

Audience Duplication and Its Determinants:
A Study in the Multi-channel and Multi-culture Television Market in Guangzhou

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Abstract

This study examines audience duplication, the extent to which the audience of one program also watches the other, and its determinants. Using peplemeter data from Guangzhou, a multi-channel and multi-cultural television market in China, the study tests the intertwining effects of media structural factors and audience preference factors on audience duplication levels of program pairs. The results show significant effects of the two types of factors. A regression model was established in which these two types of factors together explained 59% of the total variance in audience duplication.

Key words: audience duplication, audience behavior, cultural proximity

Introduction

The research interests in audience duplication, a prominent feature of audience program choice, originated from practical concerns of the advertising industry (e.g. Barwise & Ehrenberg, 1988; Kent, 1994). Treating audiences as consumers, advertising researchers and media programmers are compelled to look for ways to achieve maximum audience retention. Early research on audience duplication in the 70s and 80s in the U.K. and the U.S. found that patterns of audience duplication were mainly associated with structural factors such as program scheduling (Barwise & Ehrenberg, 1988).

These early studies on aggregate audience behavior patterns directly challenged the prevalent uses and gratifications paradigm, which posits that media users are autonomous individuals who actively choose media to satisfy their socio-psychological needs (Blumler, Gurevitch & Katz, 1985). Furthermore, as the development of cable and satellite services has brought about an abundance of media outlets into the media environments, our understanding of audience program choice has also evolved. The rising number of channel options and increasing degree of content diversity together have afforded audiences more freedom to choose according to their preferences. Tensions between the structure-oriented approach and the active-audience perspective have called on researchers to take into consideration both audience preferences and media structures on audience program choice (Webster, 2006).

Adding to the evermore sophisticated television environment is the recent development of media globalization. Thrust in international trade of television programs and the rapid development of trans-border television have expanded television beyond domestic boundaries (Negrine & Papathanassopoulos, 1991). Notions of cultural

imperialism have heightened the importance of cultural considerations in studying audience behavior. Based on the observation that audiences tend to gravitate toward media from their own culture, theorists have posited new concepts such as “cultural proximity” and “geo-linguistic regions” to challenge the previously dominant view of a one-way flow of cultural influence in global media markets (Jirik, 2003; Sinclair, 1999; Straubhaar, 1991, 2003). Audience behavior has become a key factor in evaluating these contesting theses.

Using audience viewing data in Guangzhou, an emerging multi-channel and multi-culture television market in China, the current study attempts to take a closer look at audience program choice, in the form of audience duplication, that is subject to the intertwining effects of media environment factors and audience preference factors. The findings in Guangzhou not only offer us fresh insights to the huge yet little known television market of China but also help further our understanding of audience behavior in general.

Audience Duplication and Its Determinants

Audience duplication typically takes the size of the audience common to two programs as the dependent variable and casts other characteristics of the program pair as independent variables. By examining audience duplication between program pairs in relation to the scheduling and content of these pairs, researchers have been able to identify and test the factors influencing audience behavior (e.g. Barwise & Ehrenberg, 1988; Cooper, 1996; Sherman, 1995; Webster, 2006; Zubayr, 1999).

Determinants of audience duplication can be best understood within a theoretical framework developed by Webster and Phalen (1997). They group the various media and

audience factors that influence audience behavior into two categories: structural factors that are common to the media environment and the audience in the aggregate, and individual factors, such as viewers' program preferences. They argue that audience behavior patterns are often the result of the interplay between the two groups of factors. While individual viewers' use of media tends to be purposeful and done at a time and place of their choosing, viewers' program preference is often mitigated by circumventing structural factors such as audience availability, i.e., when viewers are available to watch TV, and program scheduling. The interaction effect of the audience agency and the structural limitation served as a theoretical framework for the current study.

Early research on audience duplication, mostly done in the U. S. and the U. K., discovered some remarkable patterns of audience behavior. Among the most routinely observed patterns of audience duplication were: 1) inheritance effects, a tendency for adjacent programs to often have unusually high levels of audience duplication; 2) channel loyalty, programs on the same channel often enjoy disproportionately high levels of audience duplication (Barwise & Ehrenberg, 1988; Cooper, 1996; Webster, 2006).

Interestingly, patterns of audience duplication were found to be scarcely influenced by the actual content of the programs in the early studies (Barwise & Ehrenberg, 1988; Goodhardt & Ehrenberg, 1969). This lack of evidence for the importance of program type was not only counterintuitive to the conventional wisdom of industry media programmers but also directly at odds with the presumptions of the uses and gratifications research tradition and a large body of economic theories on the determinants of program choice (Blumler, Gurevitch & Katz, 1985; Owen & Wildman,

1992). All these perspectives assume that viewers' program choices are systematically related to their content preferences based on program types.

Recent research on audience duplication, however, has found modest effects of program content. In his two studies of inheritance effects, Webster (1985, 2006) found similarity of program type within the adjacent program pair increased the number of duplicated viewers between the two programs. Sherman (1995) demonstrated that programs with continuing story lines had higher levels of repeat viewing. Many later studies of audience duplication also confirmed the effect of program content (Adams, 1997; Cohen, 2002; Eastman, Newton, Riggs & Neal-Lunsford, 1997; Zubayr, 1999).

Cooper (1996) explained that audience behavioral patterns in early studies were premised upon a structure where only one to three broadcasting channels were available. As the media environment has evolved, we would expect changes in audience behavior accordingly. Youn (1994) demonstrated that viewers' program choice correlated with program type preferences significantly more in a multi-channel environment than in a broadcast-channel-only situation. Webster (2006) further argued that, as the media environment offered more choices to audiences, program content would play a larger role in predicting audience program choice.

Unfortunately, program scheduling is very easily confounded with program type in influencing the extent of audience duplication in highly commercialized media systems. For instance, "block programming" has long been a common scheduling strategy in the U.S. in which programs of a type are shown in succession to facilitate inheritance effects (Webster, Phalen & Lichty, 2006). The existence of the confounding

correlation between the two factors makes it difficult to determine the degree of their influences independently.

Besides program content and scheduling factors, language has also been found to affect audience duplication. For instance, Cohen (2002) has shown that local-language programs were more popular than English programs in his study of Israeli television audiences. Ksiazek and Webster (2008) have found in their study of audience program choice in Houston, Texas, that English speakers tend to mainly consume English-language media and Spanish speakers tend to choose Spanish-language media. These findings are consistent with an earlier study by Barwise and Ehrenberg (1984), which demonstrated that minority-language stations enjoyed very high levels of audience duplication despite the limited size of their audiences.

In today's increasingly globalized television environment, language is believed to play an ever more important role in explaining audience media consumption. Notions of "cultural proximity" and "geo-linguistic regions" emphasize the role of cultural linguistic factors in accounting for the complexity of audience program choice and for the formation of national and regional audiovisual markets (Jirik, 2003; Sinclair, 1999; Straubhaar, 1991, 2003). Unfortunately, existing studies of cultural proximity documented the phenomenon of cultural proximity mainly by examining programming practices and/or the prime-time ratings of individual programs. Little evidence is available to clearly demonstrate the impact of language, as an important cultural element, on actual patterns of audience behavior in a multicultural environment.

Many existing studies on audience duplication included the ratings of the programs, i.e., the percent of viewers who watched the programs, to explain the variance

in the level of audience duplication (e.g. Cooper, 1996; Sherman, 1995; Webster 2006; Zubayr, 1999). Although the models thus built did successfully explain significant portions of variance in the audience duplication, using ratings as an explanatory variable has two major caveats. First, it has an unsatisfactory tautological quality. The rating of a program indicates the degree of popularity of the program. It is the result of audience program choice, the very dependent variable under investigation in the first place. Applying program ratings to the regression model is to use a related outcome variable to replace, rather than explain, audience program choice. Second, the ratings tend to swamp the regression model, leaving little room for other, more interesting, variables.

While examining audience duplication and its structural and individual determinants in a culturally diverse media market in China, this study addresses the three issues highlighted above: a) the interaction effects of program scheduling factors and audience preference factors in a multi-channel environment, b) the language issue; and c) the tautological quality of ratings as a major determinant.

The Multi-channel and Multi-culture Television Market in Guangzhou

Guangzhou, the capital city of the Guangdong province in South China, is the second largest television market in China. 99% of the households in Guangzhou have at least one TV set with a remote control. The cable penetration has reached 99%, a level well above the comparable U.S. national average. While the total number of channels circulating in Guangzhou is ninety-five, an average household can receive about forty-four channels. An average Guangzhou adult viewer spends about 200 minutes a day watching television (CVSC-Sofres Media, 2007), or about 80 fewer minutes than a typical American ((Nielsen Media Research, 2007).

There are currently four categories of television in the burgeoning Guangzhou market: national, local, domestic imports, and overseas imports. First, China Central Television (CCTV), the only national television station under the auspices of the central government, operates a total of fifteen channels, all of which are accessible to the Guangzhou audience via satellite-fed cable systems. Second, local services include Guangdong provincial channels and Guangzhou municipal channels. Third, there are approximately 50 distant satellite-fed cable channels from other provinces. Finally, there are eight overseas channels operating in Guangzhou. Among these overseas channels, four are from Hong Kong, a cosmopolitan city that is geographically close to and ideologically different from Guangzhou.

In spite of the fact that Mandarin has been the national standard language in China since the mid 1950s, Chinese people actually speak seven major mutually unintelligible dialects in different parts of the country. Although the majority of the population is able to speak Mandarin fluently, the daily language most often used by 85% of households in Guangzhou is Cantonese, a very different language from Mandarin in terms of phonological, lexical and syntactic features (Pan, 1998). The bilingual mode is also the standard in the Guangzhou television market. CCTV channels, distance satellite channels, and all but two overseas channels, broadcast in Mandarin. Local channels use both languages in their programs. Two of the Hong Kong Channels broadcast in Cantonese. Among the top fifteen channels with the largest market shares in Guangzhou, seven are Mandarin channels, two are Cantonese channels, and the others carry programs in both languages. This unique characteristic of the Guangzhou market offers one the chance to look into the effect of language on audience duplication.

Research Hypotheses

Structural Factors

As argued above, structural factors, especially scheduling factors, have been found to be the major determinants of audience duplication. In fact, the two most prominent and persistent patterns of audience behavior, i.e. the inheritance effect and channel loyalty, were all found to be mainly the result of certain particular modes of program scheduling (e.g. Barwise & Ehrenberg, 1988; Webster, 2006). To test if these structural effects still hold in today's much more complex media environment, my first two hypotheses concern the two prominent audience duplication patterns:

H₁: Programs shown back-to-back have higher levels of audience duplication than those not (inheritance effects).

H₂: Programs shown on the same channel have higher levels of audience duplication than those on different channels (channel loyalty).

Audience Preference Factors

While early studies found that audience duplication patterns were persistent regardless of the genres of the program pairs examined (e.g. Barwise & Ehrenberg, 1988), more recent research did detect some effects of program content on audience duplication. In his effort to explain the inconsistency in existing research findings, Webster (2006) argued that the effect of program type was often mitigated by the circumventing factor of audience availability and program scheduling, two structural factors. Simply put, viewers are just not always available to watch what they like. And when they are, their choice is again limited by the scheduling factors.

Moreover, as the media environment further develops with an increased number of channels, more program diversity, and the wide spread of remote control devices and digital recording devices, audiences may well enjoy greater freedom to act upon their program preferences. Comparing the viewing behavior of cable subscribers and non-subscribers, Youn (1994) found that an increase in program-choice options facilitated program choice based on program-type preferences. Walker, Bellamy and Traudt (1993) showed that the remote control helps viewers selectively avoid unpleasant stimuli. Bellamy and Walker (1996) further related the use of a remote device to augmented audience selectivity in their program choice. Therefore, it is important to assess the effect of program type in the new multi-channel environment represented by the Guangzhou market.

H₃: Programs of the same type have higher levels of audience duplication than those of different program types.

Guangzhou is China's most open and diverse television market with more than half a dozen overseas television services available to local audiences. These overseas channels originate from political, economic and cultural backgrounds that are vastly different from the domestic media environment (See Table 1). Nevertheless, they make up a large chunk of the total viewing of Guangzhou's television audience. For instance, the two Cantonese channels from Hong Kong claim about 40% of the overall market share in Guangzhou. Therefore, it is of particular interest to consider the role of cultural elements in influencing the Guangzhou audience's viewing behavior.

 Insert Table 1 About Here

Straubhaar (1991) pointed out that other things being equal, television audiences tend to choose programs that bear their own cultural characteristics based in region, dialect/language and other elements. Lull (2000) maintained that language is a primary symbol system of cultural representation. Ksiazek and Webster (2008) have demonstrated that language is a powerful component of the multidimensional construct of cultural proximity. Existing studies of audience duplication have shown that the programs broadcast in ethnic languages have higher than usual duplication levels (e.g. Barwise & Ehrenberg, 1984). Given the interesting multi-language status quo in its television market, Guangzhou provides an ideal venue to test the effect of language on audience program choice. The current study does so by examining how it plays out on the audience duplication levels in Guangzhou.

H₄: Program pairs broadcast in Cantonese have higher levels of audience duplication than those in Mandarin and those in different languages.

The Interaction Effects of the Structural Factors and Audience Preference Factors

Although recent research on audience behavior has emphasized that audience program choice is a result of the interplay of both media structures and audience preference, there have been few research efforts to investigate the direct interactive effect of the two types of factors. The current study takes the initiative to test the interaction effects of scheduling factors and audience preference factors. It is expected that audiences are more likely to stay tuned for the next program when it is the same type as the previous one than it is not. This hypothesis may provide clear evidence for the effectiveness of the popular programming strategy of “block programming” in many

countries. The inheritance effect is also expected to be stronger among program pairs of the same language.

H₅: The inheritance effect is stronger among program pairs of the same type.

H₆: The inheritance effect is stronger among program pairs of the same language.

Similarly, an audience of a program is expected to be more likely to watch another program on the same channel if the two programs are of the same type and / or the same language. Positive results of these hypotheses would indicate that audience program choice in today's multi-channel media environment is indeed the result of the interplay of both scheduling factors and audience preference factors.

H₇: The channel loyalty effect is stronger among program pairs of the same type.

H₈: The channel loyalty effect is stronger among program pairs of the same language.

Method

The current study is a secondary analysis of CVSC-Sofres Media's (CSM) peplemeter data collected via its year-round peplemeter panel in Guangzhou. The Guangzhou panel is part of CSM's national audience measurement network in China. The panel was created through a process of multi-stage area probability sampling, in which each stage is stratified and sample elements are drawn in proportion to their incidence in the population. Similar to the kind that Nielsen uses in the U.S., CSM peplemeters are electronic devices attached to the TV set that automatically records the minute-by-minute viewing behavior of all members of the household. Such meters are known to produce a much more precise record of viewing behavior than either diaries or

telephone recall techniques and have become the preferred method for measuring television audiences worldwide (Webster, et al, 2006).

The data, provided by CSM in their original minute-by-minute format, were collected during the second week of April 2007 in Guangzhou. The week was chosen to avoid any atypical events that might have distorted normal viewing patterns. The panel consists of 300 sample households, or 909 total individuals, representative of the urban population in Guangzhou.

Only prime time (6:30 pm- 10:30pm) viewing data were included in the study for two reasons. First, prime time is when most viewing occurs. Second, this daily time period was chosen to reduce the influence of audience availability during the day. Previous studies showed that daytime soap operas with small audiences tended to enjoy higher repeat viewing simply because their audiences were more consistently available (Barwise & Ehrenberg, 1988). The study chose the top ten channels with the largest market shares. The ten channels accounted for 76% of the total viewing of the Guangzhou audience. This measure serves two important purposes: One, it eliminated channels and programs with an insufficient number of viewers in the sample. If the number of viewers of a channel or a program in the sample is too small, it would not be adequately representative of the population. No hypothesis could be tested based on an insufficient sample size. Two, it helps to control for the effect of channel availability. Channels with small audiences are usually those with a small household penetration rate in the Guangzhou market.

The unit of analysis was the program pair. To further reduce the noise generated by programs with small audience size, programs shorter than 5 minutes or watched by

nine or fewer viewers (about 1% of the 909 viewers in the sample) were excluded from the study. All individuals in each household were included. A total of 25,190 pairs of programs were in the final data set, 144 pairs of which were aired back-to-back; 3,385 on the same channel; 5,710 of the same type; and 11,365 of the same language.

The current study defines an audience as those who watch a program for at least ten consecutive minutes. The ten-consecutive-minute definition has proven to be a viable standard in previous studies dealing with peoplemeter data (Yuan & Webster, 2006). Level of audience duplication was measured as the number of viewers who watched both programs in the pair. For example, if 50 out of the 100 viewers who watched program A also watched program B, the dependent variable of the duplication level for the pair of programs is 50. The three scheduling variables were binary to indicate if the program pairs were broadcast on the same channel, back-to-back or at the same time over course of the week on the same channel. Program type classification information was provided by CSM based on its fifteen-category program genre scheme, which serves as an industry standard in China¹. A dichotomy program type variable was then created by the author with “1” indicating that the two programs in the pair were of the same type and “0” indicating that they were different. Language was a categorical variable with three different values: “0” for pairs of programs in different languages, “1” for Mandarin program pairs, and “2” for Cantonese program pairs. Because English channels have very small audiences, they were not included in the study. A programmer was hired to turn the minute-by-minute viewing records into a SPSS dataset with the variables defined above.

Results

A model of audience duplication regressed on four blocks of variables is presented in Table 2. The first block of variables, the individual ratings of the two programs in the pair, was entered in the model first as control variables. The second block included the scheduling factors of adjacent programs and programs on the same channel. Entered as the third block were audience preference factors including the program type variable and the language variable. Lastly, the interaction variables were entered. Table 2 included the R^2 result and β s of all the variables in each of these four steps.

A 17% increase in R^2 in the second step showed that the scheduling factors added significant explanatory power to the model. The parameter estimates showed further evidence to support the first two hypotheses: H_1 , programs scheduled back-to-back have higher levels of audience duplication, otherwise known as the inheritance effect, and H_2 , programs on the same channel have higher levels of audience duplication, i.e. channel loyalty.

After audience preference factors were entered in the regression model in the third step, the portion of the explained variance of audience duplication further grew to 56%. The parameter estimates showed that the program pairs of the same type had higher levels of audience duplication than those not, regardless of how they were scheduled. Therefore, Hypothesis 3 is supported.

A separate ANOVA analysis showed a significant effect of language on audience duplication. Audience duplication levels were found to differ between the program pairs broadcast in different languages ($F = 612.31, p < .001$). The post hoc comparisons between the three groups of program pairs showed that Cantonese program pairs had

higher levels of audience duplication than both Mandarin pairs (Mean difference = 4.70, $p < .001$) and pairs of different languages (Mean difference = 5.33, $p < .001$). Meanwhile, the difference between the Mandarin pairs and the mixed pairs was not significant (Mean difference = .63, $p = .342$). These results provided evidence that the Guangzhou audiences had a strong affinity for the local language. Thus, the finding offers clear empirical evidence for the culture proximity effect on audience behavior.

For the regression model, the language variable was converted into a new dummy variable, with “1” representing program pairs of the same language, “0” representing two programs that were in different languages. This dummy variable was then entered in the regression model in Step Three and Four to account for the language effect in the model.

The fourth block added more explanatory power to the overall model, although the 3% R^2 change was moderate. However, the interaction effects between the scheduling factors and the audience preference factors in the fourth step significantly changed the dynamics of the previous variables in the model. We saw large reductions in the individual effect sizes of the scheduling factors and the audience preference factors. In their replacement were the significant effects of the interaction variables. In summary, the results supported H_5 and H_6 , that the inheritance effect is stronger among program pairs of the same type and / or the same language. Similarly, H_7 and H_8 , that the channel loyalty effect is stronger among program pairs of the same type and / or the same language were also supported. These results demonstrated that the Inheritance effect and channel loyalty in today’s media environment are no longer the simple effect of program scheduling but subject to the intertwining effect of both media structures and audience preferences (Webster, 1985, 2006).

Finally, the four-step regression model explained 59% of the total variance in audience duplication, a very significant result compared to most previous studies.

 Insert Table 2 About Here

Discussion

This study examined an important manifestation of audience program choice—audience duplication, the extent to which the audience of one program who also watches another program. Earlier studies of audience duplication, which were carried out when there were only a handful of available channels, consistently found that patterns of duplication were mainly associated with program scheduling, a structural factor that was characteristic of the media environment (Barwise & Ehrenberg, 1988). Findings of this study indicate that this has changed. In today's multichannel environment, audience duplication is a result of the interplay of both macro-level structural factors and micro-level audience preference factors (Webster & Phalen, 1997).

The prominent uses and gratifications approach to audience behavior has long emphasized the effect of individual preference on program choice. More important, as the rapid development of communication technology has brought about an abundance of media outlets, as well as devices that facilitate program selection such as remote control, some expect that television viewers would be free from structural limitations and exert total autonomy in their program choice. However, the research results in Guangzhou, an emerging multicultural television market, showed that, even with unprecedented freedom to choose among a wealth of channels, Guangzhou audiences still displayed strong

structural patterns of audience duplication. Programs scheduled back-to-back share more viewers than those farther apart. The audience of one program is likely to go back for another program on the same channel regardless of the content of the programs. This finding is consistent with what research has found concerning audience behavior in the U.S., one of the most advanced contemporary television environments in the world (Webster, 2006).

However powerful, structural factors alone do not account for all audience behavior patterns. Individual characteristics that are particular to different viewers and different programs are found to work beyond structural constraints. Program type is found to affect audience duplication regardless of the manner in which the programs are scheduled. Furthermore, the significant interaction effects in the final regression model demonstrate that the prominent inheritance effect and channel loyalty effect found in today's multi-channel media environment are not merely a result of structural factors. Instead, they reflect the combined effects of both program scheduling and audience preference factors.

The findings in the Chinese context have important implications for audience studies in general. There have been long-held contentions between two important conceptualizations of audiences: audience-as-outcome and audience-as-agent (Webster, 1998). The former conceives audiences as passive receivers who are acted upon by media, while the latter believes audiences are free agents acting on their own will and preferences in their media use. The dominant-model paradigm in media effects and later the uses and gratifications paradigm are representative of the two different conceptualizations, respectively (Blumler, et al, 1985; Lowery & DeFleur, 1995). The

significant interaction effects of both audience preferences based on program type as well as the broadcasting language, and the structural factors in the Chinese context confirm that television program choice is the complicated result of many factors. It demonstrates that audience agency, i.e. preference-based audience autonomy, is often both enabled and restricted by the structure in which it operates. The effects of the scheduling factors in the study adequately captured the power of the media structure in affecting audience program choice (Webster, 2006).

The study offers explanations of audience behavior beyond the usual analyses of TV program schedules and primetime ratings. Language appeared to be a potent element that explained much about audience behavior. Programs of the same language have higher levels of audience duplication regardless how they are scheduled. Furthermore, program pairs in Cantonese, the native dialect in the local market, have higher levels of audience duplication than both Mandarin program pairs and pairs in different languages. This finding offers empirical support for the theoretical notion of “cultural proximity”, or the notion that audiences prefer programs bearing cultural elements such as language, similar to their own in a multicultural television market (Straubhaar, 1991). The language effect also manifested itself in that the two Hong Kong channels broadcasting in Cantonese are the most popular in the market. Conversely, it may also be the reason that the other overseas channels broadcasting in Mandarin fail to attract sizeable Guangzhou audiences. This seems to indicate that the effect of opening up the domestic market to the global influences brought about by these overseas channels is necessarily mitigated by local cultural influences. The Hong Kong channels obviously are the winner in this dual process of “glocalization” (Kumar, 1998).

The lack of access to individual-level data on language proficiency prevented the study to further assess the “cultural proximity” thesis. It would be interesting to see how bilingual audiences differ from those who have strong affinity with only the local language in terms of their program choice. This could be an interesting research question for future concerns.

The unit of analysis of the current research was limited to program pair. Future research might look at possible effects of individual viewer characteristics on program choice as viewers from different demographic groups may respond to the changing television environment differently. This line of research would provide further insights into audience duplication, and audience behavior in general.

Notes (Television program types in China)

1. They are: 1) news and current affairs, 2) in-depth updates and reports on social political issues, 3) financial programs, 4) news magazine on law enforcement issues, 5) hobbies, leisure and consumer programs, 6) light entertainment, 7) music, 8) folk opera, 9) drama, 10) movies, 11) sports, 12) educational programs, 13) English language programs, 14) children's programs, and 15) others.

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Table 1

Overseas Television Channels in Guangzhou

Channel	Parent Company	Broadcast Language
Phoenix Satellite Channel	News Corp.	Mandarin
CETV	AOL Time Warner	Mandarin
XingKong Satellite TV	Fox (News Corp.)	Mandarin
ATV		Cantonese
ATV -2	HK Asia Television	English
MTV	Viacom	English
Jade		Cantonese
Pearl	HK BTV	English

Source: CVSC-Sofres-Media, 2007.

Table 2

Audience Duplication Regression Model in Guangzhou with the Control variables

	<i>The First Step</i>	<i>The Second Step</i>	<i>The Third Step</i>	<i>The Fourth Step</i>
	$R^2 = .37$	$R^2 = .54$	$R^2 = .56$	$R^2 = .59$
	$F = 7332.26$	$F = 7475.33$	$F = 5190.38$	$F = 3540.65$
	$p < .01$	$p < .01$	$p < .01$	$p < .01$
1 st program's rating	.47 (**)	.42 (**)	.42 (**)	.42 (**)
2 nd program's rating	.39 (**)	.36 (**)	.36 (**)	.36 (**)
Inheritance Effect		.10 (**)	.10 (**)	.00 (**)
Channel Loyalty		.39 (**)	.39 (**)	.09 (**)
Program Type Effect			.10 (**)	.03 (**)
Language Effect			.12 (**)	.02 (**)
Inheritance Effect X				.04 (**)
Program Type				
Inheritance Effect X				.09 (**)
Language				
Channel Loyalty X				.20 (**)
Program Type				
Channel Loyalty X				.21 (**)
Language				

** Correlation is significant at the 0.01 level (2-tailed).