

2006

# How rural children in China consume media & advertising

Kara Chan

*Hong Kong Baptist University*, [karachan@hkbu.edu.hk](mailto:karachan@hkbu.edu.hk)

James McNeal

*McNeal & Kids*, [mcnealjimu@yahoo.com](mailto:mcnealjimu@yahoo.com)

This document is the authors' final version of the published article.

Link to published article: <http://dx.doi.org/10.1108/17473610610705363>

---

## Citation

Chan, Kara, and James McNeal. "How rural children in China consume media & advertising." *Young Consumers* 7.3 (2006): 39-50.

This Journal Article is brought to you for free and open access by the Department of Communication Studies at HKBU Institutional Repository. It has been accepted for inclusion in Department of Communication Studies Journal Articles by an authorized administrator of HKBU Institutional Repository. For more information, please contact [repository@hkbu.edu.hk](mailto:repository@hkbu.edu.hk).

**How rural children in china consume media and advertising**

Keywords: China – rural -- child – media use – advertising

Prof. Kara Chan\*

Department of Communication Studies

Hong Kong Baptist University

Kowloon Tong, Hong Kong

Tel: (852) 3411 7836 Fax: (852) 3411 7890

email: karachan@hkbu.edu.hk

Prof. James U McNeal

McNeal & Kids, Youth Marketing Consultant,

College Station, Texas, USA

email: mcnealjimu@yahoo.com

Paper published in the *Young Consumers* 7(3), 39-50

Emerald Literati Network Awards for Excellence 2007 Outstanding Paper Award

\*Please send all correspondence to this author.

Acknowledgement: The work described in this paper was fully supported by a Faculty Research Grant from the Hong Kong Baptist University (Project No. FRG/02-03/II-19)

Running head: *Rural Chinese children*

April 10, 2007

File: Young Consumers rural final.doc

## **How rural children in china consume media and advertising**

### **Abstract**

This study investigates household access to traditional and new media, media exposure, time spent on media and other activities, and attention to advertising among rural children in mainland China. A survey of 1,008 rural children aged six to 13 in four Chinese provinces was conducted in March 2003. Results indicate that 98 percent of rural Chinese children have access to television and 71 percent have access to children's books. Access to other broadcast and print media was under 50 percent. Most of the media consumption was in-home. Rural children spent most of the time playing with friends, study and watching television. Older children spent more time on media and other activities than younger children. Boys spent more time on electronic games, radio and videotapes than girls. Younger children paid more attention to television commercials than older children. Older children paid more attention to advertising in other media than younger children.

(150 words)

## **How rural children in china consume media and advertising**

### **Introduction**

The functions of communication in a society are surveillance, consensus, and socialization (Lasswell 1948). These communication tasks are carried out by different parties, depending on the different levels of development of a society. Table 1 shows a framework describing how different types of societies participate in the communication tasks (Schramm 1977). As China is rapidly transitioning from a traditional society to a modern society, it seems important to study how its young members use personal as well as mass media.

[TABLE ONE ABOUT HERE]

There are at least two reasons to study media usage of children in rural China. First, social and economic reforms in transitional economies in China have led to rapid increase in consumer incomes and demand for products (Batra 1997). The enormous population and rapid growth of consumption patterns have resulted in several market segments with distinctive profiles (Schmitt 1999). Among these markets segments, Chinese children represent an important market because of their growing purchases and their enormous influence on family purchase decisions (McNeal and Yeh 1997). Rapid commercialization of childhood as a result of economic restructuring, new affluence, and innovative retailing practices is not unique to China. However, the one-child policy

## *Rural Chinese children*

and the rapid economic development in China have enabled the process to unfold at a fast pace and across all social strata (Davis and Sensenbrenner 2000). 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). McNeal and Yeh (1997) found that Chinese children's overall index of influence on family purchase was about 68 percent, surpassing the 45 percent for children in U.S.

Second, there is a lack of study on media and consumption among children in rural China. The only one reported (Greenberg et al. 1991) was conducted in 1988, and we can expect a drastic change in availability and accessibility of media since then.

The current study attempts to investigate rural children's access to traditional and new media, how often they are exposed to various media, how much time is spent on media when compared with the time spent on other activities, and children's attention to various forms of advertising.

## **Literature review**

### **Media in China**

China's rapid change to a market-driven economy from one that is state-controlled is producing an average annual economic growth rate of around eight percent, far greater than that of any other large nations. And this is happening in a country that is still at least two-thirds rural. It is China's urban areas that are

producing most of its economic growth. For example, its ten largest cities contain only four percent of its population but account for approximately 22 percent of earning power and 19 percent of discretionary spending. Consequently, a major growth in media has occurred as a direct response to this attainment in consumer spending. New media, changing media, growing media are logical reactions to higher personal and household incomes. New media, such as new magazines and newspapers, provide satisfaction to those members of the population that are seeking information and entertainment. The fast development of television broadcasting has been most notable. The household penetration rate for television in 2002 was 99.5% (China Infobank, 2003). Television has become the major medium in China. Television audience reached 1.1 billion in 2003 (CCTV website, 2006). On average, urban households can access 15 channels while rural households can access six channels. In 2003, Chinese people spent on average 2.5 hours per day on television and among which 0.8 hour on CCTV (CCTV website, 2006). In 1999 there were eight national channels and 53 local channels broadcasting around ten hours of programs per day for children compared to only three channels 15 years earlier and virtually no specific programs for children (Bu 2001). A typical television schedule of China Central Television (CCTV, the state-owned national television station of China) in January 2003 showed that programs for children included one to two hours of cartoons in the

### *Rural Chinese children*

morning, and one to two hours of entertainment after school. The remaining hours when children might watch television, with their parents or alone, tended to have educational slant such as teaching values, English, singing and other school topics. On average national channels carry about 9.5 hours of children's programs and local channels carry about one hour of children's programs every day (Chan and McNeal 2004). Younger audiences like to watch cartoons, children's drama series, game shows and variety shows. Teenagers show more interest in sports programs and news programs (Bu 1998).

As for other major media, in 1995 there were around 104 radios per 100 Chinese households (China Statistical Yearbook 1996). By 1999 there were 296 radio stations that reached over 90 percent of China's households mainly targeting adults, usually with news, economic matters, and music, but there was some after-school programming of one hour or less that targeted children with both education and entertainment (China Statistical Yearbook 2000). Popular children's programs include *Small Trumpet* for young children aged five to seven, *Fire Pole* and *Rainbow Bridge* for elementary school children, and *439 Station* for secondary school children (Bu 2001).

Similar growth in other new media has also occurred, and today there are 2,111 newspapers in China and more than 8,000 magazines now published in China (China

### *Rural Chinese children*

Journalism Yearbook 2002). Owing to China's lack of a good national distribution system, most of the print media are of a local or regional nature. In 1997 there were 77 newspapers and 98 magazines targeting children (Bu 2001) with virtually all of them tending toward the educational with very little that children would likely perceive as fun for fun's sake. One tabloid that is popular with Chinese children in virtually all of the major cities of China is *Zhonguo Shaonian Bao* (Chinese Children's News). It has been published since 1951 and its national circulation in 1997 was 0.9 million (Bu 2001). It presents stories about heroes and heroines who are revered by children and their parents in order to teach values and love for the nation.

The commercial content among print media that target children can generally be described as sparse (McNeal and Ji 1999). In 1998 there were one or two advertisements, at most, per children's magazine or newspaper, and they were usually targeted at parents and typically focused on health and/or educational products. For example, in an issue of *The King of Story*, there was a full page advertisement for Signal toothbrushes that targeted both parents and children with a health message. Advertisements tend to be more prevalent in broadcast media. There is usually a 15-second commercial before and after each radio program and each television program that targets children. These ads are directed at parents and children, and those to children in around 88 percent of cases, present messages about foods and beverages,

### *Rural Chinese children*

such as *Wahaha*, a Chinese soft drink, while the remainder consists of messages about school supplies, video games, and toiletries such as Little White Rabbit toothpaste (McNeal and Ji 1999). Advertisements from Western marketers that target children are beginning to appear, but still constitute only a small portion of the money spent by advertisers to reach children. For example, in a content analysis of Beijing television commercials that target children (Ji and McNeal 2001), only ten of several hundred ads were for Western products and included McDonald's, KFC, and Oreo cookies.

### **Chinese children's media usage**

Studies of media usage in China, especially among its children, appear to be uncommon and certainly not comprehensive. In a survey of 529 high school students in Hangzhou, the capital of Zhejiang Province in the 1980s, it was found that 88 percent of the urban and 11 percent of the rural students had television sets at home. Television was children's most favored source of learning new information, and favorite television contents were drama among entertainment categories and sports among news topics (Research Group on Adolescence and Television 1984). In a survey of 600 sixth grade and tenth grade students in Beijing in 1988, on average young people spent 1.3 hours each day watching television. The time spent on radio, newspapers, and audiotapes were 0.8, 0.7, and 0.6 hours per day respectively (Greenberg et.al. 1991). In a survey of 2,288 Beijing children in 1998, the most

### *Rural Chinese children*

popular media were television, books and newspapers (Bu 1998). The media exposure in a week was: watching television (89 percent), reading books (73 percent), reading newspapers (73 percent), listening to cassette tapes (65 percent), listening to radio (61 percent), reading magazines (53 percent), playing with computers (32 percent), playing electronic games (14 percent) and surfing on the Internet (seven percent).

### **Media and children's consumer socialization**

The process of learning about products, their brands, and the retail outlets where they can be bought is called consumer socialization (Ward 1974). Theory says that children learn consumer behavior patterns from parents first and foremost, but also from other socialization agents; namely, peers, schools, stores, media, and the products themselves and their packages (Moschis 1987). Media's influence on children is mainly due to two dimensions — advertising and editorial/programming content (O'Guinn and Shrum 1997) — with advertising specifically intended to inform young consumers about products and encourage their purchase. Advertising media have probably received more attention in the research literature than any other consumer socialization agent (Moschis 1987). Both advertising and editorial/program content of the mass media provide children with knowledge and guidance in their consumer behavior development. In fact, it is often difficult to separate the influence. Another factor that makes media important as influencers is their ubiquity. They are

### *Rural Chinese children*

everywhere — in the home, in the child's room, at school, on the computer, on the way to school, in the car, on the bus. Finally, the amount of interaction with the media appears to be positively related to learning consumer behavior. That is, the more that children interact with the mass media, the more consumer socialization takes place (Moschis and Churchill 1978).

### **Methodology**

The data were collected in March 2003 in rural areas of four Chinese provinces including Heilongjiang, Hubei, Hunan, and Yunnan, by researchers from a national Chinese market research company, working under the supervision of the authors. Questionnaires were administered in classroom settings to grade one to six students in 12 elementary schools. The number of students in each school varied from 150 (in Heilongjiang) to 575 (in Yunnan). All the schools were situated in counties with population of less than 131,000. Researchers read out the questions and answers for grade one to two students in Mandarin while older students filled in the questionnaires by themselves. The following table shows the general profile of the four provinces in 2000 (China Statistical Yearbook 2001).

*Rural Chinese children*

	Heilongjiang	Hubei	Hunan	Yunnan
Location	Northern	Central	Mid-south	Western
Population (million)	36	60	63	42
GDP (billion yuan)	325.3	427.6	369.2	195.5
GDP per capita (yuan)	8977	7186	5835	4615
Provincial ad expenditure (million yuan)	1084	898	990	736
% of national ad expenditure	1.6	1.4	1.5	1.1

A draft questionnaire in Chinese was constructed based on previous studies (McNeal and Ji 1999; Bu 2001). The questionnaire was tested among ten rural children aged seven to 11 for clarity. It was revised, tested again on another six rural children and finalized. The questionnaire consisted of close-ended questions about household ownership of broadcast and print media, media exposure, amount of time rural children spent on various activities and attention to advertising, and four demographic questions.

*Household ownership of broadcast and print media* was measured by asking “Do you have the following items in your home now?” It consisted of 13 different household and media items. For each item, children were asked to choose from the answers “Yes” or “No” only.

*Media exposure* was measured by the question “In the past month, have you done any of the following things?” This question consisted of 12 items including broadcast media and print media.

### *Rural Chinese children*

*Amount of time spent on various activities* was measured by asking children “On average, how much time do you spend on the following activities every day?” Children were requested to select from five answers, “0 minute”, “1 to 60 minutes”, “61 to 120 minutes”, “121 to 180 minutes”, and “180 minutes or above”.

*Attention to advertising* was measured by the question “In the past month, how often do you attend to the following types of advertisements?” using a five-point scale (1 = never watched, 5 = watch nearly every time). Students could choose ‘don’t know’.

## **Findings**

### **Sample profile**

Altogether 1,008 children aged five to 13 participated in the study. There were nearly equal numbers of boys and girls. The average age of the respondents was 10.0 years (SD = 1.9 years). Forty two percent of the respondents were single children in their families. Boys were significantly more likely to be an only child than girls (Chi-square = 28.6,  $p < 0.001$ ). Fifty one percent and 34 percent of boys and girls were a single child respectively.

### **Data analysis**

To examine the differences and distribution for all variables among the age, gender and single-child factors, data analyses were performed in several ways. One-way analysis of variance was conducted for variables in interval scale. Chi-square analyses were conducted on the frequencies for nominal as well as ordinal level variables. For the age

### *Rural Chinese children*

variable, children were categorized into four age groups i.e. five to seven, eight to nine, ten to 11, and 12 to 13, representing the perceptual, early analytical, late analytical and reflective stages of John's (1999) model of consumer socialization respectively. Since a substantial amount of research has shown some varying cognitive development within the age range of eight to 11, we split the analytical stage into two sub-stages (early and late analytical). The relatively large sample size in this age range permitted this split.

### **Household media ownership**

Home ownership of media by age group is summarized in Table 2. Ninety-eight percent of the children surveyed had television sets at home. Three-quarters of the children had color television set and over 40 percent possessed black and white television sets. Twenty-seven percent of the children had more than one television set at home. Home ownership for all listed broadcast media (except television) was below 50 percent. DVD players and computers were not popular in rural China and less than ten percent of children had them at home. Children's books were popular in rural families while children's magazines and newspapers were not.

Home ownership of broadcast media was found dependent on age of children. Older children were more likely to have color television and a cassette player at home. Younger children were more likely to have black and white television. Home ownership of print media dramatically increased for children aged ten or above. Boys

### *Rural Chinese children*

and girls had similar ownership of broadcast and print media except radio, electronic game players and children's newspapers. Boys were more likely to have radio and electronic game players at home while girls were more likely to have children's newspapers at home. Being a single-child was more likely to produce ownership of DVD players and children's magazines at home.

[TABLE 2 ABOUT HERE]

### **Past month media exposure**

Media usage in the past month analyzed by age group is summarized in Table 3. Nearly all children surveyed watched television in the last month. Media exposure for VCD, radio and cassette tapes was medium. Less than one third of the children watched videotapes or played electronic games in the past month. Exposure to DVDs and the Internet was low with merely three percent of the children using the Internet in the past month. Rural children more often used print media. Past month exposure to print media was in general higher than the exposure to most of the broadcast media listed. Past month media exposure was similar to the home ownership of the media, except for VCD, videotapes, and DVD. For VCD, videotapes and DVD, past month media exposure was significantly higher than that of home ownership. This indicated some degree of share viewing of these relatively new media. Although six percent of the children had a computer at home, only three percent got access to the Internet. This

### *Rural Chinese children*

indicates that about at least half of the computers at rural homes were not connected to the web. Older and younger children were exposed to television similarly. Some differences in media exposure based on age were notable. Older children were more likely to use broadcast as well as print media. Such age difference was found more prevalent among print media than among broadcast media. Media exposure for boys and girls was similar in most of the media surveyed. Boys were more likely to watch VCDs, listen to radio, and play electronic games. Girls were more likely to read children's newspapers. Single children were more likely to watch videotapes and DVDs.

[TABLE 3 ABOUT HERE]

### **Time spent in media and other activities**

The time spent on media on an average day as well as other activities is shown in Table 4. Rural children spent most of their time playing with friends, doing homework/studying and watching television. Over 20 percent of the sample spent 61 to 120 minutes on each of these three activities. Doing housework and reading book occupied one to 60 minutes of respondents' time. Rural children spent little time on using Internet, watching videotapes, and playing electronic games.

[TABLE 4 ABOUT HERE]

Chi-square test was used to investigate the time spent on different activities by three

### *Rural Chinese children*

demographic variables (age, sex, and single child). Because of the small number of respondents checking the answer “180 or above minutes”, the last two categories were combined to give one group of “121 or above minutes”. The results are summarized in Table 5. Age group had the greatest impact on time spent on different activities. Eight out of 11 Chi-square tests were found significant at 0.05 level. Other children spent more time on the four activities and four media. Time spent on television, radio and Internet did not report significant age differences. The data did not show that media consumption replaced time spent with friends and performing own’s duties. Boys and girls spent different amount of time on media and other activities. Boys reported that they spent more time playing with friends and doing agricultural work than girls. Girls reported that they spent more time doing housework. Boys spent more time on playing electronic games, listening to radio, and watching videotapes than girls. Being a single child had no impact on time spent on media. However, single children reported that they spent less time on housework and agricultural work than non-single children.

[TABLE 5 ABOUT HERE]

### **Attention to advertising**

Table 6 shows rural children’s attention to different types of advertisements. Nearly all children know what television commercials are but probably not all children understand other types of advertisements. This could be inferred from the large

### *Rural Chinese children*

numbers of children reporting “don’t know” for the other five types of advertisements.

Children reported that they sometimes watched television commercials (mean = 3.1)

while they seldom attended to advertisements in all other media (mean less than 2.0).

Children aged five to seven reported that they always watched television commercials

while children aged eight to 13 watched them only sometimes. In general, children

aged 8 to 9 reported the lowest attention to all types of advertisements. Children aged

five to seven and children aged ten to 13 reported a similar degree of attention to

newspaper advertisements, radio commercials, outdoor billboards, and advertisements

on transport vehicles. Children aged five to seven gave less attention to magazine

advertisements than older children. Boys were more likely to watch television

commercials, listened to radio commercials, and read advertisements on transport

vehicles. Single child and non-single child caused no difference in attention to

advertising.

[TABLE 6 ABOUT HERE]

### **Discussion and conclusions**

China is a developing country with a rapidly changing media environment. The current study showed that television played a central part in the rural Chinese families.

Television ownership reached nearly 100 percent while the penetration of all other broadcast media was less than 50 percent. Nearly all children reported that they

### *Rural Chinese children*

watched television in the past month. Children's books were also important among Chinese families, especially those with older children. More than 85 percent of children aged ten to 13 reported that they owned children's books and read them in the past month. We suggest that the low ownership and consumption of children's newspapers and magazines among younger children can be attributed to two reasons. Firstly, there is a lack of print media that target younger children. A brief survey of existing children's newspapers and magazines in China showed that most of the children's print media was loaded with words and long stories, with little illustrations and pictures. So, younger children are unlikely to find them interesting. Secondly, the distribution network of print media in rural areas is poor. When one of the authors visited two villages in Chengdu, Sichuan in August 2003, there was no newsstand in the markets and we were told that newspapers could only be obtained through subscription at the post office or purchasing them at the nearby urban cities.

When compared with a national survey of media usage of urban children in 1996 (Table 7), we found that access to and media exposure of nearly all media among rural children was lower than that for their urban counterparts. The gap was even greater for the relatively new media such as videotapes, electronic games, and computers. As rural children did not use mass media as much as urban children, we expect that personal sources, including parents, teachers and peers, will play a more important role in

children's consumer socialization. Further research is needed to explore it.

[TABLE 7 ABOUT HERE]

The current study found consistent pattern in the use of media with age. Older children had higher exposure to media and also spent more time on media than younger children. This may be related with children's improved literacy and ability to process information with age. As we did not find older children spending less time on other activities, we expect that the extra time spent on media and other activities may come from another source, such as reducing sleeping time.

Rural boys and girls had similar access to media but they had quite different media preferences. Boys were more visual while girls were more verbal. This can be demonstrated by the difference in time spent on broadcast and print media. The results was consistent with previous results among urban Chinese children that boys preferred active and exciting media content, while girls preferred softer, more talkative formats (Greenberg et al. 1991). It was also consistent with findings among young people aged six to 17 in Britain and the Netherlands that boys spent more time on television and videos than girls (van der Voort et al. 1998).

Younger rural children reported that they always watched television commercials while older children only watched them sometimes. The general decrease in attention to television advertising with age was similar to that reported for urban children (Chan

*Rural Chinese children*

and McNeal 2002). However, older rural children gave more attention to radio as well as print advertisements. We are not certain why there were opposite trends in attention to television and other forms of advertising with age. Further research is needed to explore and explain this.

To conclude, rural children in China are in the television age. They have access to television and have high media exposure. However, they still spend much time on playing with friends and doing homework and agricultural work. The older children spend more time on broadcast as well as print media. This may reflect their increased interest in the outside world. This study reported for the first time media consumption by children in the rural areas of China. Because of differences in measurements and sample profile, we have some difficulty in comparing directly with their urban counterparts. According to the available data now, there is evidence that rural children lag behind their urban counterparts in terms of media exposure and access to media. The implication is that personal sources of information will still play a more important role in children's consumer socialization among rural children in China.

(4,037 words)

## References

- Batra, R. (1997) Marketing Issues and Challenges in Transitional Economies, *Journal of International Marketing*, **5**(4), 95-114.
- Bu, W. (1998) Children Programming: Who's the Target? *Journalism and Communication Research*, **5**(2), 13-24. (In Chinese).
- Bu, W. (2001) *The Influence of Mass Media on Children (Da zhong chuan mei dui er tong de ying xiang)*. Beijing: Xinhua Publishing House. (In Chinese)
- Chan, K., & McNeal, J. U. (2004) *Advertising to Children in China*. Hong Kong: Chinese University Press.
- Chan, K., & McNeal, J. U. (2002) Children's Perceptions of Television Advertising in Urban China. *International Journal of Advertising and Marketing to Children*, **3**(3), 69-79.
- China Infobank (2003). The penetration rate of household durables of Chinese family. Retrieved on 28 May from <http://www.chinainfobank.com/> (In Chinese).
- China Journalism Yearbook* (2002) Beijing, China: China Journalism Yearbook Publishing House.
- China Statistical Yearbook* (1996) Beijing, China: State Statistical Bureau.
- China Statistical Yearbook* (2000) Beijing, China: State Statistical Bureau.
- China Statistical Yearbook* (2001) Beijing, China: State Statistical Bureau.
- CCTV website (2006). Overview of CCTV. Retrieved on 24 April from <http://www.cctv.com/profile/intro.html>
- Davis, D. S., & Sensenbrenner, J. S. (2000) Commercializing Childhood: Parental Purchases for Shanghai's only Child. In D. S. Davis (Ed.), *The Consumer Revolution in Urban China* (pp. 54-79). Berkeley, CA: University of California Press.
- Greenberg, B. S., Li, H., Ku, L., & Wang, J. (1991) Young People and Mass Media in China. *Asian Journal of Communication*, **1**(2), 122-142.
- Ji, M. F., & McNeal, J. U. (2001) How Chinese Children's Commercials Differ from those of the United States: A Content Analysis. *Journal of Advertising*, **30**(3), 79-92.
- Jing, J. (2000) Food, Nutrition, and Cultural Authority in a Gansu Village. In Jing, J (Eds.), *Feeding China's Little Emperors* (pp.135-159). California: Stanford University Press.
- John, D. R. (1999) Consumer Socialization of Children: A Retrospective Look at Twenty-five Years of Research. *Journal of Consumer Research*, **26**(December), 183-213.
- Lasswell, H. (1948) The Structure and Function of Communication in Society. In L. Bryson (Ed.), *The Communication of Ideas* (pp. 37-51), New York: Harper.

*Rural Chinese children*

- McNeal, J. U., & Ji, M. F. (1999) Chinese Children as Consumers: An Analysis of their New Product Information Sources. *Journal of Consumer Marketing*, **16**(4), 345-364.
- McNeal, J. U., & Yeh, C. H. (1997) Development of Consumer Behaviour Patterns among Chinese Children. *Journal of Consumer Marketing*, **14**(1), 45-59.
- McNeal, J. U., & Yeh, C. H. (2003). Consumer Behaviour of Chinese Children, 1995-2002. *Journal of Consumer Marketing*, forthcoming.
- Moschis, G. P. (1987) *Consumer Socialization: A Life-cycle Perspective*. Lexington, MA: Lexington Books.
- Moschis, G. P., & Churchill, G. A., Jr. (1978) Consumer Socialization: A Theoretical and Empirical Analysis. *Journal of Marketing Research*, **15**(November), 599-609.
- O'Guinn, T. C., & Shrum, L. J. (1997) The Role of Television in the Construction of Consumer Reality. *Journal of Consumer Research*, **23**(March), 278-294.
- Research Group on Adolescence and Television (1984) High School Students and Television, In *China News Yearbook*, pp.296-300. (In Chinese)
- Schmitt, B. (1999) Consumer Segmentation in China. In R. Batra (Ed.) *Marketing Issues in Transitional Economies*, Boston: Kluwer Academic Publishers, 73-84.
- Schramm, W. (1977) The Nature of Communication between Humans. In W. Schramm and D.F. Roberts (Eds.) *The Process and Effects of Mass Communication*, pp.1-53, Revised Edition, Urbana: University of Illinois Press.
- van der Voort, T.H.A., Beentjes, J.W.J., Bovill, M., Gaskell, G., Koolstra, C.M., Livingstone, S., and Marseille, N. (1998) Young People's Ownership and Uses of New and Old Forms of Media in Britain and the Netherlands, *European Journal of Communication*, **13**(4), 457-477.
- Ward, S. (1974) Consumer Socialization. *Journal of Consumer Research*, **1**(September), 1-14.

Table 1 Communication tasks in different types of societies

Communication task	Traditional society	Modern society: interpersonal	Modern society: mass media	Modern society: media/individual
Share knowledge of environment	Watchman	Informed person	News media	News media and computer mediated
Socialize new members	Parent or tribal elder	Parent, older children, professional teacher	School system, publishing, educational media	School, parents, peer and media
Entertain	Dancer, ballad singer, storyteller	Storyteller, artists of all kinds	Entertainment industry, including entertainment media and publishing	Entertainment media (mass and personalized)
Gain consensus, persuade, control	Tribal chief or council	Influential leader, salesman, agitator	Government and all the organizational and media structure for forming public opinion and exerting social control, including advertising and propaganda	Government and media structure

Source: The first four columns: Schramm (1977)  
 The last column is the authors' extension of the model.

Table 2 Household ownership of broadcast and print media

	Total	Age group (%)			Chi-square	
		5-7	8-9	10-11		12-13
<i>Broadcast media</i>						
BW or Color TV set	98	99	96	99	100	14.7**
Color TV set	75	64	71	78	79	13.2**
BW TV set	44	52	42	39	48	7.9*
Cassette player	46	42	40	45	55	15.6**
VCD player	45	42	41	49	46	5.3
Radio	43	36	40	43	48	6.0
Electronic game player	27	22	27	30	25	3.1
Video cassette recorder	20	21	21	22	16	3.8
DVD player	8	10	6	11	6	7.8*
Computer	6	6	7	8	4	4.4
<i>Print media</i>						
Children's books	71	52	50	84	86	145.3***
Children's newspapers	39	27	30	41	51	34.1***
Children's magazines	30	13	16	32	51	100.2***

\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.0005$

Table 3 Media exposure in the past month

	Total	Age group (%)			Chi-square	
		5-7	8-9	10-11		12-13
<i>Broadcast Media</i>						
TV	99	98	98	99	99	0.9
VCDs	56	47	48	58	65	19.7***
Radio	50	50	46	54	50	4.3
Cassette tapes	50	45	42	51	59	17.0**
Video tapes	32	22	25	42	32	24.5***
Electronic games	30	21	31	37	25	14.4**
Movies	18	26	19	20	11	16.0**
DVDs	14	11	9	22	13	24.0***
Internet	3	1	1	4	4	0.1
<i>Print Media</i>						
Children's books	73	56	52	87	86	139.1***
Children's newspapers	44	29	31	49	56	50.0***
Children's magazines	33	16	17	38	54	104.9***

\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.0005$

*Rural Chinese children*

Table 4 Time spent tails on media and other activities (in minutes)

	0	1-60	61-120	121-180	180+	Total*
	%	%	%	%	%	%
<i>Activities</i>						
Playing with friends	3	55	29	9	5	101
Study	1	64	28	5	2	100
Housework	10	78	10	1	1	100
Agricultural work	59	25	10	4	2	100
<i>Media</i>						
TV	3	70	20	5	2	100
Books	31	54	12	2	1	100
Newspapers/magazines	56	38	4	1	0	99
Radio	61	37	2	0	0	100
Videotapes	78	15	6	1	0	100
Electronic games	77	19	4	1	0	101
Internet	97	2	1	0	0	100

\* may not add up to 100 due to rounding

*Rural Chinese children*

Table 5 Summary of Chi-square tests of time spent on media and other activities by age group, by sex, and by number of child per family

	Age group	Sex	Single child
<i>Activities</i>			
Playing with friends	** (older children) @	*** (boys)	n.s.
Study	*** (older children)	n.s.	n.s.
Housework	* (older children)	** (girls)	** (non-single child)
Agricultural work	*** (older children)	** (boys)	*** (non-single child)
<i>Media</i>			
TV	n.s.	* (boys)	n.s.
Books	*** (older children)	n.s.	n.s.
Newspapers/magazines	*** (older children)	n.s.	n.s.
Radio	n.s.	*** (boys)	n.s.
Videotapes	** (older children)	* (boys)	n.s.
Electronic games	* (older children)	*** (boys)	n.s.
Internet	n.s.	n.s.	n.s.

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

@ Demographic group in bracket spent more time

Table 6 Attention to advertising

	N	Mean@	S.D.	Age group				F value
				5-7 a	8-9 b	10-11 c	12-13 d	
TV commercials	1005	3.1	1.0	3.5 <sup>bcd</sup>	3.1 <sup>a</sup>	3.1 <sup>a</sup>	3.0 <sup>a</sup>	5.3***
Newspaper ads	854	1.9	1.0	1.8	1.6 <sup>cd</sup>	2.0 <sup>b</sup>	2.0 <sup>b</sup>	8.0***
Radio commercials	900	1.6	0.8	1.6	1.5 <sup>cd</sup>	1.7 <sup>b</sup>	1.7 <sup>b</sup>	3.8**
Billboard ads	713	1.9	1.0	1.8	1.6 <sup>cd</sup>	2.1 <sup>b</sup>	2.0 <sup>b</sup>	12.8***
Ads on transport vehicles	741	1.8	1.0	1.9	1.5 <sup>cd</sup>	2.0 <sup>b</sup>	2.0 <sup>b</sup>	9.0***
Magazine ads	790	1.6	0.9	1.4 <sup>d</sup>	1.4 <sup>cd</sup>	1.7 <sup>b</sup>	1.8 <sup>ab</sup>	10.5***

@ Measured on a 5-point scale (1 = never watched, 5 = watched almost every time) Notes:

Superscripts indicate differences between groups, Tukey HSD paired comparisons,

p<0.05

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

*Rural Chinese children*

Table 7 Comparison of rural and urban children's access of media and media usage

	Ownership Rural children (%)	Ownership Urban children in 1996 (%)	Past month exposure Rural children (%)	Past week exposure Urban children in 1996 (%)
TV	98	99	99	82
Cassette player/tape	46	92	50	74
VCD player/tape	45	Not available	47	Not available
Radio	43	88	50	61
Electronic game player	27	60	30	12
Video cassette recorder/tape	20	57	32	Not available
DVD player/DVD	8	Not available	14	Not available
Computer/Internet	6	21	3	21
Books	71	Not available	73	88

Source of data for urban children: Bu (2001, p. 100, 105); N = 3173