

Television Advertising Avoidance: Advancing Research Methodology

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New technologies have led to increased television advertising avoidance. In particular, mechanical avoidance in the form of zipping and zapping has gained momentum in recent years. Channel switching or “commercial zapping” studies employ diverse methodologies, including self reports, electronic monitoring, laboratory, and in-home observation which has led to a diversity of reported results. This article proposes advancing and standardizing the methodology to comprise a two-phase hidden observation and survey method. A number of research phases have led to the development of this method to collect both mechanical and behavioral avoidance data. The study includes a detailed outline of the hidden observation approach. The survey phase opens up the potential for the collection of viewer data that may further illuminate television advertising avoidance behavior.

KEYWORDS *advertising, commercials, consumer behavior, television, zapping, zipping*

INTRODUCTION

The consumer’s willingness to pay attention to advertising is necessary for advertising to do its work (Poltrack, 1997; Hallward, 2000; Patchen & Harris-Kojetin, 2001). In mature markets, television commercials are typically clustered into defined breaks and are embedded into the programming. Viewers pay varying levels of attention to advertising messages, and there is unquestionably some level of advertising avoidance for television commercials (Heeter & Greenberg, 1985; Danaher, 1995; Speck & Elliott, 1997; Rojas-Méndez & Davies, 2005). Clearly, increased levels of television advertising

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avoidance are of great concern to advertisers as commercial television can no longer guarantee a relatively captive audience to the advertising industry (Walker & Bellamy, 1993a, p. 8).

The overall level of advertising avoidance erodes advertising effectiveness (Cronin, 1995) and has obvious financial implications for both television stations and advertisers (Woolley, 2003). Advertising rates for television advertising is based on the number of people watching the program (Kaplan, 1985). Although all program viewers have the "opportunity to see" the television commercial (TVC), those viewers who choose not to watch the TVC's have been paid for, but are not "delivered" (Cronin).

New technologies, such as the Digital Video Recorder (DVR), video-on-demand and recordable DVD players advance the ways in which viewers avoid television commercials (Donaldson, 2005; Fass, 2005). This trend is likely to force agencies and their clients to continue to find new ways to advertise on television (Donaldson, 2005) particularly as commercial time continues to "cost more and deliver less" (Streisand, 2004). The technology trend is showing no signs of abating. Forrester Research forecasts that over half of US households will have some form of on-demand television by the end of 2007 (Donaldson, 2005). Clearly the television business model that has grown out of the 30-second television spot is in peril (Streisand).

TELEVISION ADVERTISING AVOIDANCE

Advertising avoidance is defined as all actions made by media users that differentially reduce their exposure to advertising content (Speck & Elliott, 1997, p. 61). Specifically, television advertising avoidance is expressed as the viewer's behavior in "passing over" the opportunity to see a TVC.

Advertising avoidance is highest for television (Speck & Elliott, 1997; 1998) compared to other media forms. Physical avoidance of television advertising includes behavioral and/or cognitive avoidance (Speck & Elliott, 1997). Behavioral avoidance includes leaving the room or dozing off (Kaatz, 1986) while cognitive avoidance includes diverting attention away from the television set, usually to converse or read (Kitchen, 1986). In essence, people use the television commercial breaks to do other things (O'Donohoe, 1994; Speck & Elliott, 1997).

Mechanical avoidance includes the use of a remote control to fast forward a videotape so as to bypass non-program content ("zipping") or switch channels ("zapping") during commercial breaks. In recent years, mechanical TVC avoidance has been fuelled by the emergence of Video Cassette Recorders (VCR), cable television, remote control devices, and advertising clutter (& Ray, 1979; Kitchen, 1986; Nakra, 1991; Cronin, 1995; Speck & Elliott, 1998).

Methodology to Monitor Television Advertising Avoidance

Research into the area of television advertising avoidance has relied predominantly on self reports (Heeter & Greenberg, 1985; Yorke & Kitchen, 1985; Kitchen, 1986; Greene, 1988; Abernethy, 1991; Speck & Elliott, 1997; 1998) and electronic monitoring of television audience switching (Zufryden, Pedrick, & Sankaralingam, 1993; Danaher, 1995; van Meurs, 1998). Avoidance rates vary considerably for different studies. Abernethy (1991) reports one or more viewers left the room during 36% of the commercials. Fifty per cent of viewers report avoiding advertisements by leaving the room, changing channels, or muting the commercial breaks (Mittal, 1994). Cook (1994) reports that, in a pilot study for a passive people meter, Nielsen Media Research notes that only 5% of the audience leave the room on average during commercial breaks, whereas Hallward (2000) states that most viewers are doing something else during commercial breaks and/or leave the room.

The variety of research approaches employed has led to a wide diversity of outcomes, resulting in limited scope for comparison across different studies. In order to advance the accumulation of knowledge into this area, a universal methodological approach is essential to drive congruency across these studies.

Outcomes of Channel Switching Studies

Television channel switching during commercials is referred to as “commercial zapping” (Zufryden et al., 1993) which accounts for a significant portion of television advertising avoidance behavior (Heeter & Greenberg, 1985; Abernethy, 1991; van Meurs, 1998). Moreover, commercial zapping appears to be a good predictor of other forms of advertising avoidance such as zipping and leaving the room (Abernethy, 1991).

Commercial zapping estimates vary considerably from one study to the next. Based on a 1991 study, Moriarty (cited in Cornwell et al., 1993) found that only 40% of the fifty commercial breaks observed included one or more channel changes. Cronin (1995) reported on the percentage of commercials zapped, noting that 30% of all commercials were zapped in an in-home observation study. In terms of audience avoidance behavior, some studies report on the percentage of audience that zap commercials. Such studies report a variety of findings including 16% (Kaatz, 1986; Greene, 1988), 60% (Cronin, 1995), between 50% and 67% (Heeter & Greenberg, 1985), 67% (Mittal, 1994), and 81% (Tse & Lee, 2001).

Other studies report on the percentage of commercial time that was avoided. Again, a variety of results have been reported including 3.4% (Siddarth & Chattopadhyay, 1998), 5% (Zufryden et al., 1993), 10.4% (Danaher, 1995), 28.6% (van Meurs, 1998), between 45% and 60% (Abernethy, 1991), and 61% (Moriarty & Everett, 1994).

The variation in these findings may be attributed to a number of factors. For example, national differences exist among respondents in Hong Kong (Tse & Lee, 2001), the Netherlands (van Meurs, 1998), the US (Heeter & Greenberg, 1985; Greene, 1988; Speck & Elliott, 1997), New Zealand (Danaher, 1995), and the UK (Yorke & Kitchen, 1985; Kitchen, 1986). Moreover, while most studies are based on self-reported zapping behavior (Heeter & Greenberg, 1985; Yorke & Kitchen, 1985; Kitchen, 1986; Greene, 1988; Abernethy, 1991; Speck & Elliott, 1997) others make use of objective mechanical tracking devices such as people meters (Kneale, 1988; Zufryden et al., 1993; Danaher, 1995; Siddarth & Chattopadhyay, 1998; van Meurs, 1998). Moreover, while some studies report on channel switching exclusively (Heeter & Greenberg, 1985; Cronin, 1995; Danaher, 1995; Siddarth & Chattopadhyay, 1998; van Meurs, 1998), others define their measurement in terms of advertising avoidance across different media (Speck & Elliott, 1997).

In some cases, sampling procedures are non-random (Yorke & Kitchen, 1985; Kitchen, 1986; Cronin, 1995), others are skewed by admission of the authors (Abernethy, 1991; Speck & Elliott, 1997) while some are representative of underlying national populations (Danaher, 1995; van Meurs, 1998; Tse & Lee, 2001). Growing access to remote control devices impacts on the data as studies range from between 1985 (Heeter & Greenberg, 1985; Yorke & Kitchen, 1985; Cronin, 1995) and 2001 (Tse & Lee, 2001). Consistency is also compromised as some studies are conducted over a period of days (Cronin, 1995; Danaher, 1995; Tse & Lee, 2001) while others collect data over weeks, months, or even years (Heeter & Greenberg, 1985; Zufryden et al., 1993; van Meurs, 1998). Therefore, it is highly imprudent to attempt to draw meaningful comparisons across the different studies.

LIMITATIONS OF EXISTING DATA COLLECTION METHODS

The primary data collection method for channel switching and commercial avoidance studies is via self-reports (Walker & Bellamy, 1993b, p. 12; Kaye, 1994). Despite being the most common method, self-reporting is hampered by a number of limitations. First, it is doubtful whether viewers can accurately reveal their own switching behavior. Self-reports are subject to biases such as memory and social desirability effects (Ferguson, 1992, as cited in Kaye, 1994; van Meurs, 1998). Moreover, Moriarty in 1991 found that, in self reports, viewers underestimate their frequency of remote control use (cited in Cornwell et al., 1993, p. 47) and tend to “oversimplify, distort or merge their actual behavior” when self-reporting on their channel switching activities (Cornwell et al., 1993, p. 46). Second, researchers have tended to use relative scales (“never” to “very often”) rather than attempt to gather actual channel switching behavior (Walker & Bellamy, 1993b).

Although electronic monitoring provides accurate quantitative output (van Meurs, 1998), the channel switcher's identity and the circumstances underlying the use of the RCD remain unknown (Cornwell et al., 1993). Moreover, electronic measures such as people meters and cable converter boxes do not capture short-interval dial switching (Cronin, 1995; Ephron & Gray, 2001).

Laboratory observation may result in contrived behavior (van Meurs, 1998). Videotaping is intrusive and is limited to small samples while in-home human observation has the problem of an obtrusive interviewer presence (Cronin, 1995) and difficulty in accurately recording quick changes in viewer activity (Cornwell et al., 1993, p. 48). Finally, asking the viewer to complete a diary requires considerable effort from the respondent. Moreover, diaries are subject to respondent fatigue with response rates as low as 40% to 50% of households (Beville, 1988, pp. 111–112).

All methods of television avoidance data collection have notable limitations. No existing method is an established benchmark in this area of research. Clearly, in order to advance this area of study, a methodological leap is necessary. This article proposes an innovative alternative to the conventional methods that have been employed during recent years.

PROPOSED RESEARCH APPROACH

Researchers have called for advancing the methodological approach in studies on the use of the RCD (Krendl, Troiano, Dawson & Clark, 1993; Walker & Bellamy, 1993b; Kaye, 1994). In particular, calls have been made to utilize multiple research methods or triangulation (Walker & Bellamy, 1993b, p. 12; Hogg & Garrow, 2003) perhaps in the form of a combination of personal observation and depth interviews as complementary processes (Krendl et al., 1993, p. 138). Isolated studies have employed a triangulated approach using both observation and survey (Cronin, 1995). However, no studies to date in the area of channel switching have used a combination of hidden observation and survey in tandem. Dix and Phau (2003) have mooted that the realism of in-home observation followed by a self-completion survey provides a rich source of channel switching data within a naturalistic setting.

TWO-PHASE OBSERVATION/SURVEY METHOD

Observation Phase

In-home observation has been used successfully to study a variety of television studies (Steiner, 1966; Reid & Frazer, 1980; Lull, 1982; Stoneman & Brody, 1983; Lindlof, Shatzer, & Wilkinson, 1988; Krugman & Johnson, 1991;

Kaufman & Lane, 1994; Kaye, 1994; Krugman, Cameron, & McKearney White, 1995).

Since the subject(s) selects the location, viewing time, and the program, this approach offers a naturalistic enquiry (Krugman et al., 1995). In order to keep the observation hidden, thus removing interviewer bias, the observer should preferably be a member of the household. It is proposed that the ideal person to conduct a hidden in-home observation is a university student. The student may assume the role under the guise of completing a television-related assignment (Dix & Phau, 2003) and is therefore least likely to raise suspicion from other household members.

Arguably, the ideal observer is a student of marketing research. This student is engaged in learning the principles of marketing research and is an ideal candidate to be trained as an observer and to be “engaged in a television-related assignment.” Not only does this research exercise equip these students with relevant observation skills, but it also offers them the experience of completing a practical research task. Moreover, most major universities have sufficiently large marketing research classes to generate a meaningful sample. Therefore, this approach can be replicated in all major cities worldwide.

Survey Phase

Once the observation process is complete, the observer discloses his or her role and requests that viewers complete a survey. The survey can be used to gather valuable viewer data such as perceived clutter, attitudes to television advertising, planned versus impulse viewing, and the influence of situational triggers on channel switching. In addition, the survey can be structured to gather viewers’ reported channel switching for comparison with their observed channel switching activity.

REFINEMENT OF THE TWO-PHASE OBSERVATION/SURVEY METHOD

This proposed observer/survey research approach was refined over a period of eighteen months spanning three distinct phases.

Phase One—Exploratory Study

The first phase was exploratory in nature. The objective of this phase was to explore television viewer behavior during a program as well as during the advertising breaks. The task was applied by a group of 200 volunteer Marketing Research students. Each student observer was required to conduct

the task in his or her own household. Observers were required to monitor no more than three viewers during a single 30-minute observation session. The observer was required to keep an approximate record of time and to note the activities in which viewers engaged while watching television.

Following the observation phase, viewers were told that they had been monitored over the previous 30 minutes and were asked to complete a survey. The self-completion survey required between 10 and 15 minutes to complete. Finally, the observer was required to complete a feedback form, outlining the observation experience and what had been learned about advertising avoidance. Observers were asked to note any disruptions or problems encountered during the observation process. Moreover, observers were required to comment on whether they had managed to keep the observation hidden from household viewers.

It was clear from the feedback that observers could successfully conduct a hidden observation exercise within their own household. The data collected from this phase provided a qualitative insight into the typical behavior of a television audience. Although this data set was not subject to formal analysis, it did support taking this methodological approach forward to the next phase. None of the household members objected to being monitored by a member of household and all agreed to complete a survey at the request of the observer.

Phase 2—Determine What Areas of Advertising Avoidance Can Be Observed

During phase 2, the intention was to conduct a study to focus specifically on television advertising avoidance behavior. A key objective of this study was to determine whether it is possible for observers to track the viewer's "eyes-on-screen" during the advertising breaks. "Eyes-on-screen" would constitute the primary measure of visual attention to the commercial messages. The time difference between the total length of the advertising break and "eyes-on-screen" equated to the "eyes-off-screen" or visual inattention to the commercial messages.

In addition to eyes-on-screen, observers were required to monitor two other variables simultaneously over the duration of the advertising break. The observer was required to monitor whether the viewer was watching program or non-program material (advertising, station promotions, or station identification) and to which channel the television set was tuned. Observers were given a time sheet and were required to note changes for the three variables under review in the appropriate time blocks.

For purposes of this pilot study, television advertising avoidance was operationalized as the percentage of time that the viewer's eyes were not on the screen during a commercial break. This pilot study sought to ascertain whether eyes-off-screen was measurable via an observation approach. If so,

this measure could serve as a surrogate for both cognitive and behavioral television advertising avoidance. Mechanical avoidance could be simultaneously measured by monitoring the channel that the television set was tuned to.

The methodology proved to be too ambitious and a number of weaknesses emerged from this phase of the study. First, observers were only able to monitor one viewer's eyes-on-screen at a time. This raised the issue of which household viewer should be selected for observation. Although observers were instructed to select the person with closest access to the remote control, results would always be limited to one person within a group-viewing environment. Moreover, despite being closest to the remote control device, that person may not switch channels during the advertising break. This would result in a convolution of channel switching and eyes-on-screen interaction effects.

Second, this approach did not successfully distinguish between cognitive and behavioral avoidance. Eyes-off-screen may denote a viewer who remained in the viewing room but was not paying attention to the advertising (cognitive avoidance). While this person avoided direct visual contact with the advertising, he or she may still get peripheral visual or auditory (unless the television set is muted) input from the advertising. However, for the viewer with eyes-off-screen who was out of the room (behavioral avoidance), there was no visual input from the advertising and an auditory stimulus was less likely.

Third, the feedback from this pilot indicated that it was not possible to observe a viewer's eyes-on-screen without it being obvious to that viewer. In many cases, the person being observed was unnerved by the constant visual attention and this led to atypical behavior on their part. This approach was successful where the observer could be seated either behind the viewer or in an adjoining room adjacent to the viewing room. However, only a minority of viewing rooms offered the observer such an advantageous point of reference.

As a result of these limitations, it was clear that cognitive, behavioral and mechanical avoidance could only be simultaneously measured by means of a video camera installed into the viewing room. However, such a methodological approach precludes a large sample study. Therefore, it was decided to refine the research methodology to exclude cognitive avoidance and to focus on mechanical and behavioral avoidance only.

Phase 2 provided the opportunity to effect a number of methodological improvements. Each issue was separately listed and the stated resolution was included in the following phase of developing this research methodology.

1. The mobile phone used as a timing device may go off during the observed commercial break.

Resolution: Set your phone to silent prior to each observation session.

2. Other viewers in the room engage the observer in conversation during the commercial break.
Resolution: Speak to them as you usually would. If your data is compromised, you may need to abort the session and start a new session at a later time.
3. The viewer notices your working papers and becomes suspicious.
Resolution: Acknowledge that you have a university assignment that requires you to monitor product placements within television programs.
4. The viewer(s) do not complete watching the program.
Resolution: Abort the session and start a new session at another time.
5. The observation sheet is expressed in seconds only.
Resolution: The observation sheet should be coded in minutes and seconds to correspond to the timing format on a mobile phone.

Phase 3—Consolidation of the Proposed Observation/ Survey Approach

For purposes of this final phase, the primary dependent variable is defined as the viewer's "propensity to zap television commercials" (PROPZAP). This was operationalized as the percentage of advertising time missed on the program channel as a result of having switched to other channels. There are two versions of this variable. OBSERVED PROPZAP is the observed percentage of time that the viewer was exposed to channels other than the program channel during advertising breaks (gathered from the observation). REPORTED PROPZAP is the viewer's estimate of the percentage of time that he or she was exposed to channels other than the program channel during the advertising breaks (gathered from the survey).

Although the propensity to zap commercials (PROPZAP) was the primary dependent measure included in this study, two other secondary television advertising avoidance behaviors have been included. Leaving the room (PROPLEAVE) and muting the ads during the commercial break (PROPMUTE) were also measured in this study. The inclusion of these measures boosts the significance of the research approach by addressing all mechanical and physical television advertising avoidance activities.

Leaving the Room during Advertising Breaks (PROPLEAVE)

Viewer absence was included in the research methodology since it impacts directly on the viewer's potential to switch channels. Clearly, a missing viewer cannot switch channels during the ad breaks. For the solo viewer, absence from the viewing room during the advertising break precluded channel switching unless the viewer switches channel before leaving the room. In

the case of multiple viewers, the absence of one or more viewers from the viewing room during the advertising break did not preclude the remaining viewers from switching channels. Absence from the room and channel switching are therefore not mutually exclusive.

This proposed methodology monitored the time that each viewer spent outside of the viewing room during the advertising breaks. This was expressed as a percentage of the total advertising break. For example, if Person B was out of the room for 40 seconds of a 200-second advertising break, then s(he) was absent for 20% of the time and had missed the opportunity to see (OTS) 20% of the advertising.

Muting the Television Set during Advertising Breaks (PROPMUTE)

Muting the sound on the television set is a form of advertising avoidance that removes the auditory component and so reduces the impact of the advertising. Muting can occur while the television set remains tuned to the program channel during the advertising break or when tuned to an alternative channel. Muting, channel switching, and absence from the viewing room are not mutually exclusive activities.

Observation Data Collection during Phase 3

The observation phase of this proposed methodology comprised separate observations sessions of 30 minutes each. It was suggested that four observation occasions would be ideal. The observer was required to code relevant viewer activity during all advertising breaks within each 30-minute interval. Depending on the program being viewed, there could be one, two, or three advertising breaks during a 30-minute interval. Since the observation took place in a naturalistic setting, not all household viewers would be present at every session. However, by including several observation sessions into the study, it was intended to gather a meaningful PROPZAP profile for each household viewer.

Prior to the first advertising break during observation 1, the observer captured the date of the session, name of the program, number of remote control devices in the viewing room, whether the household has access to cable television, and the number of television sets in the household. The age and gender of each respondent was recorded for all observation sessions. In addition, the observer noted whether each viewer is a household member or a visitor.

Provision could be made for a maximum of five viewers over the duration of the observation sessions. Between one and five viewers (members or visitors) could be observed during any one session. Within the same

household, any combination of viewers could be present for any one observation session. At the completion of, for example four observation sessions, viewers included in the study could have been present for one, two, three, or all four sessions.

The observation coding sheet is divided into 300 blocks of one-second each, totaling five minutes of coding time. The blocks are numbered in minutes and seconds to conform to the configuration of time as displayed on a mobile phone, wristwatch, or stopwatch. The timing device was activated as the advertising break begins.

Coding the Ad Breaks

An observer coding sheet was used to record the relevant data during each advertising break. There are five distinct coding tasks inherent in the observation exercise. First, in block "1," observers entered the number denoting the television station (Australian television uses channels 7, 9, or 10) to which the television is tuned. This identified the program channel that the viewers had been watching leading up to the advertising break.

Second, for any channel switch, the observer coded the identity of the person making the switch as well as the identity of the channel to which the switch is made. Each member of household (or visitor) was consistently identified by a particular letter (A, B, C, D, or E) across all observation sessions. Moreover, every channel was identified by its number or by appropriate letters. For example, "B9" indicates that person B has switched to Channel 9. This information was written into the appropriate time block denoting when the switch occurred.

Third, observers were required to record when the television set was muted. For example, if person A mutes ("M") the television at 35 seconds, then an "MA" is coded into the block marked "35". If person C de-activates the the muting function at a later time within the commercial break (for example at 2 minutes and 10 seconds), then "MC" is written into coding block "2:10".

Fourth, observers were required to record any movement of viewers leaving or returning to the viewing room during the advertising break. Small letters (a, b, c, d, and e) were used to indicate this movement. For example, if person B leaves the room after 20 seconds, then "b" is coded into the block marked "20." If person B returns after 1 minute and 25 seconds, then a "b" is also coded into the 1:25 block. If B does not return during the advertising break, the presence of only a single "b" code denotes that this person did not return for the remainder of the advertising break.

Finally, the end of the advertising break was entered as an "E" in the appropriate time block on the coding sheet. If the viewer(s) returned to the target program only after the advertising break has ended, this was denoted

by a “P” (Program) in the appropriate time block to indicate that they have returned to the program. In this case, the observer would not know the exact time that the advertising break had ended.

ANALYZING THE OBSERVATION DATA

After each observation session, data was extracted from the observer’s coding sheet and was transposed onto the analysis page (Appendix 1). The length of time (in seconds) spent on each channel during the advertising break was recorded alongside that channel description. The television channels, including cable TV, were listed on the analysis page. The time intervals (in seconds) corresponding to each channel option were added to display the total length of the advertising break (in seconds). Those time intervals during which the television set was muted were recorded alongside the relevant channel to which the set was tuned while the muting took place. Finally, the number of seconds that each viewer was out of the room during the ad break was recorded alongside that person’s identifying letter (A, B, C, D, or E).

Observed PROPZAP

Having observed all advertising breaks within the designated 30-minute period, a summary of the viewer activity within that time frame was compiled (Appendix 2). The time (in seconds) of each advertising break is noted (Column B). The time (in seconds) that viewers were tuned to channels other than the program channel is also noted (Column C). The time away from the program channel (Column C) is expressed as a percentage of the total time of the advertising break (Column B). This denotes the percentage of time that the television was off the program channel during the ad break (Column D).

Thereafter, the length of all ad breaks within the observation period was summed (per Column B). The total time spent off-channel during all ad breaks was also summed (Column C). The total off-channel time is then expressed as a percentage of the total length of ad breaks (Col C/Col B \times 100). This result (Column D) denotes an overall, weighted average of the percentage time spent off-channel during the 30-minute observation sessions under review. This measure is referred to as “observed PROPZAP” (Table 1).

The percentage of time spent off-channel is separately displayed for each advertising break (Column D). Moreover, the total time spent off-channel over all three advertising breaks (Total Column C) is displayed alongside the total length of the ad breaks themselves (Total Column B).

TABLE 1 Observer's Analysis of Channel Switching Activity

Column A	Column B Total length of ad break in seconds (or best estimate if viewers return after ad break has ended)	Column C Total time spent on channels other than the program channel (in seconds)	Column D Time spent on other channels as a% of total ad time $\frac{\text{ColC}}{\text{ColB}} \times 100$
Ad Break 1	185	120	64.86%
Ad Break 2	160	0	0.00%
Ad Break 3	200	100	50.00%
Total of Columns	545	220	40.37%

Column C total is divided by Column B total and multiplied by 100 to give the overall weighted percentage time spent off-channel for all advertising breaks (40.37%) denoting observed PROPZAP for the 30-minute viewing period.

PROPLEAVE

The time interval that each viewer spent out of the viewing room was entered onto the analysis summary sheet. These time intervals were added for each viewer to reflect the cumulative number of seconds each person spent out-of-room during advertising breaks embedded into the 30-minute observation period. The total time each viewer was out of room was converted to a percentage of the total ad break time. This denoted the percentage of the ad break time that each viewer spent outside of the viewing room. This measure is referred to as "observed PROPLEAVE" (see Table 2).

Given that the advertising breaks within the half hour observation session totaled to 545 seconds, the percentage of time that each person spent outside the viewing room could be calculated:

$$\text{Person A: } 150/545 \times 100 = 27.52\%$$

$$\text{Person B: } 120/545 \times 100 = 22.02\%$$

TABLE 2 Observer's Record of Time Spent Outside the Viewing Room

	Person A	Person B	Person C	Person D	Person E
Ad Break 1	40	0			
Ad Break 2	0	35			
Ad Break 3	110	85			
Total	150	120			

TABLE 3 Observer's Record of Time for which the Television is Muted

Column A Channel	Column B How many seconds was the TV tuned to each channel during the ad break?	Column C How many seconds (of those listed in Column B) were muted?
ABC		
Channel 7	100	40
Channel 9	50	30
Channel 10	90	
SBS		
Foxtel		
Total	240	70

PROPMUTE

Finally, the percentage of time that the television set was muted during ad breaks is referred to as PROPMUTE. Observers were expected to note when the TV set was muted and by whom (see Table 3).

For the ad break analyzed in Table 3, the television set had been muted for 29.17% ($70/240 \times 100$) of the ad break time. These measures were separately recorded for each advertising break and the mean of the percentage time muted is represented as PROPMUTE.

Recording of Programs Over the Observation Period

All television programs were tape-recorded over the duration of the observation period. This had two important benefits. First, the length of the ad breaks per the observation sheets could be verified to determine the observer's timing accuracy. Second, when viewers returned to the program after the ad break was over, the exact time that the ad break ended was unknown. By recording all television programs, the length of each ad break was calculated and the time at the end of the advertising break ("E") was inserted onto the coding sheet. The analysis could then be adjusted to reflect viewer activity over the duration of the advertising break only.

Self-Completion Survey Instrument

The methodology proposes that the observation should be followed by a self-completion survey. Once the final observation session was complete, the observer revealed the real purpose of the observation exercise.

A letter from the researcher confirmed to the viewers that the observer had been instructed to conduct a hidden observation task. The letter verified the objective of the study and requested that the viewers complete the survey

form. Respondents were given the option of whether to participate and were guaranteed anonymity.

Observers were given a set of five identical surveys printed on yellow paper for ease of identification. Each survey is clearly marked for Person A, B, C, D and E. Observers were instructed to hand the relevant survey(s) to those viewers present at the end of the final observation.

The survey consisted of two components—section A and section B. Viewers who were present during the fourth and final observation session completed both sections A and B. Since viewers were asked to complete the survey immediately after the final observation ends, respondents were questioned in Section A on their specific channel switching behavior during the preceding 30 minutes.

Surveys forms were also given to those viewers who were previously observed but were not present for the final observation session. These surveys were administered at the observer's convenience as the questions did not relate to a particular viewing period. All respondents were required to complete section B only, which focused on television viewing in general.

OBSERVER TRAINING

A critical component in the effectiveness of this methodological approach lay in the extent and quality of training offered to observers. The following provides an outline of how to equip observers with the skills necessary to successfully complete this task.

A brief for the observation task may be posted on the intranet three weeks before the commencement of the training phase. The objective is to prime the observers regarding the nature of the task. Student observers are instructed to periodically watch television with a pen, paper, and mobile phone in hand under the guise of monitoring television programs. The purpose of this is to get household members accustomed to the observer being in the television room with assignment materials in hand. To address any suspicion as to what s(he) is doing, the observer may be instructed to say that s(he) is completing a university assignment on product placement which requires that s(he) conducts some television monitoring.

Thereafter, student observers may receive training once a week over a period of three weeks. A copy of the transcript for each training session should be handed out to students at the end of each session to reinforce their learning.

Training session 1 has an orientation focus in which the nature of the task is confirmed and expectations for the task are detailed. A key component in this session is to determine whether each student has access to a timing device. The preferred device is the mobile phone, as this will attract least attention to the observer. For those without access to a mobile phone, a

stop-watch or a wristwatch would suffice. In addition, students should be given the researcher's telephone and email contact details to address any questions or concerns directly to the researcher.

Session 2 outlines the mechanics of the coding process and takes the student group through a simulated observation using a video recording of a family viewing television. Students are required to conduct at least two practice observations at home before the third and final training session. Developing proficiency in keeping track of time while simultaneously noting switching, muting, and viewer movement can be achieved over two practice occasions.

The objective of Session 3 is to consolidate the coding system and provide a further simulation exercise. During this session, students are shown how to complete the analysis sheets based on the data collected during the coding process. This session may also highlight the key elements of the observation process and address any final concerns. A list of frequently asked questions generated by student email enquiries throughout the training process may be handed to the students as both an easy-reference and a refresher.

CONCLUSIONS

The implementation of the observation/survey approach provided the opportunity for fresh insights into the television channel switching environment. Although a version of this methodological approach had been applied in at least one previous study into this area (Cronin, 1995), the variation applied in this study was unique.

The methodology employed in this study targeted dual quantitative and qualitative components of channel switching behavior to provide a benchmark research approach. It offers an effective means of collecting actual viewer data within a naturalistic setting. Moreover, it can be conducted within a university setting providing valuable practical experience for students of marketing research.

This methodological approach resolves the inequities apparent within recent channel switching studies. One methodology can be applied across future studies to exact meaningful comparison across different regions and over time. Not only does this methodology provide an accurate measure of the extent of advertising avoidance via channel switching, but it also creates the opportunity for renewed comparison between observed and reported levels of channel switching. Moreover, this methodology exposes the potential for identifying additional predictors of channel switching behavior.

This methodological approach offers notable contributions to media planners. Knowing the extent of channel switching behavior among prime time television audiences empowers media planners to more accurately

determine prime time advertising audience sizes. Cost per Thousand (CPM) calculations can then be realistically founded on commercial audience sizes rather than the current practice of basing these on program audiences. Clearly, the stakes are high in a global television sector that attracts in excess of US\$125b in advertising revenue per annum.

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APPENDIX 1

Analysis Sheet

A. Complete the following table in relation to number of seconds that the television set was tuned to specific channels:

Column A Channel	Column B How many seconds was the TV tuned to each channel during the ad break? *** See note below	Column C How many seconds (of those listed in column B) were muted?
ABC		
Channel 7		
Channel 9		
Channel 10		
SBS		
Foxtel		
Total		

*** If the viewer only returns to the program after the ad break has finished, then you should account for all time that has been expended up to the “P” symbol.

B. Complete the following table in relation to viewers leaving the room during the advertising break

Person	Did this person leave the room during the ad break?	How many seconds was that person out of the viewing room during the ad break?
A		
B		
C		
D		
E		

APPENDIX 2

Overall Analysis of All Observations

A. Based on as many observations as you have done during the trial phase, complete the following table

Column A	Column B Total length of ad break in seconds (or best estimate if viewers return after ad break has ended)	Column C Total time spent on channels other than the program channel (in seconds)	Column D Time spent on other channels as a% of total ad time $\frac{\text{ColC}}{\text{ColB}} \times 100$
Trial Observation 1			
Trial Observation 2			
Trial Observation 3			
Trial Observation 4			
Total of Columns			

B. Complete the following table by noting how many seconds each person spends out of the viewing room during each observation session and compute the total

	Person A	Person B	Person C	Person D	Person E
Trial Observation 1					
Trial Observation 2					
Trial Observation 3					
Trial Observation 4					
Total					

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