertising viewing and residence of respondents on perceived influence as well as materialism, multiple linear regression analyses are conducted. As there are only two levels for the residency of respondents, GLM method is not needed. Nominal data with two levels are treated as dummy variables in the multiple regression analysis.

Results

Table 2 shows the mean scores for the estimates of five possessions and the perceived affluence in society among urban and rural respondents respectively. Urban respondents reported higher estimates of families with cars, air-conditioners, cameras and personal computers than their rural counterparts. There was no difference in the estimate of families with mobile phones among urban and rural respondents. Overall speaking, urban respondents had a higher score for perceived affluence in society than rural respondents (t (636) = 11.8, $p<0.001$).

〔INSERT TABLE 2 ABOUT HERE〕

Table 3 shows the mean scores for television advertising viewing and materialism among urban and rural respondents. Rural respondents exhibited a higher level of television

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advertising viewing than urban respondents (t (615) =-4.4, $p<0.001$). Rural respondents

reported that they more often view television advertising to find out how good a product is,

to determine what to buy, to find out where to buy things, to have things to talk about, and to

get examples of way of living than urban respondents. Rural respondents endorsed

significantly higher level of materialism than urban respondents (t (611) = -4.3, $p<0.001$).

Rural respondents were more likely to report that they admire people who own expensive

possessions, the possessions say a lot about how well they are doing in life, their lives would

be better if they own certain things they do not have, they like to own things that impress

people, and they are bothered sometimes that they cannot afford to buy all the things they

like than urban respondents.

〔INSERT TABLE 3 ABOUT HERE〕

Multiple linear regression analysis using ordinary least square method was carried out

in three steps. The predicted variables are perceived affluence and materialism. The

predictors are demographic variables, television advertising viewing, and residency of

respondents. In the first step, three demographic variables were used as predictors. In the

second step, television advertising viewing and residency (urban or rural) were added as

predictors. In the third step, the interaction of television advertising viewing and residency

was added as a predictor. The stepwise regression method with demographic variables

followed by media usage and other variables as predictors is suggested from existing

research on cultivation theory (e.g. Guo and Moy, 1998).

Results indicated that the interaction between television advertising viewing and residency was not significant in predicting perceived affluence in the society. The additional variance accounted for by the interaction term was 0.00 percent. Similarly, the interaction between television advertising viewing and residency was not significant in predicting materialism. Because the interaction term was not significant, the standardized regression coefficients for the third step are not shown. Instead, the standardized regression coefficients for the second step of regression are showed in Table 4.

In the prediction of perceived affluence, the five predictors together were able to explain 19 percent of the variance of the perceived affluence. The F-statistic of the model was 28.3 and was significant at 0.001 level. The incremental R square for step 2 was significant at 0.001 level. The results indicate that the variables television advertising viewing and residency meet the criteria of remaining in the regression model in predicting perceived affluence. In the prediction of materialism, the five predictors together were able to explain 10 percent of the variance of materialism. The F-statistic of the model was 14.0 and was significant at 0.001 level. The incremental R square for step 2 was significant at 0.001 level. The results indicate that the variables television advertising viewing and residency meet the criteria of remaining in the regression model in predicting materialism.

〔INSERT TABLE 4 ABOUT HERE〕

Results of hypothesis testing

In the prediction of perceived affluence, the standardized regression coefficient for

television advertising viewing was 0.15 and was significant at 0.001 level (see Table 4). In other words, heavy television advertising viewers had a higher level of perceived affluence in the society than light television advertising viewers. Therefore, television advertising viewing had a positive correlation with perceived affluence. As a result, H1 was supported.

In the prediction of materialism, the standardized regression coefficient for television advertising viewing was 0.28 and was significant at 0.001 level (see Table 4). In other words, heavy television advertising viewers endorsed higher level of materialism than light television advertising viewers. Therefore, television advertising viewing had a positive correlation with materialism. As a result, H2 was supported.

The Pearson correlation coefficient between perceived affluence in the society and materialism was 0.07, 0.13, and 0.02 for the urban sub-sample, rural sub-sample, and the total sample respectively. All three correlation coefficients were not significant at 0.05 level. It showed that there was no correlation between perceived affluence in society and materialism among urban and rural adolescents. As a result, H3 was supported. In other words, the result supported a nil correlation between the first-order and the second-order cultivation effects.

In the prediction of perceived affluence, the standardized regression coefficient for residency was -0.45 and was significant at 0.05 levels. The standardized regression coefficients for the residency variable were negative, indicating that urban respondents had a higher level of perceived affluence than rural respondents when the television advertising

viewing variable was controlled. In other words, the residence of the respondents moderated the relation between television advertising viewing and the perceived affluence in the society (positive moderating effect for urban residency). As a result, H4 was supported. The standardized regression coefficients of television advertising viewing and residency were 0.15 and -0.45 respectively. The relative size indicates that residency was more important than television advertising viewing in predicting perceived affluence in the society.

In the prediction of materialism, the standardized regression coefficient for residency was 0.17 and was significant at 0.01 level. The standardized regression coefficient for the residency variable was positive, indicating that rural respondents were more likely to endorse materialism than rural respondents. In other words, the residence of the respondents moderated the relation between television advertising viewing and materialism (positive moderating effect for rural residency). As a result, H5 was supported. The standardized regression coefficients of television advertising viewing and residency were 0.28 and 0.17 respectively. The relative size indicates that television advertising viewing was more important than residency in predicting materialism.

Discussion and conclusion

The current study examined the impact of television advertising viewing on perceived affluence in the society and materialism using the cultivation theory as the theoretical framework. The study also tested the moderating role of residency as an indicator of life experience in the cultivation effect.

As hypothesized, heavy television advertising viewers had a higher level of perceived affluence than light television advertising viewers. Heavy television advertising viewers were also more materialistic than light television advertising viewers. Both first-order and second-order cultivation effects were supported in the current study. The effects of viewing portrayals of affluence in television advertising extend beyond believing that others are rich, to having an effect on viewers' consumption values. As television advertising viewing was tested instead of general television viewing, the current study showed that one particular part of the television contents (i.e. the advertising part) was able to demonstrate cultivation effects on viewers' belief about television reality as well as general attitudes toward the state of television reality (i.e. attitudes toward material possessions in this context). The positive correlation of television advertising viewing and materialism were consistent with previous findings among urban college students (Chan and Zhang, 2007) and urban adolescents (Chan *et al.*, 2006) in China. The current study showed that cultivation effects occurred among rural adolescents in China as well.

Among the three demographic predictors, only the variable "single-child" has a positive impact on materialism. As the urban sub-sample contained a higher proportion of single-child than the rural-sample, the urban sub-sample was expected to have a higher materialism score than the rural sub-sample. The current evidence of higher materialism scores among the rural sub-sample therefore did not originate from the single-child bias.

As hypothesized, respondents' perceived affluence in society was not correlated with

materialism. One possible explanation is that prevalence perceptions and consumer values are fundamentally different types of judgments constructed through different processes (Shrum *et al.*, 2005). Respondents' desire for material possessions may not be generated from believing others are having the possessions. Respondents' desire for material possessions may be generated by projecting themselves into the advertisements and seeing the benefits of owning the possessions.

As hypothesized, life experience of respondents had a moderating effect on the cultivation of television advertising viewing. The interaction of television advertising viewing and residency was not significant. So, neither mainstreaming nor resonance moderating effect was supported. However, residency was a significant factor in predicting both perceived affluence and materialism. It was interesting that the moderating effect of residency pointed at opposite directions for the first order and second order cultivation effects. The finding suggests that communication effects of television advertising may involve different processes among urban and rural adolescents.

From the relative magnitudes of the regression coefficients, direct experience plays a more important role when adolescents make judgment about prevalence of affluence. Urban respondents are more likely to have direct experience of these products in the market place than rural adolescents. Rural adolescents have limited experience of encountering with the selected household durables. Because they seldom see these products, they perceive that not many people own them. As a result, rural adolescents have lower estimates of affluence in

the society. From the relative magnitudes of the regression coefficients, television advertising viewing plays a more important role when adolescents make judgment about consumption values. Rural respondents are less likely to have direct experience of modern material possessions than urban adolescents. May be because they have less direct experience with material possessions, they idealize the possessions. They may think that owning materialistic possessions will bring happiness and success. As a result, rural adolescents have higher level of materialism.

Rural adolescents endorsed higher level of materialism than their urban counterparts. The finding is consistent with previous studies that youths from socio-economically disadvantaged backgrounds were more materialistic (Kasser et al., 1995). This may also be explained by Inglehart and Abramson's (1994) post-materialism theory, which postulates that economic deprivation in childhood would lead to materialism in adult life. Because rural areas in China are still in an early stage of economic development, rural respondents are expected to experience more economic insecurity and therefore exhibit a higher degree of material aspiration than urban respondents.

Other than the cultivation effects discussed above, the current study found that television advertising viewing was higher among rural adolescents than urban respondents. This result is similar to a previous study that rural children paid more attention to television advertising than urban children (Chan and McNeal, 2006a). This may be because rural adolescents have limited access to the market information sources such as sales person, the

Internet and the print media. So they rely more on television advertising for information about products and services.

To conclude, the study provides empirical support that television advertising has differential impact on perceived affluence and materialism among urban as well as rural adolescents in China. The moderating effect of direct experience on cultivation effects was also supported.

This current study has several limitations. Firstly, the sample is a non-probability sample of students from grades 7 and 8 only. The results may be not able to generalize to adolescents in other Chinese provinces. Second, respondents may not want to report on excessive television viewing or to appear greedy and materialistic. As a result, there may be some bias of social desirability. Third, previous studies show that contextual and personal factors can affect the size and reliability of the cultivation effects. Future studies should look at other factors, such as viewer selectivity and personality.

Marketing implications

Urban and rural respondents shared the similarities that higher television advertising viewing was positively correlated with higher materialistic value orientations. Advertising on national television channels should be considered as the advertising medium for campaigns that target at urban as well rural adolescents. The difference between the two market segments is that rural respondents were more materialistic while urban respondents had a higher level of perceived affluence. Many marketers in China use popularity appeals in

promoting their products and claim that the products or services are widely accepted in the

society. Our study indicates that the popularity appeal may not be well received among rural

respondents because they probably do not see a lot of people using the products in real life

situations. They may be skeptic about the marketing claims. Rural respondents tend to

idealize material possessions. Media educators who attempt to discourage materialism

among adolescents should encourage them to read television commercials critically.

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Table 1 Sample profile (n=646)

	Urban (n=379)	Rural (n=267)	
	%	%	Chi-square
Sex			2.5
Female	47.8	41.6	
Male	52.2	58.4	
Age			142.6***
11	0.5	0.0	
12	17.1	3.0	
13	39.4	20.2	
14	38.3	38.0	
15	4.3	30.8	
16	0.3	7.2	
17	0.0	0.8	
Grade			2.5
7	49.9	52.1	
8	50.1	47.9	
Single child			246.0***
Yes	76.8	12.9	
No	23.2	87.1	

	Urban (n=379) %	Rural (n=267) %	Chi-square
Yearly household income (yuan)			
Below 12,000	8.5		Not applicable
12,001-60,000	30.4		
60,0001-120,000	13.7		
Above 120,000	4.8		
Don't know	42.5		
Below 2000		23.9	
2000-4000		20.8	
Above 4000		6.3	
Don't know		49.0	

Note: ***$p < 0.001$

Table 2 Perceived affluence in society among urban and rural respondents

Estimates of …	Urban		Rural		
	Mean	S.D.	Mean	S.D.	t-stat.
private cars	2.4	1.2	1.8	1.1	5.9***
air conditioners	3.8	1.2	2.6	1.1	12.4***
personal computers	3.5	1.2	1.9	1.1	17.2***
cameras	3.9	1.1	3.1	1.3	7.8***
mobile phones	4.2	1.1	4.3	1.1	1.1
Perceived affluence	3.6	0.9	2.8	0.8	11.8***

*** $p < 0.001$

Table 3 Respondents' television advertising viewing and materialistic value orientations among urban and rural respondents

	Urban	Rural	t-stat.
Television advertising viewing: I watch TV advertisements…	**2.1**	**2.4**	**-4.4***
… to find out how good a product is	2.1	2.4	-4.0***
…to find out what things to buy to impress others	2.1	2.2	-1.5
… to help me decide what things to buy	2.0	2.3	-3.8***
… to find out where I can buy some things I want	2.4	2.7	-2.9**
… to have something to talk about with others	2.1	2.3	-2.2*
… to learn about the 'in' things to buy	2.6	2.5	1.1
… to see people on TV ads who are examples of the way I wish I were	1.8	2.4	-6.5***
Materialistic value orientations	**2.8**	**3.0**	**-4.3***
I admire people who own expensive houses, cars and clothes.	2.4	2.7	-2.7**
The things I own say a lot about how well I'm doing in life.	2.8	3.2	-4.7***
Buying things gives me a lot of life.	2.8	2.9	-1.6
I enjoy a lot of luxury in my life.	2.4	2.5	-0.6
My life would be better if I owned things I don't have.	2.8	3.1	-2.8**
I'd be happier if I could afford to buy more things.	3.0	3.1	-0.7
I like to own things that impress people.	3.2	3.6	-5.1***
I try to keep my life simple, as far as possessions are concerned (R)	3.1	3.1	0.2
I sometimes bothers me that I can't afford to buy all the things I'd like	2.6	2.9	-3.7***

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

Table 4 Summary of the regression analysis for predicting perceived affluence and materialism

Step/predicting variables	Perceived affluence	materialism
Step 1 (with 3 demographic variables as predictors)		
Sex (0=F,1=M)	0.01	0.01
Age	0.00	0.04
Single-child (0=no, 1=yes)	-0.01	0.11*
Step 2 (adding 2 more predictors)		
TV advertising viewing	0.15***	0.28***
Residency (0=urban,1=rural)	-0.45***	0.17**
R square for step 1(%)	0.08***	0.01
R square for step 2(%)	0.19***	0.10***
Incremental R square for step 2 (%)	0.11***	0.09***

Note: Entries are standardized coefficients from ordinary least squares regression analyses for step 2

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