Children’s Prime-Time Food Commercials in China: A Content Analysis of National and Provincial TV Channels

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This thesis titled
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and Provincial TV Channels

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ABSTRACT

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Children’s Prime-Time Food Commercials in China: A Content Analysis of National and Provincial TV Channels

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This study is aimed at probing children’s prime-time food commercials on China’s national TV channels (CCTV-1 and CCTV-Children) and provincial channels (SXTV and HNTV) with particular emphasis on the food product types, promotional claim types, and other content that may influence children’s dietary habits. A content analysis of 761 food product commercials within children’s prime-time programs during the first and last week of September 2009 was conducted. It was found in the study that, compared to provincial channels, China’s national channels were more likely to promote healthier food products and eating locales. Provincial channels tended to broadcast more commercials during children’s prime time, and were more inclined to center on promoting nutritional supplements and food products containing high calorie, eating snacks with little nutritional value occasions, away from home eating locales as well as underweight characters. Possible reasons for the differences and several implications from this study were discussed.

Approved:

____________________________________________________________

Hong Cheng

Professor of Journalism
ACKNOWLEDGMENTS

I am still able to recall that class, when Dr. Hong Cheng asked several international students to write the word “advertisement” on the blackboard in other languages they know besides English. I was one of them, writing every stroke with great pride and respect for my own culture. Minutes later, we had “广告” (‘advertisement’ in Chinese), “Anzeige” (in German), “광고” (in Korean), and “Publicidad” (in Spanish) —all with the same meaning, presented in different languages. The small but intriguing section of that class vividly broadened my understanding toward advertising—a global industry, as well as a way of communication imprinted with diverse cultures. This class also sparked the idea for my thesis—children’s advertising in China. I would like to take this opportunity to thank Dr. Cheng, my committee chair and mentor. His valuable guidance and unflagging support always give me strength and courage to overcome the difficulties during my two years’ study in the E. W. Scripps School.

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Please allow me also to express my sincere gratitude toward my parents, for the confidence and belief they have in me; for the wisdom and strength they have been giving me; and, most of all, for their unconditional love, which has been flowing in my life for the past 24 years.
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CHAPTER 1: INTRODUCTION

Several studies have found that TV food commercials are linked to children’s unhealthy food choices and the resultant childhood obesity in Western countries (e.g., French & Story, 2001; Gamble & Cotugna, 1999; Gortmaker et al., 1996; Kotz & Story, 1994), but few studies have ever focused on the content of children’s prime-time TV food commercials in China.

In a landmark study of children’s prime-time TV food commercials in China, Cheng et al. (2009) examined the content of food commercials on China’s national channels. The study found that due to the strict government regulation and the industry’s self-regulation, China’s national channels—CCTV-1, CCTV-7, and CCTV-Children—tend to broadcast healthier TV food commercials to their audience of children than do their German and U.S. counterparts.

To answer the question of whether China’s provincial TV channels keep pace with national channels, and whether they provide similar content in prime-time food commercials directed to children, this thesis was designed to compare the content of children’s prime-time food commercials appearing on China’s provincial channels and national channels.

To address this question, a sample of commercials from national and provincial TV channels were examined. China Central Television (CCTV) is the sole national TV network in China. CCTV channels have a penetration of more than 98% of TV viewership in China, the largest in the country (Media Yearbook, 2007). Chinese TV viewers tend to perceive CCTV programs as authoritative and high in quality, because of the status of the national network and its government support (Huang, 2001). As a result, CCTV maintains a higher reputation as compared to provincial TV channels in general (Zhang, 2002). In recent years, CCTV took an audience share of around 30%
in the country ("CCTV," 2009), ranking first among all of the Asian media, and seventh of Asia’s 500 most valuable brands ("Asia’s 500," 2010).

Provincial TV networks feature many distinctive programs adapting to specific customs and characteristics of their regions. For example, The Jilin channel hosts humor programs and serial plays, based on the common characteristics of humor shared by people in Jilin, a province in Northeast China ("Local Characters," 2007). The channel of Hunan, a province in Central China, features entertainment programs, based on the relatively well-developed entertainment industry in this region ("HNTV," 2007). Additionally, some provincial channels even produce programs in dialects to cater for the needs of viewers not able to understand Mandarin, as well as to maintain regional cultural diversities ("Dialect Programs," 2009).

Purpose and Rationale

This study examined children’s prime-time food commercials in China’s national TV channels and provincial channels, with particular emphasis on the food product types, promotional claim types, and other content that may influence children’s dietary habits.

As a result of the rising prevalence of childhood obesity worldwide, “globesity” has become a heated public-health issue that calls for attention from the whole society ("Globesity," 2004). Among reasons offered as explanations for this crisis, researchers, who have identified a statistically significant correlation between media use and childhood obesity, have argued that the time children spend watching TV displaces the time they formerly spent on physical activities and that food commercials advertised on television help to foster children’s unhealthy eating habits ("The Role," 2004).
According to statistics from UNICEF (United Nations Children's Fund), the population of children (under 18 years old) in China reached 340 million in 2008 ("UNICEF," 2008). Holding the second largest population of children in the world after India, China offers a spectacular children’s market to both global and domestic marketers. According to data reported by Wang (2009), Chinese children were exposed to more than 500 commercials during prime-time TV programs weekly; aside from that, among commercials targeted to children, promotions of food and beverages occupied the largest proportion of these commercials.

Cheng et al.’s (2009) study on China, Germany, and the United States found that a relatively healthy product—“dairy food”—was the most advertised food type on China’s national channels. Controlled by the government, China’s national channels are subject to strict censorship and, therefore, might be more sensitive about children’s advertising content (Cheng et al., 2009). On the other hand, Chan and McNeal (2004) once found that local TV channels in China, especially those in less developed regions, experienced weaker regulation of TV commercials in general. However, Chan and McNeal’s (2004) study did not focus on TV commercials for children’s food.

China’s provincial TV system now consists of 188 TV channels (Media Yearbook, 2007). In terms of children’s prime-time TV food commercials, do provincial TV channels advertise healthy food products as frequently as do national channels or not? This unanswered question was addressed in this study.

**Childhood Obesity**

According to the World Health Organization’s latest projections released in 2005, globally, at least 20 million children under five years of age were overweight
Overweight and obesity can lead to serious health consequences. For example, cardiovascular disease, mainly seen as heart disease and stroke, has already become the world’s number one killer, causing more than 17 million deaths each year. Other than this, type 2 diabetes, Musculoskeletal disorders, hypertension, cancer, premature death, depression, and other diseases are also linked to increases of BMI (Body Mass Index), a commonly used index in categorizing overweight and obesity (“WHO,” 2005).

The trend of childhood obesity is not only obvious in developed countries such as the United States and the United Kingdom, but also has become a health challenge in developing nations like China. Currently, 20% of children under seven years old in China are overweight and nearly another 7% are obese. This represents a rapid increase of 156% in the numbers of obese children in the past 10 years (“China’s Child,” 2008).

Experts have pointed to a range of causes for the rise of childhood “globesity,” which include escalating purchases of extra energy-dense and nutrient-poor foods (with excessive sugar and saturated fats), as well as insufficient physical exercises (Kant & Schatzkin, 1994). Among these factors, media use, especially TV viewing, is accused of one of the major factors to nurture this trend (“The Role,” 2004).

Advertisement to Children in China

Children have become a major influence on household expenditure nowadays (McNeal & Yeh, 1997). Many Chinese children, spoiled as “little emperors” at home (“China’s Child,” 2008), have excessive discretionary money (Langer, 2004) and are loyal media users. They constitute a tantalizing market for advertisers (Chan & McNeal, 2004).
One-child Policy

To mitigate social, economic, and environmental problems, the one-child policy has been deployed in mainland China since 1979. Other than several exemptions, the national policy restricts the number of children in each family to one (“One-child Policy,” n.d.). Children who were born under this policy are generally considered overprotected as a result of excessive attention paid to them by their parents and grandparents (“China’s Child,” 2008).

Goll (1995) described this generation’s spending power as “six pocket syndrome” where “six” stands for the sum of two parents and four grandparents. The “4-2-1 indulgence formula” symbolizes four grandparents and two parents indulging a single child. In addition to exerting influence on relatives, children also hold more discretionary money to spend on things they find attractive (Langer, 2004). As a result, the one-child policy contributes to the lucrative children’s market in China.

Household Purchase

Children have a notable influence on household expenditures. Chinese children, generally the only child of each family, dominate more than 68% of total family expenditure (McNeal & Yeh, 1997). According to McNeal and Zhang (2000), children who lived in large cities of China directly affected more than $60 billion in household purchases annually, including $50 billion of foods, $5 billion of clothing, $3 billion of stationery products and school supplies, and $3 billion of entertainment. Given the fast-growing household purchasing power (Population Reference Bureau, 2003), scholars concluded that children’s purchasing power in China cannot be ignored (Langer, 2004).
Chinese Children’s Media Use

According to Chan and McNeal (2004), Chinese children preferred TV viewing (97.3%) to other types of media use. On average, children viewed 17.2 hours of television weekly, with 1.8 hours on weekdays and 4.2 hours on weekends.

Moreover, children consider television as the most important source in accessing new product information, as compared to other media and relatives or friends around them. Chan and McNeal (2004) argued that Chinese children’s heavy TV use was reducing the reliance on traditional interpersonal sources of product information. Chinese children who were born in this current generation provide advertisers with more opportunities to achieve increased sales through the medium of television, because children are more than willing to pay for the products they see on television (Chan & McNeal, 2004).

Why Compare Commercials between the TV Channels at National and Provincial Levels?

Located in Beijing, the national capital, CCTV is strictly censored by the government (Heberer & Schubert, 2009). Because of this control, the CCTV network reflects the interests of the Chinese government and represents the nation to the world.

Provincial TV stations are different. Most of them lack sufficient capital and media talents. It has been argued that excluding three relatively highly developed tier 1 cities—Beijing, Shanghai, and Guangdong—censorship toward commercials might be less strictly implemented at the local TV level (Chan & McNeal, 2004).

Statistics also provided evidence on the importance of examining both levels of TV channels rather than simply focusing on the national channels. Currently, CCTV, China’s sole national TV network, owns 22 channels (“CCTV,” 2010). In terms of the
provincial level, there are 188 TV channels (Media Yearbook, 2007). Each province, operates its own TV station. Except for sharing the same programming of National News Serials produced by CCTV-1, provincial channels deliver distinctive programs of their own. Since they also reach a large amount of the population and exert an educational influence on the audience, the power of provincial TV channels should not be ignored when the overall content of commercials in China is explored.
CHAPTER 2: RELATED STUDIES

Bandura’s (1976) social learning theory, Gerbner’s (1969) cultivation theory, and other relevant prior studies about media influence on children’s learning lay an intellectual foundation for this study. Research questions and hypotheses were brought forward based on the review of literature.

Social Learning Theory

*Social Learning and Imitation*

Neal Miller and John Dollard (1941), pioneers of social learning theory, defined learning theory in its simplest form, as “…the study of the circumstances under which a response and a cue stimulus become connected. After learning has been completed, response and cue are bound together in such a way that the appearance of the cue evokes the response” (p. 1).

Arguing that “the connection between a cue and a response can be strengthened only under certain conditions,” Miller and Dollard (1941) believed that learning occurred only when observers were motivated to make the response and positively reinforced for having responded in the presence of the cue. To put it in another way, for the purpose of learning, observers must “…want something (drive), notice something (cue), do something (response), and get something (reward)” (p. 2).

Early learning theory described a form of stimulus-response learning, assuming that learners performed certain behaviors, shaped in accordance to the reinforcement learners actually received. However, the emphasis on the operation of reinforcement confined the ability of the theory in covering and explaining the conditions when people learn from the mass media (Baran & Davis, 2009).
Contemporary Social Cognitive Theory

Developed on the basis of Miller and Dollard’s (1941) social learning and imitation, contemporary social cognitive theory (social learning theory) argues that much social learning occurs through observing the behavior of others (Bandura, 1976). Social learning theory contains both behavioristic factors and cognitive factors, and differentiates learning through observation and the actual imitation after observation. Bandura (1976) noted that, except for operant manner, behaviors could be learned simply through observation.

Symbolic Modeling

Social learning theory states that “…modeling influences operate principally through their informative function and that observers acquire mainly symbolic representations of modeled events rather than specific stimulus-response associations” (Bandura, 1971, p.16).

Investigations of symbolic modeling indicate that matching performances could be attained without the necessity of “… requiring the physical presence of a model if the essential features of his behavior are accurately depicted either pictorially or verbally” (Bandura, 1971, p. 43). Bandura (1976) considered visual media—television, films, etc. — an “influential source of social learning” due to the “abundant and varied symbolic modeling provided” (p. 39). It was found in several studies that from sources of filmed and televised modeling, children and adults attain new attitudes, emotional responses, and fashioned conduct (Bandura, 1973; Liebert, Neale, & Davidson, 1973). In his study, Bandura (1976) concluded that “in view of the efficacy of, and extensive public exposure to, televised modeling, the mass media play an influential role in shaping behavior and social attitudes” (p. 39).
Contemporary social cognitive theory posits that individuals are able to acquire symbolic representations of behaviors performed by media characters; nevertheless, they need not actually be rewarded for imitating these behaviors depicted on the screen. Vicarious reinforcement is brought forward to stand for the kind of reinforcement acquired by the viewers through observation instead of direct experience (Baran & Davis, 2009). Television provides the viewers with great chances to model the presented reinforced behaviors on screen (Lears, 1992). For example, in TV commercials, food and restaurant marketers have increasingly tried to impress their young viewers by mentioning a toy premium, a good flavor, or the great fun the actors/actresses gained through purchasing and consuming their products. (Reece & Rifon, 1999; Sokol, 2000).

Cultivation Theory

Developed by George Gerbner during the 1970s, cultivation theory holds that “television ‘cultivates’ or creates a world view that, although possibly inaccurate, becomes the reality simply because we, as a people, believe it to be the reality and base our judgments about our own, everyday worlds on that ‘reality’” (Baran & Davis, 2009, p. 324).

Media tend to nurture the acceptance of values and attitudes they create. Long-term exposure cultivates the outlooks, beliefs, and agenda that match the world forged by the media; however, the “reality” is not able to generalize the real world (Gerbner, 1969; Signorelli & Morgan, 1990).

Gerbner et al. (2002) argued that if viewers were born into the symbolic world, they are not likely to avoid exposure to recurrent patterns of various media. The patterns of programming, “settings, casting social typing, actions, and related
outcomes” penetrating throughout programs, contribute to define the media reality (p. 45).

Cultivation theory posits that given its considerable pervasiveness and exposure, televisions is considered to be “a force of enculturation,” instead of a simple medium providing information and entertainment (Lears, 1992). Television penetrates throughout the whole world, all social classes, and even age groups (Gerbner & Gross, 1976). Joshua Meyrowitz (1985) described television’s early influence toward children, as enabling children to see the world before they are permitted to cross the street.

Cultivation occurs in two ways—mainstreaming and resonance. Compared to a global “melting pot,” television has a remarkable function of mainstreaming in status quo. Mainstreaming is defined as “…the process, especially for heavier viewers, by which television’s symbols monopolize and dominate other sources of information and ideas about the world” (Baran & Davis, 2009, p. 328). To simplify, television allows viewers to absorb differences in outlooks and behaviors derived from other factors and to converge those viewers into the universal views of the television world (Gerbner et al., 2002). The other way to cultivate is resonance, meaning when viewers find that scenes on television resonate with their daily realities, they tend to rely more on what they see on television (Baran & Davis, 2009, p. 328).

Begun in the 1970s and 1980s, cultivation analysis first dealt with violence-related assumptions (Gerbner et al., 2002). Through a series of questions, the Mean World Index, Gerbner et al. (1980) found that television tends to depict the world as a mean and dangerous place in which to live when long-term TV exposure is taken into account. Since then, cultivation analysis has been employed to examine TV impacts
of other fields as well, for instance, the portrayal of women on television (Steeves, 1987), sex roles attitudes/behaviors (Lovdal, 1989; Morgan, 1987; Morgan & Rothschild, 1983), gender and work (Signorielli, 1989), television and family values (Signorielli, 1991), values (Potter, 1990), social stereotypes (Tan, 1982), and nutrition and body image (Cohen, 2006), etc.

Previous studies have found that television commercials tend to promote unrealistic body images (Harrison & Cantor, 1997). The prevalence of slim figures shown on television contributes to the notion of ideal body image (Strasburger, 2004). According to Hammond, Wyllie, and Casswell (1999), obese characters are less frequently shown on television than in the general population. Furthermore, cultivation occurs when TV content implies, in this case, a contradictory relationship between calorie intake and fitness (Cohen, 2006). Kaufman (1980) described the two parts of this contradiction as “one suggests that we eat in ways almost guaranteed to make us fat; the other suggests that we strive to remain slim” (p. 45). Likewise, researchers have also done much work to reveal the link between ideal thin body images portrayed on television, and the resultant body dissatisfaction and eating disorders (Field et al., 2001; Kilbourne, 1999; Levine, 2001; Thompson, 1999).

Children’s Learning through TV Commercials

Children learn information from television, which is also seen as an influential source of encountering new products. What do children inevitably learn from televised food commercials? In a positive way, from those pro-nutritional commercials, children may learn how nutritional substances (vitamins, mineral elements, etc.) work, and accept this as a positive influence on how to maintain healthy physiological functions. However, born in the modern era, children are mostly
surrounded by junk foods, which contain low nutritional value, but are underscored as good flavor or exaggerated to be rich in nutrition by advertisers (Harrison & Marske, 2005).

*Children’s Understanding toward TV Advertising*

Researchers found that young children have limited ability to understand the concept of advertising (e.g., Gunter, Oates, & Blades, 2005). Young children who are under six years old are considered to lack the capacity to distinguish between TV commercials and programs (Bjurstrom, 1994; Levin, Petros, & Petrella, 1982). There are also concerns that children, not as experienced as adults in distinguishing the selling purpose of commercials, are more susceptible to the influence of commercials. Thus, children are more willing to internalize the message conveyed in commercials (Strasburger, 2004).

Although teenagers are deemed less vulnerable than young children in understanding the intent of commercials, Strasburger and Wilson (2002) contended that television tends to influence teens using the power of “super peers”—derived from *opinion leaders*—who affect the way they deal with daily issues. The concept of *opinion leaders* was first brought up by Paul Lazarsfeld et al. (1944). According to Lazarsfeld and Katz (2009), *opinion leadership* bridges mass media information to other people. *Opinion leaders* might influence people who belong to the same primary groups—interests, demographics, social status, etc.—with them. And these *opinion leaders* are capable of influencing people with their behaviors and ideas (Katz, 1957).

A previous study also showed that, as a result of the misleading nutritional emphasis of the commercials, 70% of 6-to-8-year-old children were convinced that eating fast food of certain brands was healthier than eating home prepared food.
(Donahue, Meyer, & Henke, 1978). Signorelli and Staples (1997) noted that, when asking fourth and fifth graders to pick up the healthier items among the given foods, heavy TV users were more inclined to choose the less healthy foods. Hawkes (2005) concluded that, contrary to encouraging children to develop healthy eating habits, advertisers are using mixed messages to instill children with the concept of “good diet and nutrition.”

*Childhood Obesity and TV Use*

The correlation between TV viewing and children’s overweight status has been examined since Gussow (1972). Relative studies underpinned this foundation by arguing that TV viewing was associated with children’s unhealthy eating habits and inaccurate concepts of food and nutrition (Signorelli & Lears, 1992; Signorelli & Staples, 1997). Moreover, by constantly showing normal or underweight actors eating high-calorie foods in commercials, advertisers were blamed for sending misleading health messages to their audience of children (Kaufman, 1980).

*Childhood Obesity and TV Viewing Time.* Previous studies have found a positive correlation between children’s TV viewing time and overweight status—a link between the number of hours viewed and the consumption of advertised foods (Gamble & Cotugna, 1999).

According to a survey of children aged 10 to 15 in the United States, scholars found that children who watched five hours of television per day were 4.6 times more likely to be overweight than those children who had a daily television viewing time of zero to one hour (Gortmaker et al., 1999). Similarly, Anderson et al. (1998) found that children who watched the most television had greater BMI values than those who watched television for fewer than two hours per day. Zutphen et al. (2007) found that
overweight or obese children were more likely to have longer TV viewing time than healthy weight children. To make this correlation more convincing, several studies have successfully affected children’s body weight by reducing TV viewing hours (Robinson, 1998; Zutphen et al., 2005).

**Children’s Food Choice and TV Viewing.** Previous studies have revealed that TV viewing was related to the number of food products requested by children (Chamberlain, Wang, & Robinson, 2006; Marquis, Filion, & Dafenais, 2005). The most prevalent food products advertised on TV are those snacks or beverages with high sugar, sodium, fat, or calories (Story & Faulkner, 1990). Scholars disclosed that the amount of TV viewing was significantly related to children’s caloric intake (Taras et al., 1989). French and Story (2001) found that 7th to 12th graders who were fond of fast food spent more time watching TV compared to other peers. Likewise, middle-school children who watched more television were inclined to purchase more soft drinks (Giammattei et al., 2003).

As opposed to the magnificent proportion of commercials that unhealthy foods represented in TV advertising, Kunkel and Gantz (1992) found that healthy foods simply represented 2.8% of all children’s food commercials. Halford et al. (2007) found a significant relationship between children’s commercial viewing and the intake of high-calorie foods; however, the intake of fruits was not significantly related. A previous study even showed that children’s fruit and vegetable purchasing was found to be negatively correlated with TV viewing (“The Role,” 2004).

**Characters’ Body Image and Children’s Eating Habits.** Advertisers’ presentation of unrealistic ideal body images on the screen is linked to children’s unhealthy eating habits. Although eating food with high calories, high fat, high sugar, and low fiber,
commercial characters can remain slender and healthy (Byrd-Bredbenner & Grasso, 2000). Children are more likely to be misled to believe that, no matter how much they eat, they would stay the way they were or look better as the commercial characters appear to be (Harrison & Marske, 2005).

Although Chinese children’s social learning from national and provincial food TV commercials and the cultivation of those advertisements on Chinese children cannot and are not intended to be examined directly in this content analysis. The theories and prior studies reviewed above have clearly indicated the need for monitoring TV food commercials—in this case, in China, a fast-emerging and drastically changing market in the world today.

Research Questions and Hypotheses

In a study of children’s advertising conditions in China, Chan and McNeal (2004) reported that the development of advertising in China was highly unbalanced and differed by regions. Beijing, Shanghai, and Guangdong were the three largest advertising markets in China, responsible for half of the total advertising expenditures in the country (Media Yearbook, 2007). CCTV-1, located in Beijing, was found to advertise 10 to 20 times more commercials during children’s programming than did any city-based channels. Furthermore, it was noticed that advertising clutter in children’s programs of China’s national channels was a problem, but was not a problem for many local channels (Chan & McNeal, 2004). Based on this study, H1 was formulated:
**H1:** There would be more commercials during children’s prime-time programs on the two national channels—CCTV-1 and CCTV-Children, than the two provincial channels—SXTV and HNTV under study.¹

Given the food content categories from previous studies (Byrd-Bredbenner & Grasso, 2000; Cheng et al., 2009; Story & Faulkner, 1990), this study was focused on eight food categories based on the eating habits of the Chinese people. The first research question was intended to identify the most advertised food product type on Chinese national and provincial TV channels under study.

**RQ1:** What types of food products were advertised most frequently on the two national TV channels and the two provincial TV channels in China during children’s prime-time programs?

Based on nutritional promotional claims categories established from related studies (Byrd-Bredbenner & Grasso, 2000; Cheng et al., 2009), four subcategories were examined in this study: 1) consumer-related claims included messages related to flavor, convenience, economy, quality, homemade, novelty, etc.; 2) general health and nutrition claims included messages related to the provision of health benefits, prevention of illness, provision of energy, provision of balance/variety, provision of professional recommendations, etc.; 3) specific nutrients content claims included statements asserting that the product contains vitamins, minerals, protein, complex carbohydrates, unsaturated fat, grain/bran, fiber, vegetable, fruit, etc.; 4) minimizing/eliminating-specific-substances claims included statements asserting that the product contains low fat, cholesterol, sugar, sodium, caffeine, or calories; is

¹ For more information on these two provincial Chinese TV channels, please refer to the next chapter.
pure/natural; or is light and additive free. Thus, the following research question was asked:

**RQ2:** What promotional claims were used most frequently in the children’s prime-time commercials on the two national TV channels and the two provincial TV channels in China under study?

According to Lears (1992), poor eating habits result in inadequate nutrients intake. Using the Bad Eating Habits Index, Lears found strong statistical support for the positive relationship between TV viewing and poor eating practices. Additionally, Kaufman (1980) claimed that television frequently shows people eating for fun, for emotional and social intents rather than the purpose of satisfying hunger. In this thesis, the category of eating occasions was expanded from Harrison and Marske’s (2005) study, which revealed that in children’s TV food commercials, food products were more frequently shown to be eaten at snack time rather than at regular meal time.

**RQ3:** What eating occasions were portrayed most frequently in the children’s prime-time commercials on the two national TV channels and the two provincial TV channels in China under study?

In a study examining the well-being conditions of children, through a series of measurements, the authors claimed that food eaten at home is less dense in fat; lower in cholesterol, sodium and calories; and higher in fiber, calcium and iron, than away from home foods (Lin, Guthrie, & Frazao, 2001). Harrison and Marske (2005) noted that, in programs mostly children watched, commercials are more likely to encourage children to eat away from home rather than at home.
Given the differences between China’s national and provincial TV stations, China’s national TV channels received stricter censorship on advertisement content and were found to advertise nutritious products more often (Chan & McNeal, 2004; Cheng, et al., 2009). H2 was, therefore, posited as follows:

**H2**: Home-eating locales would be shown more frequently in the children’s prime-time commercials on the two national TV channels than on the two provincial TV channels in China under study.

Cheng et al. (2009) criticized the widespread use of normal-weight characters in Chinese, German, and U.S. TV commercials is potentially giving children the wrong impression that they could eat high-calorie foods whenever they want without gaining weight. Given the “appeal” of normal-weight characters, provincial Chinese TV channels may tend to carry commercials with such characters as frequently as did the national TV channels in China, which were found to have only featured normal-weight characters in their commercials (Cheng et al. 2009), the last hypothesis of this study was formulated as follows:

**H3**: Under/normal-weight characters would be shown in children’s prime-time commercials on the two provincial TV channels in China as frequently as on the two national channels under study.
CHAPTER 3: METHOD

Content Analysis

Content analysis provides researchers with an efficient way of examining media content (Wimmer & Dominick, 2011). As early as in 1952, Berelson defined content analysis as “a research technique for the objective, systematic, and quantitative description of the manifest content of communication” (p. 204). Berelson (1952) also pointed out that more often than not, the purpose of conducting content analysis is to explore the communicators’ “purposes, motives, and other characteristics” that are shown in the media content” (p. 204).

Sample Collection

CCTV-1, CCTV-Children, SXTV, and HNTV were selected for data collection. CCTV-1 and CCTV-Children are two channels from CCTV, the sole national TV network in China. CCTV-1, a general channel with programs fit for all age groups, is “the first and the most influential TV channel in China” and “the flagship of TV media in China” (“Flagship,” 2009). CCTV-Children, the “first professional channel oriented toward juveniles and children” in China (“Generous Gift,” 2009), regularly broadcasts cartoons, intellectual programs, entertainment programs, children’s serials, etc., and has been widely welcomed by children throughout the country with “its audience records broken time by time” (“Generous Gift,” 2009).

As representative of China’s provincial TV channels, channels of SXTV in Shanxi and HNTV in Hunan were selected. According to the Gross Domestic Product (GDP) ranking report, the GDP of Shanxi and Hunan provinces ranked around the middle—18th and 11th of the 31 provinces in China (“PRC,” 2010)—indicating that the economic development and living standards in these two provinces are about
average for the nation (*Statistical Yearbook*, 2009). As for the advertising revenue, SXTV and HNTV ranked 22th and 7th, respectively, among the 31 satellite provincial channels (“2006 Provincial,” 2008). Moreover, Shanxi and Hunan are located in the Northern and Southern parts of China, providing geographical and cultural diversity.

The researcher taped commercials from Chinese TV channels, transferred them onto Digital Video Discs (DVDs) and recorded their respective dates and channels. To reduce the mistakes that might occur during the recording process, the recording schedules, designed in line with the rotation principle\(^2\), were distributed to the recording personnel in China.

To guarantee the working conditions of digital equipment, a pre-test was implemented for the duration of three days, which was not included in the sample dates for the study. Other than that, except for the original DVDs directly transferred from recording tapes, a set of copies of each disc was made in order to avoid unexpected damage in preservation or delivery.

**Time Frame**

Two weeks’ worth of children’s prime-time programs and commercials were videotaped. Four hours a night of commercial broadcasting was collected, representing a total of 56 hours. The time frame for recording all four channels was within the first week and the last week of September in 2009. The reason for taking these two weeks as a sample was that no important holidays occurred during this period.

\(^2\) Rotation principle is introduced in the section of Time Frame.
Programs and commercials from 5 to 7 p.m. were recorded. In accordance with the State Administration of Radio, Film, and Television (SARFT) in China, children’s prime-time period is from 5 to 8 p.m. (“Prime Time,” 2006). However, in this study, the time frame was chosen from 5 to 7 p.m., considering the fact that children are less likely to decide which program to watch between 7 to 8 p.m. when their parents are more likely to watch the National News Serials (Xin Wen Lian Bo) of CCTV-1—relayed by all provincial channels and major regional channels in China during prime time. The National News Serials program has a viewership of more than 850 million, claimed as a single TV program with the largest audience in the world (Wang, 2008; “Xin Wen,” 2008). Additionally, Chinese children tend to be encouraged to work on their school assignments after dinner at about 7 p.m.

A rotation principle was employed as a recording method over the two weeks, which is considered to be representative to show the overall sample condition (Katz & Lee, 1992). For example, on the first day, CCTV-1 and SXTV were recorded from 5 to 6 p.m., and CCTV-Children and HNTV were recorded from 6 to 7 p.m. Channels were rotated on the second day; CCTV-Children and HNTV were recorded from 5 to 6 p.m., and CCTV-1 and SXTV were recorded from 6 to 7 p.m. Similarly, the recording schedule of the third day followed that of the first day, and so forth.

Coding Instrument

In the coding instrument, the dependent variables were food product types, promotional claims, eating occasions, eating locales and characters’ body sizes. The independent variable was program source--CCTV-1, CCTV-Children, SXTV, and HNTV.
Food/beverage products fell into eight categories based on previous studies as well as Chinese dietary habits. They were coded as: 1) dairy products; 2) other protein-rich foods (e.g., nuts, eggs, and seaweed); 3) fruits/vegetables (e.g., dry fruit, fruit juice, and vegetable juice); 4) sweets/soft drinks (e.g., candy, ice-cream, and punch); 5) processed snacks (e.g., popcorns, chips, and cookies); 6) fast food (e.g., instant noodles, sesame paste powder, KFC, and breads); 7) nutritional supplements (e.g., vitamin pills, calcium pills, and glucose essence); 8) alcohol; 9) other foods (Byrd-Bredbenner & Grasso, 2000; Cheng et al., 2009; Story & Faulkner, 1990).

In light of former research, promotional claims of sample commercials were broken down into four groups. They were coded as: 1) consumer-related claims; 2) general health and nutrition claims; 3) specific nutrients content claims; 4) minimizing/eliminating-specific-substances claims (Byrd-Bredbenner & Grasso, 2000; Cheng et al., 2009).

Eating occasions basically followed the category formulated by Harrison and Marske (2005). To make the subcategories suitable to Chinese TV commercials, the original version of eating occasion categories: breakfast, lunch, dinner, snack, and nondiscernible were combined and expanded to: 1) meal time; 2) eating snacks with little nutritional value; 3) eating high-protein/natural snacks; 4) taking nutritional supplements; 5) other occasions.

Grounded on Harrison and Marske’s (2005) commercial eating locales category, in conjunction with the locales repeatedly presented in Chinese TV commercials referred to during the pre-test, the eating locales variable in this study was coded as: 1) home; 2) away from home.
Characters’ body sizes were coded as: 1) under/normal-weight; 2) overweight; 3) no human characters (Cheng et al., 2009; Harrison & Marske, 2005). These subcategories were further subdivided in accordance with Collins’ (1990) seven-figure images (see Appendix C), from very underweight to obese, with the first five figures displayed on the left coded as “under/normal-weight,” and the two figures displayed on the right as “overweight.”

Coding Procedure

First, the coders were asked to record the commercial ID, product name, recording date, TV channel, and product categories for the purpose of collecting basic information on each commercial for the first section of the coding instrument.

All of the sample commercials were categorized into food or non-food products. If a “non-food product” was indicated, the coders were asked to leave the second section; nevertheless, the first section was saved for statistical usage. If “food products” subcategory was indicated, the coders continued to the second section.

The second section aimed at exploring and measuring more specifically on the food product types, promotional claims types, eating occasions, eating locales, and characters’ body sizes.

Inter-coder Reliability

Two Chinese graduate students, who majored in financial economics and hearing science, and who are fluent in Chinese and English, and the author of this study, conducted the inter-coder reliability test. A training session was held to explain the purpose of the study and introduce each coding entry with its subcategories.

In order to test inter-coder reliability, 20% of the sample commercials were coded at random. The percentage of agreement ranged from a low of 94.77% on the
variable “eating occasions,” to a high of 100% on variables “ad ID,” “brand name,”
“recording date,” “TV channel,” “product categories,” “locales,” and “characters’
body sizes,” for an overall percentage of agreement of 98.53%.
CHAPTER 4: RESULTS

This chapter reports the data generated based on the research questions and hypotheses raised from the previous chapter, as well as compares the commercial amount, commercial food types, promotional claims, eating habits promotions, and the portrayal of characters’ body sizes between national and provincial channels.

H1 assumed that there would be more commercials during children’s prime-time programs on the two CCTV channels than the two provincial channels under study.

As reported in Table 1, the totals indicate that during children’s prime-time TV programs, sample national TV channels broadcasted 832 (37.90%) commercials, a much smaller amount than the 1,363 (62.10%) commercials from provincial TV channels. H1 was, therefore, rejected.

Table 1

<table>
<thead>
<tr>
<th>Prime-time Commercials by TV Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Content</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>Food</td>
</tr>
<tr>
<td>Others</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

$X^2=10.2; \ df=1; \ p<.001$
RQ1 explored what types of food products were advertised most frequently on the two CCTV channels and the two provincial channels in children’s prime-time programs.

From Table 2, the results manifest that the highest presence of food types at the national TV level was “dairy products” (26.01%). In terms of the provincial TV level, a surprisingly large share of “nutritional supplements” (42.24%) commercials were found overriding all other food types.

Table 2

Food Product Types in Prime-time Commercials by TV Levels

<table>
<thead>
<tr>
<th>Food Product Types</th>
<th>National Level</th>
<th>Provincial Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy Products</td>
<td>84 (26.01%)</td>
<td>45 (10.27%)</td>
</tr>
<tr>
<td>Other Protein-rich Foods</td>
<td>58 (17.96%)</td>
<td>4 (.91%)</td>
</tr>
<tr>
<td>Fruits/Vegetables</td>
<td>7 (2.17%)</td>
<td>2 (.46%)</td>
</tr>
<tr>
<td>Sweets/Soft Drinks</td>
<td>72 (22.29%)</td>
<td>112 (25.57%)</td>
</tr>
<tr>
<td>Processed Snacks</td>
<td>9 (2.79%)</td>
<td>15 (3.42%)</td>
</tr>
<tr>
<td>Fast Food</td>
<td>30 (9.29%)</td>
<td>31 (7.08%)</td>
</tr>
<tr>
<td>Nutritional Supplements</td>
<td>55 (17.03%)</td>
<td>185 (42.24%)</td>
</tr>
<tr>
<td>Alcohol</td>
<td>5 (1.55%)</td>
<td>44 (10.05%)</td>
</tr>
<tr>
<td>Other Foods</td>
<td>3 (.93%)</td>
<td>0 (.00%)</td>
</tr>
<tr>
<td>Total</td>
<td>323 (100.00%)</td>
<td>438 (100.00%)</td>
</tr>
</tbody>
</table>

X²=163.0; df=8; p<.001
Based on the data, national channels advertised more heavily on food products in the categories of “dairy products” (26.01%), “other protein-rich foods” (17.96%), “fruits/vegetables” (2.17%), and “fast food” (9.29%), with provincial channels taking up the proportion of 10.27%, .91%, .46%, 7.08%, respectively.

On the other hand, China’s provincial TV level advertised food products of “sweets/soft drinks” (25.57%), “processed snacks” (3.42%), “nutritional supplements” (42.24%), and “alcohol” (10.05%) more frequently than the national level did (22.29%, 2.79%, 17.03%, and 1.55%).

**RQ2** examined what promotional claims were used most frequently in the children’s prime-time commercials on the two national TV channels and the two provincial TV channels in China under study.

**Table 3** indicates that “consumer-related claims” were mostly deployed by both TV levels, with a proportion of 41.20 % at the national level, and 43.87% at the provincial level. However, no significance was found.
Table 3

Promotional Claims in Prime-time Commercials by TV Levels

<table>
<thead>
<tr>
<th>Promotional Claims</th>
<th>National Level</th>
<th>Provincial Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer-related Claims</td>
<td>185 (41.20%)</td>
<td>290 (43.87%)</td>
</tr>
<tr>
<td>General Health and Nutrition Claims</td>
<td>103 (22.94%)</td>
<td>158 (23.90%)</td>
</tr>
<tr>
<td>Specific Nutrients Content Claims</td>
<td>115 (25.61%)</td>
<td>163 (24.66%)</td>
</tr>
<tr>
<td>Minimizing/Eliminating-Specific-Substances Claims</td>
<td>46 (10.24%)</td>
<td>50 (7.56%)</td>
</tr>
<tr>
<td>Total</td>
<td>449 (100.00%)</td>
<td>661 (100.00%)</td>
</tr>
</tbody>
</table>

\[ X^2=2.9; \text{ df}=3; \ p=0.412 \]

**RQ3** explored the most frequently advertised eating occasions occurring on the two national TV channels and the two provincial TV channels in China under study.

Based on **Table 4**, relevant data show that, both the national (29.41%) and provincial level (31.51%) tended to stress the eating occasion of “eating snacks with little nutritional value.”

To look at the difference, the national level tended to present the eating occasions of “meal time” (16.72%) and “eating high-protein/natural snacks” (13.93%), significantly more than the provincial level (3.65% and 8.45%), where “eating snacks with little nutritional value” (31.51%) and “taking nutritional supplements” (3.42%) shared a heavier proportion than the national level did (29.41% and 1.86%).
Table 4

*Eating Occasions in Prime-time Commercials by TV Levels.*

<table>
<thead>
<tr>
<th>Eating Occasions</th>
<th>National Level</th>
<th>Provincial Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meal Time</td>
<td>54 (16.72%)</td>
<td>16 (3.65%)</td>
</tr>
<tr>
<td>Eating Snacks with Little Nutritional Value</td>
<td>95 (29.41%)</td>
<td>138 (31.51%)</td>
</tr>
<tr>
<td>Eating High-protein/Natural Snacks</td>
<td>45 (13.93%)</td>
<td>37 (8.45%)</td>
</tr>
<tr>
<td>Taking Nutritional Supplements</td>
<td>6 (1.86%)</td>
<td>15 (3.42%)</td>
</tr>
<tr>
<td>Other Occasions</td>
<td>123 (38.08%)</td>
<td>232 (52.97%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>323 (100.00%)</strong></td>
<td><strong>438 (100.00%)</strong></td>
</tr>
</tbody>
</table>

$X^2 = 50.4; \ df = 4; \ p < .001$

**H2** assumed that home-eating locales would be shown more frequently in the children’s prime-time commercials on the two national TV channels than the two provincial TV channels in China under study.

According to Table 5, national channels were found to stress “home” eating locale (57.59%). Otherwise, provincial TV channels were more likely to underscore “away from home” eating (52.05%). The data was testified to be statistically significant ($X^2 = 6.9; \ df = 1; \ p < .01$). Therefore, **H2** was supported.
Table 5

*Locales in Prime-time Commercials by TV Levels*

<table>
<thead>
<tr>
<th>Locales</th>
<th>National Level</th>
<th>Provincial Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>186 (57.59%)</td>
<td>210 (47.95%)</td>
</tr>
<tr>
<td>Away From Home</td>
<td>137 (42.41%)</td>
<td>228 (52.05%)</td>
</tr>
</tbody>
</table>

$X^2=6.9; \ df=1; \ p<.01$

**H3** hypothesized that under/normal-weight characters would be shown in children’s prime-time commercials on the two provincial TV channels in China as frequently as the two national channels under study.

As shown in Table 6, both national (81.42%) and provincial channels (87.90%) portrayed more “under/normal-weight” characters. The portrait of “overweight characters,” with the presence of 4.33% from national channels, and 2.28% from provincial channels, was the least emerged characters’ body size based on data collected. **H3** was supported.
Table 6

*Characters’ Body Sizes in Prime-time Commercials by TV Levels*

<table>
<thead>
<tr>
<th>Characters' Body Sizes</th>
<th>National Level</th>
<th>Provincial Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under/Normal-weight</td>
<td>263 (81.42%)</td>
<td>385 (87.90%)</td>
</tr>
<tr>
<td>Overweight</td>
<td>14 (4.33%)</td>
<td>10 (2.28%)</td>
</tr>
<tr>
<td>No Human Characters</td>
<td>46 (14.24%)</td>
<td>43 (9.82%)</td>
</tr>
<tr>
<td>Total</td>
<td>323 (100.00%)</td>
<td>438 (100.00%)</td>
</tr>
</tbody>
</table>

$X^2=6.51; \ df=2; \ p<.05$
CHAPTER 5: DISCUSSION AND CONCLUSION

This study content analyzed children’s prime-time food commercials on China’s two national TV channels (CCTV-1 and CCTV-Children) and two provincial channels (SXTV and HNTV) to examine the message delivered in the commercials and compare the distribution and commercial content between national and provincial TV networks.

Commercial Distribution

Throughout the time frame of the study, the two provincial TV channels delivered 64% more commercials than did their national TV counterparts. What made the quantitative contrast of prime-time commercials between the two levels?

Even though CCTV was once accused of monopolizing the Chinese advertising media market (Chan & McNeal, 2004), its commercial clutter does not seem any longer to be a problem. It seems that although competitive advertisers from home and abroad make significant efforts to purchase commercial time on the sole national network, CCTV controls its amount of commercials below a certain level (Huang, 2001).

Although it benefits from the prospering media market in the national capital, CCTV actually is more carefully surveilled by the government, together with the 1.2 billion viewers who rate high on the “brand power” of CCTV and seek to maintain it (“CCTV,” 2009). Among the most vital official mouthpieces affiliated with the government, CCTV is directly overseen by the upper-level officials of the Central Propaganda Department, the highest-level administrative body throughout all the organizations in the propaganda system of China. The censoring function of the
Central Propaganda Department and its relationship with CCTV were listed in the work of Anne-Marie Brady (2008):

The Central Propaganda Department tends to look at censorship issues from a macro level, and is concerned with overall trends in society. It has responsibility for censoring and monitoring national level media, such as CCTV and *People’s Daily* as well as high-profile scholarly and popular publications and cultural output. Provincial and regional level departments are in charge of censoring and monitoring all non-classified sources of information in their region, including advertising. (pp. 94)

Provincial TV channels, though overseen by government at the provincial level, are situated in different conditions. Because of the relatively insufficient local governmental support regarding capital, human, and material resources, provincial channels are more likely to choose to take advantage of heavier advertising. Meanwhile, as a composition of state-owned economy, provincial channels also carry the burden of bringing in profits to support the local economy for the governments, which may undermine the strength of censorship from the administrative level (Wen, 2007).

According to the recently released *Administrative Measures for the Broadcasting of Radio and TV Advertisements* (SAIC, 2009), commercial time on Chinese TV channels cannot be longer than 12 minutes per hour for every program. Commercial breaks are regulated to two or less for each episode (usually 45 minutes) of TV dramas, and the airing time of each commercial break shall not exceed 90 seconds. Yet within the sample time frame of this study, commercial time of provincial channels occasionally loosened the time restraints.

Since China became an official member of the World Trade Organization in 2001, the slogan depicting the role that Chinese media perform has been “the [Party] mouthpiece as well as an industry” (meiti jishi houshe you shi chanye) (Esarey, 2005,
Food Product Types Exploration

In line with Cheng et al.’s (2009) study, “dairy products” took the largest share of food commercials during children’s prime time on national channels. Dairy products are considered to be a healthy product type because they contain some necessary nutritional substances for children’s well-being.

Other than “dairy products” (26.01%), compared to provincial channels, national channels had a significantly larger share of “other protein-rich foods” (17.96%) and “fruits/vegetables” (2.17%) as well. These types of food products help children’s growth, reduce the chances for them to take in extra fat/calories, encourage a balanced diet, and help keep them fit. However, “fast food” was also found to occupy a larger proportion at national level (9.29%). This category emphasizes on shortening food preparation time as well as on simplifying cooking procedures; nevertheless, fast food products always contain high sugar, fat, calories, and preservative.

On the other hand, provincial channels broadcasted significantly more frequencies of “sweets/soft drinks” (25.57%), “processed snacks” (3.42%), “nutritional supplements” (42.24%), and “alcohol” (10.05%) commercials. “Sweets/soft drinks” and “processed snacks” are two of the major food types which could give rise to childhood obesity. Other than that, the frequently presented category of “alcohol” commercials was inappropriate when children were actively involved in TV viewing. Even if advertisers were more likely to target parents who watched television in the company of their children, it was still not impossible to create negative influences on children.
Nutritional supplements were mostly advocating for the well-being of children, either for the treatment of an illness or promotion of nutrition balance. On the other hand, when the current advertising condition of nutritional supplements is further investigated, one can be aware of the flaws that might exist among this commercial category, which also accounts for the largest proportion of food product commercials. Since 2000, nutritional supplements products have represented the largest percentage of the total commercials in the advertising industry of China (“Warning,” 2002).

According to the SAIC (State Administration for Industry and Commerce of the People’s Republic of China) and the SFDA (State Food and Drug Administration), illegal nutritional supplements’ advertisements have been found on some provincial and regional TV channels. The illegal nutritional supplements commercials usually share some common characteristics: 1) they exaggerate the nutritional functions of the products; 2) they understate the recovery time that the products actually take; 3) they guarantee healing regardless of individual circumstances; 4) they employ the endorsement of celebrities/medical professionals/patients, who may not have used the products; 5) the commercial scripts are written in the superlative form (i.e., the best, the fastest, the strongest); and 6) the advertised nutritional supplements are under the category of prescription (“Provincial TV,” 2007).

Among the 62,800 illegal advertisements identified in China in 2009, 59,505 were for drugs or nutritional supplements—94.75% of the total (“Illegal Advertising,” 2010). This trend also calls for attention from each regulation department nationwide and the advertising industry as a whole.
Promotional Claims Examination

The large share of “consumer-related claims” on both national (41.20%) and provincial (43.87%) TV channels verified the argument that marketers nowadays attempt to attract their children’s audience with claims of good flavor, novel gifts, impressive appearance, etc. while ignoring the communication of health-related messages (Byrd-Bredbenner & Grasso, 2000; Cheng et al., 2009; Harrison & Marske, 2005).

The most heated health-related promotional message expressed in commercials was under the category of “specific nutrients content claims” released on both national (25.61%) and provincial (24.66%) TV levels. Worthy of notice is the veiled suggestion, conveyed in the commercials, that the children might have already or are going to be suffering from some sort of nutrient deficiency. These kinds of promotional claims are taking advantage of parents’ heightened concern for their children’s welfare while sometimes ignoring the fact that the children might not need such nutrients.

Although contending to have higher nutritional values, most of these food products still contained high sugar or fat (Cheng et al., 2009). Cheng et al. (2009) suggested that health claims in commercials could be important, but “only if they are balanced” (p. 25). Quite a few food commercials overly exaggerated the beneficial nutritional contents in the foods, but were more inclined to hide other nutritional contents (Harrison & Marske, 2005). The inaccurate nutritional content claims are more likely to mislead children’s food choice since children, as well as their parents, may consume certain food products toward the specific nutrition they claim to contain.
Health-related promotional messages conveyed in sample commercials frequently announced vague medical benefits without giving the reason for how these products could achieve those promised effects. For instance, one commercial claimed that the Vitamin C supplement allows children to acquire a better health condition without mentioning that Vitamin C is good for health because it is an antioxidant vitamin needed for the formation of collagen and it improves iron absorption and resistance to infection. This finding is also congruent with Byrd-Bredbenner and Grasso’s (2000) study.

**Eating Behavior Depiction**

The traditional occasion of eating meals was less emphasized on both TV levels although it is important to encourage children to have regular meals.

The eating occasion of “eating snacks with little nutritional value” was the most commonly displayed category at both national (29.41%) and provincial (31.51%) TV levels; however, provincial channels showed such eating occasions with much higher frequency than did national channels—this category represented more than twice as much as the combined proportion of the categories of “meal” time (3.65%), “eating high-protein/natural snacks” (8.45%), and “taking nutritional supplements” (3.42%). Meanwhile, provincial channels were more likely to promote the eating locale of “away from home” (52.05%).

It was almost easy to discern advertisers’ attempt to attract their young consumers by relating the ideas of fashion, fun, exoticism, eating out with friends, etc. to their food products. These commercials were trying to instill in children the concepts that these products could enable them to become popular in their social activities or would bring them more excitement in life. Rather than educating children
to keep a balanced diet, these commercials were more inclined to promise a change in the lives of their young consumers.

National channels were more apt to present scenes of “meal” time (16.72%) and “eating high-protein/natural snacks” (13.93%) than were provincial channels (3.65% and 8.45%). These commercials modeled relatively wholesome eating habits. In terms of eating locales, home eating was more encouraged by national channels (57.59%) where home-prepared food, with more nutrition and freshness, was valued.

Commercials under this category, more often than not, related their food products to family eating. The warm family ambience is often concentrated in a family reunion scene where family dining is consistently taken as a cultural symbol representing a warm, cheerful, and prosperous family. As a result, national channels set a better example of supporting healthier home-prepared food, as well as promoting the traditional cultural legacy of respecting family relationships.

Characters’ Body Sizes Portrayal

This study found provincial TV channels were more likely to portray underweight and normal weight characters (87.90%) than were their national channels counterparts (81.42%) while less frequently showing overweight characters (2.28% at provincial level, and 4.33% at national level). National channels also mostly focused on portraying “under/normal-weight characters,” while seldom disclosing the real body shapes that high-calorie food products might bring to children.

Again, this finding shows another example of TV advertising delivering misleading messages in the portrayal of human characters in an untruthful way. These commercials, defining underweight as the standard of beauty, introduced high-calorie food, and to attract their young consumers, implied the joy their products would bring.
Provincial TV Channels’ Current Situation

Living in Dilemmatic Conditions

After China’s entry into the WTO, more than 30 international and Hong Kong satellite channels have gained broadcasting rights in the Pearl River Delta\(^3\) area, diplomatic compounds, and upscale hotels\(^4\) (i.e., including Bloomberg, CNN, CINEMAX, CNBC Asia Pacific, Discovery, Euro Sports, HBO, and Phoenix) (Wang, 2008). These acclaimed foreign channels, together with national channels, force provincial and regional channels to live between a rock and a hard place.

Other than the lack of capital support and sufficient supervision from some governments at the provincial level mentioned from the previous part of this study, compared to the noted TV networks, provincial TV channels are also at disadvantage in their inherent mechanism (Wen, 2007). Much different from the media mechanism in the western world, media in China has never been completely open to the market, although the notion of market economy was introduced in 1979 (Esarey, 2005). Long-time governmental support built a safety net for provincial channels to avoid failure resulting from complete exposure to the market economy. The safety net, however, weakened their desire and capability to compete in the media market worldwide.

In recent years, due to the intensified competitive media market environment brought by the WTO commitment and the development of new media cooperation in China, provincial TV channels have had to learn how to survive in the global market. This challenge forces the provincial channels to face the problem that, if they do not

\(^3\) In Guangdong Province. Since the open policy was adopted in 1978, the Pearl River Delta area has been one of the most economically dynamic regions in mainland China.

\(^4\) Three stars or higher.
improve the quality of their programs, lower program ratings would make it even more difficult to attract sufficient advertising resources (Wen, 2007).

Additionally, it is relatively harder for provincial TV stations to recruit leading media professionals than is the case for those acclaimed media conglomerates. According to data generated from a previous study, since the founding date of People’s Republic of China in 1949, the number of journalism professionals who have a media-related college degree, if averaged to each local TV station, would be fewer than 10 (Zhang, 2002). In fact, these professionals are more likely to choose careers with global or national media conglomerates over TV channels from less developed provinces or regions. A shortage in professionals hinders the ability of provincial channels to produce programs of high quality, which are also necessary to compete successfully in the global media market.

Loss in Public Credence

Wen (2007) argued that provincial and regional TV channels in China overly emphasize their function of being profit-oriented organizations while ignoring their social responsibilities of educating, disseminating propaganda, overseeing social activities, and speaking for the public.

In line with Wen’s (2007) conclusion, this study also found that, although SARFT issued documents and regulations forbidding the presence of commercials pertaining to weight-reducing products, height-improving products, and other supplements/drugs found to have exaggerated medical functions (SAIC, 2009), these commercials could still be identified on provincial TV channels during the sample time frame.
In her study, Wen (2007) contended that the broadcast of illegal advertisements damaged impressions of some of the provincial and regional TV channels. She called for more social responsibility from these local channels. From behind the lures of illegal advertising and the loosened supervision of some local governments, the essence that these channels has been losing is the credence from their audience.

Suggestions to Improve Children’s Prime-time Commercials

For years, researchers have argued that children do not have the ability to distinguish commercials from children’s programs given their limited cognitive abilities (Gunter, Oates, & Blades, 2005). Among others, Dorr (1986) and Gunter, Oates, and Blades (2005) suggested that adding bumpers or separators would be effective ways for children to identify commercials from programs. Interestingly, we can see that one of the national sample channels—CCTV-Children—has made such efforts to mark commercials with bumper “advertisements” (guang gao) on the corner of the screen to indicate clearly to their children’s audience the commercial time.

Another way to keep children from blending commercial messages into programs is to schedule commercial time clustering before or after programs instead of imposing commercials when programs are in process (Gunter, Oates, & Blades, 2005). This pattern has been employed by CCTV-1—another sample national channel in this study.

The quantity and quality of children’s prime-time commercials should be taken into consideration. According to the current *Administrative Measures on Radio and Television Advertisement Broadcasting* (SAIC, 2009), the amount of commercials on each channel shall not exceed 12 minutes per hour; however, no specific commercial time is regulated during children’s prime-time programs. Regarding commercial
content, more health-related promotional claims delivering educational messages should be implemented by commercial designers, and advertising regulation departments should spearhead advocacy for the creativity of such commercials. The notions of keeping a balanced diet and valuing outdoor activities should also penetrate into commercial messages to fix children’s understanding that, “staying healthy” calls for one’s comprehensive efforts, rather than simply purchasing certain kinds of food products.

Nevertheless, parental guidance on children’s food commercial viewing is suggested. Parents may give more guidance when children are watching food related commercials. They may advise children to keep alert for various promotional claims, as well as to develop healthy eating behaviors. For another important reason, parents may aid children in recognizing the selling and persuasive purposes of advertising (Young, 1990). Rather than simply considering TV advertising as a way of entertaining, children need to understand the intent of advertising, for the reason that only knowing the nature of advertising would assist children to analyze the truth or falsehood of promotional claims.

Legal Review of Children’s Food Advertising

Regulations on children’s advertising in China have been deemed too vague and general (Cao, 2009; Chan & McNeal, 2004; Cheng et al., 2009; Zhu, 2006), because of the absence of details imposed on food products commercials targeted to children or commercials delivered during children’s prime-time programs. Instead, advertising regulations in China center on overseeing the ideological problems that might happen in children’s advertising. According to Standards for Advertising Regulation (SAIC, 1994), commercials containing the following messages would be censored: 1)
undermining children’s psychological conditions or ethics; 2) suggesting that children pressure their parents to purchase the products shown in commercials; 3) exerting potential influence of ignoring respect for elders or others; 4) undermining parents’ and elders’ education on children’s language and behaviors; 5) making children feel superior or inferior by possessing or not possessing some products; 6) showing children models with above-average capacities; 7) demonstrating activities that children should not perform alone; 8) potentially triggering accidents or misbehaviors; 9) misleading or deceiving children using language beyond their judgment capacity; 10) using the name, social status, or image of teachers, child educators, writers of children literature, and children’s show performers.

In 2009, the *Administrative Measures on Radio and Television Advertisement Broadcasting* (SAIC, 2009) presented regulations, for the first time in China, to forbid the presence of alcohol commercials during children’s programs or on TV channels targeted to children. Also in these measures, commercial air-time is limited to no more than 12 minutes per hour, and 18 minutes per hour during general prime-time period (19:00-21:00), although no specific commercial time limitation relating to children’s programs was recommended (SAIC, 2009). The amended regulations are deemed the beginning of China’s legislative development on laws regarding children’s advertising.

Derived from the *Advertising Law of the People’s Republic of China* stipulated in early 1995 (SAIC, 1995), CCTV issued the *Standards for CCTV Advertising Regulation* where detailed regulations were presented (CCTV Advertising, 2010). For instance, commercials longer than 60 seconds should use bumpers to differentiate commercials from TV programs; CCTV prohibits repeatedly broadcasting the same
commercial which is shorter than standard advertising time, as the equivalent of a long commercial (i.e., advertisers cannot broadcast a 5-second commercial for 3 times to equalize a 15-second commercial). Standards also forbid the commercials for drug products targeted to children, or the use of children’s characters to endorse drug products (CCTV Advertising, 2010). This effort of CCTV could also be considered as a sign of legal improvement in China.

Children’s advertising regulations in European countries have been better arranged from the perspective of advertising restrictions on scheduling and content (Gunter, Oates, & Blades, 2005). Children’s advertising regulations in the United Kingdom, based on Television Advertising of Food and Drink Products to Children released by Ofcom (Office of Communications) in 2006 offer an appropriate example of this. On scheduling restrictions, the United Kingdom and Belgium have banned commercials during children’s programs that are shorter than half an hour. Arrays of products are not permitted to be advertised during the time block around children’s programs, for instance, slimming products, medicines, vitamins and other dietary supplements, matches, and liqueur chocolates. (EU, 2006; Ofcom, 2006).

On commercial content regulation, commercials must avoid anything likely to encourage poor nutritional habits or an unhealthy lifestyle in children. For instance, commercials for food should not suggest that an inactive or sedentary lifestyle is preferable to physical activity. Commercials selling snacks and sweets should suggest that children also pay attention to oral health, and scenes portraying children’s teeth not cleaned are prohibited. This requirement is in line with related regulations in Belgium and the Netherlands where the image of a toothbrush must be shown in commercials selling candies (EU, 2006). Ofcom also requires health-related
promotional claims supported by solid scientific evidence. In wording, there should not be suggestions of “Hurry and buy,” and commercials should not encourage children to eat more than they otherwise would (Ofcom, 2006).

Human characters shown in children’s advertising are also regulated in European countries. Italy prohibits the appearance of children younger than 14 years old in TV commercials. In Ireland, celebrity endorsement is forbidden in children’s advertising (EU, 2006).

In seeking legislative improvement, children’s advertising regulations in China could borrow support from European countries to further regulate the amount of commercials advertised during children’s prime time, food product types that undermine children’s health conditions, and messages that impair children’s physical and psychological well-being as well as their ethical standards. Meanwhile, the Chinese advertising industry should not ignore the role that self-regulation among advertisers and advertising agencies performs.

Limitations and Future Studies

This study might be refined in several ways. First of all, given the nature of content analysis, this thesis could only look at the content of children’s advertising, rather than directly demonstrate effects derived from children’s commercial viewing. Therefore, in this thesis, social learning theory, cultivation theory, and other related studies revealing the causal relationship of children’s media using and cognitive or behavioral changes acquired afterwards could only help to predict the way in which media affect their children’s audience. Future studies are expected to ameliorate this condition by developing experiments or other methods to examine the effects relating these findings.
Secondly, one of the sample channels of this thesis—CCTV-Children, mostly targeting the children’s audience—may vary from general channels in several aspects. CCTV-Children may have more concerns about children’s cognitive abilities, health conditions, and the development of ethics. In consequence, it might not be sufficiently representative of the whole CCTV network, where most of the other channels target adults. To balance the difference between the children’s channel and the general channels selected in this study, future studies might collect data from a relevant number of provincial children’s channels as well, for example, Hu Bei provincial children’s channel, and Inner Mongolia children’s channel. Or, they could use channels targeting a general audience at both national and provincial levels.

Although a training session was given before the coding procedure, “characters’ body sizes” might still be difficult for the coders to identify, given that the protocol—the human body silhouette—depends for the most part on vision recognition. Future studies are expected to use this protocol with more detailed refinement or other advanced instruments to improve the accuracy of this measurement.

Contributions

The study may contribute to the existing literature on several aspects. Grounded on the current conditions of channels at different TV levels, the analysis relating to televising resources and productions may provide implications in the field of media economics as well as to the media managerial personnel from a practical viewpoint.

For media policy makers, this study offers useful legal review on children’s advertising home and abroad. Moreover, suggestions to improve the content of children’s advertising in China were given in light of previous studies on cognitive development in children and relevant existing regulations in European countries.
Beyond this point, the thesis also generates a model for future researchers to conduct similar studies with other populations.

Implication for Advertising Researchers

This thesis has several implications. First, in the literature on Chinese media, comparative studies between national and local television are fairly rare. Even though quite a few reports and discussions on local TV’s current status were gathered, hardly any research was focused on a comparison of local television and the national TV network. Future researchers may fill this gap by paying more attention to the difference between the two levels of television programming.

Another missing link in research lies in developing conditions in regional areas of China for advertising. In China, there are more than 2,500 regional TV channels broadcasting on a daily basis, which actually comprise the vast majority of the Chinese television industry (Media Yearbook, 2007). Situated on the lowest level of the media industry in China, regional television must compete with TV channels from international and national conglomerates, as well as provincial television channels. This situation may give rise to more problems in children’s advertisements aired at local level, although this hypothesis calls for testing in future studies.

Summary

In this thesis, a content analysis was conducted to examine TV food commercial content and amount distribution conditions during children’s prime time at national and provincial TV levels of China.

To seek theoretical support, social learning theory and cultivation theory were reviewed to lay an intellectual foundation. Several other relevant studies on children’s
media use were indirectly borrowed to predict the potential relationship between children’s TV viewing and childhood obesity.

Based upon sample commercials collected for this thesis, results show that national channels broadcasted fewer TV commercials than their provincial channels counterparts during children’s prime time. This finding revealed that, currently, commercial clutter on national channels is no longer a problem. Provincial channels advertised more heavily might because of their inferior economic and human resources conditions compared to national channels.

In terms of food products distribution, national channels were more likely to broadcast dairy products, other protein-rich foods, fruits/vegetables, and fast food. Provincial channels were found to advertise more heavily on sweets/soft drinks, processed snacks, nutritional supplements and alcohol—products relatively high in calories or low in nutrition value.

Both national and local TV levels stressed consumer-related promotional claims. This finding is also in line with previous studies that marketers often attempt to attract their young consumers through the claims of good in flavor, easier for preparing, or including novel gifts, while ignoring the communication of health-related messages.

The eating occasions of eating snacks with little nutritional value were heavily presented at both national and provincial TV levels. National channels also promoted eating occasions of meal time and eating high-protein/natural snacks; on the other hand, provincial channels were found to take a larger share in presenting the categories of “eating snacks with little nutritional value” and “taking nutritional supplements.”
Home eating locales—valuing more freshness and nutrition—were found to broadcast more frequently on national channels. Nevertheless, away from home eating locales accounted for a larger proportion on provincial channels.

The higher presence of under/normal-weight characters at both national and provincial TV levels, once again, illustrates how TV commercials deliver misleading messages to the audience. Besides, national channels were found to portray more overweight characters than provincial channels.
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APPENDIX A

CODEBOOK

Coder ID: Indicate the ID of the individual who coded the sheet.

V1 Ad ID: Fill in the case number of each commercial.

V2 Brand name: Record the product advertised in each commercial along with the brand name.

V3 Recording Date (Year-Month-Day): Write down the date of each commercial broadcasted.

V4 TV Channel: Note the channel where each commercial was broadcast.

1=CCTV-1  2=CCTV-Children  3=SXTV  4=HNTV

V5 Product Categories: Choose the category of the product advertised in each commercial.

1= Food Products
2= Non-Food Products

(Continue coding if 1 is the answer to the V5 category)

V6 Food Product Types: Choose the category of the food product advertised in each commercial.

1= Dairy Products: Foodstuffs produced from milk (i.e., milk, milk powder, yogurt, lactobacillus drinks, etc.).
2= Other Protein-rich Foods (i.e., eggs, poultry, seeds, sea sedge, sesame paste, etc.)
3= Fruits/Vegetables (i.e., juice, raisins, etc.)
4= Sweets (i.e., candy, ice-cream, jelly, etc.) /Soft Drinks: Beverages without alcohol, not including dairy drinks or juice.
5= Processed Snacks (i.e., chips, popcorns, crackers, etc.)
6=Fast Food: Food sold in a restaurant or store with low quality preparation and served to the customer in a packaged form for take-out/take-away (i.e., KFC, Pizza Hut; instant foods, breads, etc.).

7=Nutritional Supplements: A preparation intended to provide nutrients, such as vitamins, minerals, fiber, fatty acids, etc., which are missing or are not consumed in sufficient quantity in a person's diet.

8=Alcohol: Alcohol products.

9=Other Food Products

V7 Consumer-related Claims: Consisted of messages related to flavor, convenience, quality, being homemade, economy, novelty, etc.

1=No: No such claims.
2=Yes: Contain such claims.

V8 General Health and Nutrition Claims: Consisted of messages related to good for health, nutritional professional recommends, prevents illness, gives energy, provides balance or variety, etc.

1=No: No such claims.
2=Yes: Contain such claims.

V9 Specific Nutrients Content Claims: Consisted of messages related to general nutrients, vitamins, minerals, proteins, fiber, vegetables or fruits, or other nutrients.

1=No: No such claims.
2=Yes: Contain such claims.

V10 Minimizing/Eliminating-Specific-Substances Claims: Consisted of messages related to low fat, cholesterol, sugar, sodium, caffeine; pure or natural; low calorie/lean; light/"lite"; additive/preservative free.

1=No: No such claims.
2=Yes: Contain such claims.

V11 Eating Occasions: Characters are shown to be situated in occasions listed below.

1=Meal Time: Include having breakfast, lunch and dinner.

Snack Time

2=Eating Snacks with Little Nutritional Value: Include eating snacks containing little or no nutritional value, high calories.
3=Eating High-protein/Natural Snacks: Include eating healthy snacks with higher nutritional value (i.e., nuts, yogurt, etc.) or fruits (i.e., juice, dry fruit, etc.).

4= Taking Nutritional Supplements.

5=Other Occasions

V12 Eating Locales: Characters (products) are shown to be situated in locales listed below.

1=Home

2=Away From Home (i.e., restaurants, cafeterias, outdoors, etc.)

V13 Characters’ Body Sizes: Body sizes of the main characters who were shown in the commercials for the longest time. Follow the seven-body-figure standards cited from Collins (1990) attached to this code book.

1=Under/Normal-weight: The first five figures to the left hand side displayed in each level are considered to be Under/Normal-weight.

2=Overweight: The last two figures to the right hand side displayed in each level are considered to be Overweight.

3=No Human Characters: No human characters are shown in commercials.
APPENDIX B
CODING SHEET

**Coder ID***  ___  ___

**V1 Ad ID**  ___

**V2 Brand name**
_________________________

**V3 Recording Date (Year-Month-Day)**  2009-9-___

**V4 TV Channel**

1=CCTV-1  2=CCTV-Children  
3=SXTV  4=HNTV

**V5 Product Categories**

1= Food Products  2=Non-Food Products

**V6 Food Product Types**

1=Dairy Products  2=Other Protein-rich Foods  
3=Fruits /vegetables  4=Sweets/Soft Drinks  
5=Processed snacks  6=Fast Food  
7=Nutritional Supplements  8=Alcohol  
9=Other Foods

**V7 Consumer-related Claims**

1=No  2=Yes

**V8 General Health and Nutrition Claims**

1=No  2=Yes

**V9 Specific Nutrients Content Claims**

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V10 Minimizing/Eliminating-Specific-Substances Claims

1=No
2=Yes

V11 Eating Occasions

1=Meal Time
2=Snack Time
3=Eating Snacks with Little Nutritional Value
4=Eating High-protein/Natural Snacks
5=Taking Nutritional Supplements
6=Other Occasions

V12 Eating Locales

1=Home
2=Away From Home

V13 Characters’ Body Sizes

1=Under/Normal-weight
2=Overweight
3=No Human Characters
APPENDIX C

CHARACTERS’ BODY SIZES SCALE