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Advertisement Placement in TV Programs: Different Roles of ELM and Mood Protection Mechanism

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Abstract

This study explores how involvement of the audience with cognitive/affective program influence their processing of advertisements aired in between the program because of varying involvement within program. An experimental design was conducted. Cognitive ad recall was found to be higher when involvement with program (both cognitive and affective) is low than when involvement with program is high. Affective ad recall was found to be lower when involvement with program (cognitive and affective) is low than when the involvement with program is high. This study will be useful for managers in choosing television slots to broadcast their advertisements. ELM, Mood Protection Mechanism and Resource Matching Hypothesis are used to explain information processing mechanisms. The results also indicated a need of extending existing information processing theories.

Advertisement Placement in TV Programs: Different Roles of ELM and Mood Protection Mechanism

Introduction

Marketers rely on program rating for the placement of ads in TV program. Importance of effectiveness of ads in case of program and ad involvement interaction is well discussed in literature (Park & McCullung, 1985; Celuch & Slama 1998, Sharma 2000; Durkin & Wakefield, 2006 ; Neijens & Smit, 2007 & Moorman, Lotte, Peter & Smit, 2012). These studies include combination of some or all of the four factors namely cognitive program, affective program, cognitive ad, affective ad and different levels of involvement (Park & McCullung 1985; Celuch & Slama 1998 & Sharma 2000). However these studies tried to find out whether one type of ad is effective in a particular type of program. The possibility of both type of ads (cognitive & affective) being effective in the same program, though at different point of time, because of varying level of program involvement and program type is yet to be explored.

Therefore this paper tries to explore whether cognitive ads can be more effective at one point of the program and affective ads can be more effective at the other point of same program given that involvement level within a program varies. This paper also assumes that involvement level of consumers with the program increases as the program progresses. Because of this the effectiveness of type of ads (cognitive/affective) might vary.

Literature Review

Getting consumers' attention towards advertisement aired in between TV programs has been a major issue for marketers. Different ways of handling this issue has been suggested (e.g. Filbeck et. al, 2009; Multichannel News, 2008; Moorman, Neijens & Smit, 2007 & Durkin &

Wakefield, 2006) and reasons behind it has been explored like social motive (Bellman, Schewda & varan, 2010). The various studies in literature can be broadly divided into two parts namely- (a) Switching behavior, (b) Advertisement and program involvement (assuming that there was no switching).

Switching behavior literature focuses on the impact of zipping and zapping on the effectiveness of ads. Zapping is switching channels while watching live TV programs and zipping refers to fast forwarding advertisements while watching programs in controllable devices like VCR, DVD etc. (Meurs 1998; Zufryden et al. 1993). Switching behavior of consumers are explained by various variables like length of break, type of break, program before and after break including length of program, length of the ads, alternating program and program category (Meurs 1998; Siddarth, Chattopadhaya 1998; Danaher 1995; Cronin 1995; Zufryden, Pedrick & Sankaralingam 1993). These studies showed that change in the rating during commercials is caused by characteristics of break and programming around it (Danaher 1995, Kent, 2012).

On the other hand advertisement and program involvement literature focuses on the impact of involvement with the program on the effectiveness of ads aired in between the programs, which can be divided into following-

- (a) Varying program type and involvement with program – This part of the literature focuses on those studies which consider varying program involvement and program type but they don't consider different types of ads. Kennedy (1971) argued that the processing of commercial due to program effect is a function of "drive for closure". This drive for closure would then increase "noise" which would affect "both perception of commercial material and its integration into memory." He found higher brand recall scores for subjects who viewed the test commercials in a comedy setting than for those who saw the suspense thriller and argued that suspense thriller program

required higher drive for closure, so ads recalled were lesser. Ads become more effective in less involving program than in high involving program is also supported by Soldow & Principie (1981). However Park & McClung (1986) found support the concept of 'drive for closure' or involvement with program in case of cognitive program but not in affective program. Specifically, they found decrease in the ad involvement as cognitive program involvement was increased from low to moderate to high but they found increase in the ad involvement increased as affective program involvement was increased from low to moderate. The results of program involvement and effectiveness of ads varies a lot. Some other varied results include - Inverted U relationship for ad recall was found for different level of involvement with the program (Tavassoli, Shultz & Fitzsimons, 1995). It is also found that program involvement has positive effect on commercials when the exposure of commercials is not forced (Moorman, Neijens & Smit, 2007). Role of violence and sex is also explored and it is found that participants recall more ads in between neutral program than violence and sex programs (Bushman & Bonacci, 2002). The effect of recall of ads in actual game at different point of program is also studied and it is found that ads placed in beginning of program was recalled more than ads placed at the end of program (Newell & Wu, 2003). It is also found that there are many antecedents of program involvement which impact advertisement processing (Moorman, Lotte, Peter & Smit, 2012).

- (b) Varying Both Program Type and Ad Type- This part focuses on those studies which consider varying program involvement and type, but these studies also consider varying ad involvement and types. McClung, Park & Seur (1985) found that cognitively involving ads are more effective when there is moderate level of involvement with the cognitive program. But high level of involvement with cognitive

program can reduce ad effectiveness because high cognitive program involvement required detailed processing style and viewers may not be able to process both the information from the ad as well as from program. An affectively involving ad indulges viewers in analogical processing in which information is grouped into larger “chunks” (a holistic thinking) and there will be little (if any) detriment to the processing of affective ad aired in between high affective program. Celuch & Slama (1998) studied cognitive and affective involvement with program and cognitive and affective involvement with the ads. Unlike Park & McClung (1986) they induced program involvement naturally by selecting different cognitive and affective program and found a reduction in cognitive ad involvement primarily when ads are placed in cognitive programs. This is due to overload effect. And affective ad involvement increased when ads are placed in affective program due to priming effect. However Sharma (2000) found support for program-commercial congruity. It is also found that program involvement (high/low) and ad involvement (high/low) leads to different types of processing (Lord & Burnkrant, 1993).

Studies have also been focused on other factors which impact advertisement processing. It is argued that information processing of advertisements also depends on natural vs. experiment setting (Moorman, Neijens, and Smit 2005, 2007; Norris, Colman, and Aleixo 2003; Moorman, Lotte, Peter & Smit, 2012). Overall these studies show that there is effect of program induced involvement on information processing.

However the extant literature either considered only one program in a study (e.g. Moorman, Lotte, Peter & Smit, 2012) or different type of programs (Park & McClung, 1986; Sharma, 2000). The studies where different type of programs have been considered provide mixed result when different type of programs are considered. As discussed above, it is evident that there are conflicting results for the effectiveness of ads placed in TV programs. Specifically

Kennedy (1971), Park, McClung & Seur (1985) found that cognitive ad involvement reduces when ads are placed in high cognitive involvement program and vice-versa for affective ads. On the other hand Park & McClung (1986) and Sharma(2000) found high cognitive ad involvement when ads are placed in high cognitive involvement program and vice versa for affective ads.

The reasons for the differences in the studies can be explained through three limitations of above studies-

- (1) Most of the above studies, when considering cognitive or affective involvement, assumed that the involvement level either cognitive or affective with the program remains constant all over the program. Some studies have considered different level of overall involvement with program, e.g. Park & McClung (1986), Newell & Wu, (2003), but they did not differentiate between the types of ads.
- (2) Most of these studies used only one commercial break in between the program and multiple (generally one or two) ads in this one commercial e.g. Keluch & Slama (1998) showed program followed by the commercial. Thus placement point of single commercial break varies in different studies which can give different result.
- (3) They all considered either cognitive ad or affective to be more effective in a program. No study explored the possibility of one of the ads type (cognitive and affective) being more effective at one point and another ad more effective at different point in the same program.

Involvement with Program- Moorman, Neijens & Smit (2007) found that recall of commercial was higher when involvement with the program is high and assumed that involvement within a single program is constant allthrough the program. On the other hand, Bryant & Comisky (1978) ,Lord & Burnkrant (1988) & Lord & Burnkrant (1993) argued that involvement within a program can vary. They incorporated different level of involvement

within a single program. But, they considered overall ad involvement or involvement with ad as high/low but have not considered cognitive/affective ads.

Following Bryant & Comisky (1978), Lord & Burnkrant (1988) & Lord & Burnkrant (1993), this paper assumes that involvement level of consumer increases in the program as program progresses and this is because the story build up slowly as the program progresses. This paper also tries to explore what happens to cognitive ads (or affective ads) at different involvement level with the cognitive (or affective program) program.

Below section is organized in the following ways – information processing theories have been discussed, hypotheses have been constructed with the help of these theories, methodology and results have been discussed followed by results and discussion based on the overall study.

Information Processing Theories

Elaboration Likelihood Model (Petty & Cacioppo 1983, Cacioppo & Petty 1984) suggests that the processing of information occurs through central and peripheral routes. If people are motivated and able to elaborate information, they process the information through central route. In central route issue relevant information is processed and the subjective merit of the information determines the influence (Haughtvedt & Petty 1992). However when people process the information through the peripheral route (because of inability or non-motivation), they take cues such as endorser, sheer number of arguments, emotions for the processing of information. Both the routes lead to attitude towards the brands but through central route the cognition is high whereas in the peripheral route cognition is less.

On the other hand mood theory explains a phenomenon called Mood Protection Mechanism which says that people in good mood (but not in bad) try to retain their mood (Swinyard 1993). Swinyard summarized various processes explaining this mood protection phenomenon

- (a) Peripheral or associative affect i.e. good mood facilitate retrieval of positive mood congruent information (b) Cognitive elaboration i.e. people in good mood will reduce cognitive elaboration in order to protect their mood since cognitive elaboration requires effort and disrupts positive mood. Positive moods create less elaboration, which results in more heuristic processing and reduces the extent to which message evaluation mediates brand attitudes (Batra & Stayman 1990).

Mood protection mechanism is applicable to positive mood. It is necessary to explore what happens if a person is in negative mood. Mood theory explains two different models i.e. mood congruency model and consistency effects model. Mood congruency model says that people tend to learn more about the events which match their mood states. This is explained by network theory given by Brower (as cited in Goldberg & Gorn 1987) where each mood has a node in memory and stimuli arouse/prime that node. Once node is aroused, it influences perceptions and information processing and people recall their old memory related to the particular stimuli. It explains both positive and negative moods. But Consistency Effect Model states that people who are in negative mood do not always have negative reaction to stimuli. This consistency effect model is explained by negative state relief model wherein (extended to marketing) when consumers mood are such that they feel sad for other people, they are in mode of empathizing the other person, they will react positively to an event coming in between (here advertisement) (Kamins, Marks & Deborah 1991). But being in good mood, according to mood protection mechanism, the elaboration of ads will be less as viewers try to protect their mood. Thus good mood hinders in-depth elaboration, so the effectiveness of the ads is in question.

Resource matching hypothesis given by Anand & Sternthal in 1988 (as cited in Mantel & Kellaris 2003) says that processing of information should be most efficient when level of available cognitive resources matches with level of required cognitive resources to process

information composing a time period or event. Processing efficiency declines when there is mismatch between required cognitive resources and available cognitive resources. When resources available is less than resources required heuristic processing is used wherein peripheral cues are used. But when available resources are more than resources required people tend to elaborate on the information presented and they use excess resources to generate additional thoughts. In case of TV programs when available cognitive resources of viewers (the resources left after using for program) matches the required cognitive resources to process ads, the impact of the ads will be most.

Supporting Park & Mittal, Park & McClung (1986) described affective and cognitive motives in case of TV programs. Cognitive motive is where one watches TV program to gain knowledge about a particular subject matter, to test his/her own perspective in relation to others, to take one's stand about an issue and to entertain his/her intellectual curiosity. On the other hand feelings and emotions are the main criterion for the affective motive. When one indulges in self identification with the character, the person is affectively involved with the program.

Design and Definitions

Here two kinds of involvement with program are taken i.e. affective program involvement and cognitive program involvement. Both program (cognitive and affective) involvement is measured in two levels i.e. low and high level of involvement. Two types of ad involvement i.e. cognitive ad involvement and affective ad involvement is taken.

The program which requires more cognitive resources or elaboration are termed here as cognitive program and involvement with them is termed as cognitive involvement and the programs which require more affective resources are termed as affective program and involvement with affective program is termed as affective involvement. Similarly the ads

which require more of cognition is termed as cognitive ads and the ads which require less elaboration and more affective resources are termed as affective ads.

Hypotheses Development

As involvement with the program increases as program progresses, more and more resources will be used for the program and hence less resources will remain available to process any other information (Kennedy, 1971; Park & McClung, 1986)(according to resource matching hypothesis), so viewers will be less motivated and less able to process any other information (according to ELM) during high involvement with program.

In case of low level of involvement with cognitive program, the viewers will have more cognitive resources available (ELM). Moreover, they initiated their thinking in cognitive way. So they will process the information of cognitive ads through central route and thus cognitive ads are expected to be registered more than affective ads in low involvement with cognitive program. However when involvement with cognitive program is high, viewers will have less cognitive resources according to resource matching hypothesis & ELM, so they can't process cognitive information but they will process the information peripherally and thus affective ads are expected to be registered more in their mind as compared to cognitive ads. Thus cognitive ads' effectiveness will be high in low involvement condition with cognitive program and the effectiveness will go down with high involvement with cognitive program. Similarly, affective ads' effectiveness will be low with low level of cognitive involvement and the effectiveness will go up with high involvement with cognitive program. The effectiveness of ads is measured as recall of the ads in this study. So the hypotheses as follows (see Table 1 below) -

H1: In cognitive program involvement -

- (a) The recall of cognitive ad will be higher when involvement with the program is low as compared to the recall of cognitive ads when the involvement with the program is high.
- (b) The recall of affective ads will be lower when involvement with the program is low as compared to the recall of affective ad when involvement with the program is high.
- (c) The recall of cognitive ad will be higher than recall of affective ad in low involvement with program and recall of affective ad will be higher than recall of cognitive ad in high involvement with program.

In case of low involvement with affective program, the viewers have cognitive resources available, so they can process the cognitive ads centrally. So they will register more cognitive ads in low involvement condition. However, when they are highly involved with affective program, even though they have available cognitive resources, but they might not process the cognitive information of the ad due to their mood protection mechanism as positive mood inhibits elaboration. And with high affective involvement with program, the viewers will register more affective information because affective ads do not require cognitive elaboration as the case with cognitive ads. This explanation is also given by Park, McClung & Seur saying that information is processed in larger chunks. Thus cognitive ads' effectiveness will be high in condition of low involvement with affective program and the effectiveness will go down with high involvement with affective program. Similarly, affective ads' effectiveness will be low with low involvement with affective program and the effectiveness will go up with high involvement with affective program. So hypotheses are (see Table 1)-

H2: In affective program involvement¹

- (a) The recall of cognitive ad will be higher when involvement with the program is low as compared to the recall of cognitive ads when the involvement with the program is high.
- (b) The recall of affective ad will be lower when involvement with the program is low as compared to the recall of affective ad when involvement with the program is high.
- (c) The recall of cognitive ad will be higher than recall of affective ad in low involvement with program and recall of affective ad will be higher than recall of cognitive ad in high involvement with program.

Table 1*Hypotheses Summary*

Inv With Program	Cognitive Program	Inv With Program	Affective Program
Low		Low	
High		High	

Pre-Tests

Two programs, one cognitive (a news debate) and one affective (Different Strokes - comedy program) are chosen after going through various programs. Two commercial breaks in each of the program are made to take care of level of involvement. First break is considered to have low involvement and second break is considered to have high involvement. Each break comprises of two cognitive ads (or two affective ads) and one filler advertisement.

Thus two experiments of 2 (program involvement type: High Vs low) x 2(ad involvement type: cognitive Vs affective) within-between subject design is conducted. One experiment is for cognitive program and another for affective program. Program involvement type is within subject and advertisement type within a program is between subject designs.

The four cognitive ads (two for each break) as well as four affective ads required for the study are to be chosen with the help of pre-test. Also the involvement type of a program (cognitive/affective) and involvement level within a program (high/low) are to be pre-tested. Therefore, a pre-test of the ads and pre-test of programs is conducted to ensure that assumptions are empirically supported.

Stimuli Selection (Selection of Ads and Programs)

The criteria to select an ad were following- (a) The ad is not seen or if seen the subject don't remember it exactly. If the ad is remembered by the subject beforehand then they might recall the ad from their stored/implicit memory and the interaction effect of program involvement and ad involvement will be confounded. (b) The brand is known to subjects. Because, in general, for the known brand, marketers face the problem of placing the new ads of brands in between the TV programs. And this is also done to avoid complication of new brand, new program together. In the Indian context these two criteria lead to selection of ads of international brands, aired in foreign countries, but the brand is known in India. Four affective ads selected are- 7Up, Lipton, Adidas and Heinz and four cognitive ads selected are LG AC, Suzuki Maruti Alto, Nokia N95 and Samsung after going through multiple ads. Cognitive ads showed product with background music and describing some feature of the products either with written words or through background sound of some person. Affective ads contained a small story or theme in the ad and the name of product and tagline appeared

in the last. The affective ads showed very less features of products and focused more in situations and emotions.

Since ads selected were in English, to avoid language incongruity programs in English language were selected. After going through five different programs – (a) Different Strokes Season 5 Ep 2, a comedy program, was chosen as affective program. Comedy program has been described as affective program (Kennedy, 1971). As the chosen affective program is a comedy program, mood protection mechanism will be more active than Consistency Effect Model because comedy program creates a positive mood. The consistency effect model can be more effective in programs which create negative emotions but here negative emotions are not tested. (b) News debate on Indian journalist beaten in Australia was chosen as cognitive program. News debate is related to argument analysis; hence it is cognitive program. It contained debate about education scam in Australia.

Since the ads taken have been aired in other countries context, to take them in Indian context it is necessary to test whether these ads required the cognitive involvement or affective involvement for the viewers of India

Pretest of Ads

The cognitive and affective ads involvement was assessed using the scale developed by Schlinger, 1979 (as cited in Celuch & Slama 1988) (See Appendix 1). Responses from 20 Management students were taken. Out of which 19 responses were useful, one response was discarded due to incompletely filled response sheet. After watching each ad respondents are asked to rate the ad on the given scale. Apart from item given by Schlinger, one more item was added to check that whether the particular ad is seen by the respondent before. This is to take care of the first criteria of ad selection. The item was “Have you seen this ad before”

with options “yes, no or probably”. If the response is high on ‘no’ or ‘probably’ the ad can be taken for main test.

Ads Pre-Test Results

Third column in Table 2 below shows the cognitive and affective mean scores for each advertisement. A significance test was performed and all the values were found to be significant at 10%. Fourth column shows the T-values. Last column of Table 2 shows whether the particular ad was high and significant in cognitive or affective involvement.

Table 2

Ads Pretest Result

Ads	Cog/Aff Inv	Mean Score	T value	High in
LG AC	Cog Inv	5.84	9.1*	Cog Inv
	Aff Inv	3.33		
7 Up	Cog Inv	2.68	(7.25)*	Aff Inv
	Aff Inv	3.72		
Lipton	Cog Inv	3.30	(5.6)*	Aff Inv
	Aff Inv	4.97		
Suzuki Maruti Alto	Cog Inv	5.67	8.33*	Cog Inv
	Aff Inv	3.64		
Nokia	Cog Inv	6.25	8.76*	Cog Inv
	Aff Inv	4.24		
Adidas	Cog Inv	3.30	(4.17)*	Aff Inv
	Aff Inv	4.68		
Samsung	Cog Inv	6.35	9.59*	Cog Inv
	Aff Inv	3.94		
Heinz	Cog Inv	3.28	(4.37)*	Aff Inv
	Aff Inv	4.69		

* $p \leq 0.0003$, * Numbers in parentheses show negative value

The results showed that 7Up, Lipton, Adidas and Heinz are high on affective resources required in ad involvement and LG AC, Suzuki Maruti Alto, Nokia N95 are high on cognitive involvement. This was as predicted. Moreover all of the ads are not seen by more than 90% of the respondents except Nokia (68.42 % not seen) and Adidas (63.16% not seen). Since more than 60% of respondents have not seen these ads, these eight ads are taken for the main test.

Pre-Test of Programs

Pre-test of programs was done to assess two things –

- (a) Whether cognitive program is high in cognitive involvement more than affective involvement and vice-versa for affective programs.
- (b) Whether there is significant difference in involvement level at two different points within a single program. This is the main assumption which should be tested before conducting main study.

The cognitive and affective ads involvement was assessed using the scale developed by Schlinger, 1979 (as cited in Celuch & Slama 1988) (See Appendix 2). For both the programs selected, the two points chosen were (a) First- Just before the 1st break and (b) Second- Just before second break. Two independent samples were taken for each program. One sample was asked to rate program on involvement scale in seven point likert scale after showing them program till first break and the other sample was asked to rate the program on involvement scale after showing the program till second break. (For affective program of 22 min, first break was at 7:42 min and second break was at 15:10 min. For cognitive program of 14:10 min, first break was at 4:23 min and second was at 11:14 min.) And the involvement scores are compared across the treatments to assess different level of involvement within same program with t-test. To assess whether the program is overall high

in cognitive/affective involvement, the scores of cognitive and affective involvement were compared within a sample using paired comparison t-test

The undergraduate students of local graduation college aged between 19-25 years are taken. The sample size was 16 for both treatments (just before first break and just before second break) of affective program, 13 for cognitive program just before first break and 17 for cognitive program just before second break treatment.

Programs Pre-Test Results

For different strokes (See Table 3), in both the breaks, the mean score of affective involvement is higher than cognitive involvement. For news debate, in both breaks, the mean score cognitive involvement is higher than affective involvement. The results are significant at 5% level. Thus Different Strokes is taken as affective program and News Debate is taken as cognitive program.

To test whether involvement within a program increases as program progresses t-test is performed. For affective program, t-test showed that affective program involvement just before second break ($M = 5.09$) was higher than affective program involvement just before first break ($M = 4.77$, $t(16) = -3.48$, $p = 0.09$). For cognitive program also, cognitive program involvement just before second break ($M = 6.25$) was higher than cognitive program involvement just before first break ($M = 5.67$, $t(13 \ \& \ 17) = -2.45$, $p = 0.01$). Thus cognitive/affective involvement with cognitive/affective program is lower in first break and higher in second break and the results are significant at 10% level. Therefore it can be claimed that cognitive/affective involvement increases as program progresses within an episode. Thus assumption of this paper is empirically supported.

Table 3*Programs Pre-Test Results*

Programs	Means		T-Value
	Cog Inv	Aff Inv	
<u>Different Strokes (Aff Prg)</u>			
Before First Break	4.23	4.77	(3.45)*
Before Second Break	4.29	5.09	(3.48)*
<u>News Debate (Cog Prg)</u>			
Before First Break	5.67	4.65	(3.87)*
Before Second Break	6.25	5.03	(3.64)*
*p<0.002			
*Values in parentheses are negative			

Main Test**Sample**

The hypotheses made were tested on the MBA students of local management school. The School selected for main test was different than the School selected for pretest to ensure that respondents of main test are unaware of the study.

Procedure

Students are randomly assigned to one of the four treatment groups' i.e. affective program x affective ads, affective program x cognitive ads, cognitive program x affective ads and cognitive program x cognitive ads. The sample size before manipulation check for the treatment groups were 28, 31, 37 and 38 respectively. Additionally, for cognitive program respondents were asked to focus on the arguments given by three people and for affective program they were asked to watch and enjoy it. A distraction task was given at the beginning to divert mind of the respondents. Respondents were asked to write as many verbs as they can which starts from M.

Manipulation Check

If the respondents guess the purpose of the study, their focus will be on the ads rather than on the programs and results will be biased. To remove this bias the question “What is the objective of the study?” was asked in the beginning of questionnaire. The responses which had guessed the purpose of the study were discarded. As discussed earlier to ensure that 100% of the respondents haven’t seen ads, a question “Have you ever seen any of the ads shown here before?” was asked at the end of questionnaire. The responses with answer ‘yes’ were discarded. There were 18 (64%, Male = 15, Female = 3) usable responses for affective program x affective ad, 19 (61.3%, Male = 15, Female = 4) for affective program x cognitive ad, 25 (67.5%, Male = 12, Female = 13) for cognitive program x affective ads and 22 (57.9%, Male = 11, Female = 11) for cognitive program x cognitive ad treatments after discarding responses in manipulation check. Although around 40% of the responses were discarded, but it helped to remove the bias from the study.

Measures

Ad recall has been measured by brand name, brand claim (Keller, Heckler & Houston, 1998), tagline, celebrity endorser, product category (Krishnan, 1999). As the ads taken didn’t have any celebrity endorser so brand name, product category, brand claim and tagline were used as a measure of ad recall. After the program, respondents were asked to write brand name, product category, brand claim and tagline of as many ads as they can recall. Based on the extent the answer was correct, each item (for two advertisements together within a single break) was rated in seven point likert scale by the author and the score of these 4 items was averaged to get brand recall score for each sample point.

A paired t-test was performed to test the hypothesis related to recall of ads in low involvement (1st break) versus high involvement (2nd break) within same program because the

data was from the same sample (Anderson, Sweeney & Williams 2007). To compare cognitive and affective ads recall for two different treatments normal t-test was performed. The input p value is taken at 5% level.

Results

In cognitive program (see Figure 1 below), cognitive ad recall was higher in low involvement condition/1st break ($M = 4$) as compared to cognitive ad recall in high involvement condition/2nd break ($M = 2$) and the results were significant at $t(22) = 6.89, p = 0.0000$. And affective ad recall was lower in low involvement condition ($M = 1.62$) as compared to affective ad recall in high involvement condition ($M = 3.41$) with significant results at $t(25) = -5.85, p = 0.0000$. Thus H1(a) and H1(b) are supported.

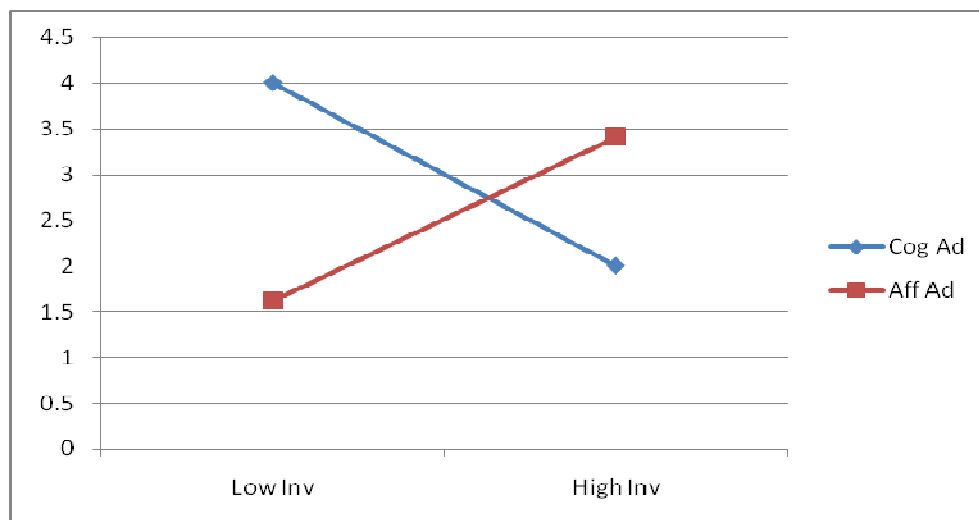


Figure 1 - Ads recall in cognitive program

In affective program (see Figure 2 below), cognitive ad recall was higher in low involvement condition/1st break ($M = 4.19$) as compared to cognitive ad recall in high involvement condition/2nd break ($M = 3.01$); $t(19) = 3.09, p = 0.003$. And affective ad recall was lower in

low involvement condition ($M = 1.27$) as compared to affective ad recall in high involvement condition ($M = 2.57$); $t(18) = -3.76, p = 0.0008$. Thus H2(a) and H2(b) are supported.

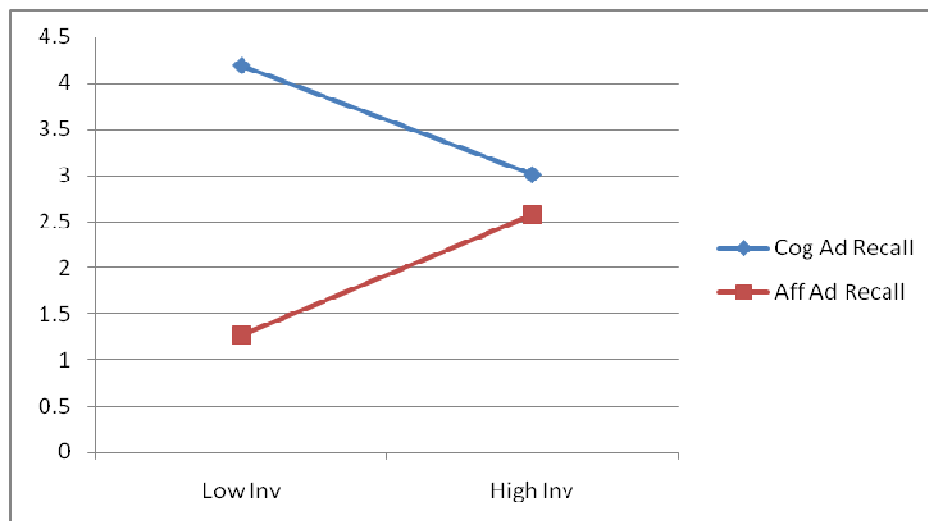


Figure 2 – Ads Recall for Affective Program

Regarding H1(c) (Figure 1), the t-test showed that for cognitive programs the hypothesis that in low involvement condition the cognitive ad recall ($M = 4$) is higher than affective ad recall ($M = 1.62$); $t(22 \& 25) = 5.75, p = 0.0000$ is significant. Similarly, for cognitive program the hypothesis that in high involvement condition the affective ad recall ($M = 3.41$) is higher than cognitive ad recall ($M = 2$); $t(22 \& 25) = 4.31, p = 0.0000$ is significant. Therefore H1(c) is also supported.

Regarding hypothesis 2(C) (Figure 2), for affective program, it is found that in both the involvement condition the mean recall of cognitive ad (4.19 in low & 3.01 in high involvement condition) was higher than affective ad (1.27 in low & 2.57 in high involvement conditions) which was not expected. The result showed that at low involvement level recall of cognitive ad ($M = 4.19$) is higher than recall of affective ad ($M = 1.27$) and is significant at $t(18 \& 19) = 5.33, p = 0.0000$, however the hypothesis that affective ad recall ($M = 2.57$) is higher than cognitive ad recall ($M = 3.01$) in high involvement with affective program is not

supported and the values for these were $t(18 \& 19) = -0.79, p = 0.214$. Thus, hypothesis that cognitive ad recall is higher than affective ad recall in case of low involvement with affective program is supported but the hypothesis that affective ad recall is higher than cognitive ad recall in case of high affective program involvement is not supported. Thus H2(c) is partially supported.

Discussion and Conclusion

In cognitive program, recall of cognitive ad is higher during low involvement with program than recall of cognitive ad during high involvement with program. Similarly, recall of affective ad is lower during low involvement with program than recall of affective ad during high involvement with the program. These outcomes provide support for resource matching hypothesis and ELM. Information overload effect is also evident.

In affective program, recall of cognitive ad is higher during low involvement with the program than recall of cognitive ad during high involvement with the program. This result supports the mood protection mechanism wherein although viewers had available cognitive resources but they resisted elaboration task which was required for cognitive ads. Since the program chosen was a comedy program which generally doesn't create negative mood, Consistency Effect model was not applicable here. However, this model will be useful for programs wherein, even for some moment (may be in middle or climax), a negative thought/mood is formed.

Overall, recall of cognitive ads is higher than recall of affective ads in low involvement with the program for both program types (cognitive and affective). For cognitive program recall of affective ad is higher than recall of cognitive ad in high involvement with program. However it cannot be conclusively said that affective ad recall is higher than cognitive ad recall when the involvement with the affective program is high. It suggests that advertisements with high

cognitive involvement should be placed at a point where involvement with the program is low and advertisements with high affective involvement should be placed at a point where involvement with the program is high. This also suggests that consumers, when are high in affective involvement or cognitive involvement, can still process affective information but not cognitive information.

These findings also indicate that there is evidence of interaction of cognitive and affective resources while processing information. The information processing theories talk about availability of resources and their usage to process information. However these theories consider one type of resource in one explanation e.g. ELM talks about cognitive resources whereas Resource Matching Hypothesis talks about overall processing resources. There are no theories which explain the interaction of different types of resources e.g. if one has used cognitive resources what happens to the affective resources available or if one is using cognitive resources what will happen to his/her processing if an information of affective nature is encountered. This study indicates that there is a need to extend the current information processing theories available.

The non-significance of result related to high involvement with cognitive program can be attributed to – (a) Small sample size. (b) The difference in involvement level with the program at two points may not significant/large enough for recall score of affective ads to cross the recall score of cognitive ads in high involvement with program.

Contribution

The literature on ad recall during program implicitly assumed that involvement level within a single program is constant all through the program. Therefore only single break is used either in the middle of program (Celuch & Slama, 1998; Lord & Burnkrant, 1988) or at the end of program (Sharma, 2000) in past studies. This study assumed that there can be different level

of involvement with program within a single program type (cognitive/affective). Specifically, as the program progresses the involvement level increases. Therefore multiple breaks within a single program type are used to take care of low and high involvement condition.

This study showed cognitive (and affective) ad recall/effectiveness can be higher at one time and affective ad recall can be higher at another time within same program depending on the level of involvement with the program as opposed to literature wherein either cognitive ad or affective ad is found to be more effective in cognitive program/affective program. The reasons/explanations given in literature for varying level of ad effectiveness in different types of programs were related to resources required and available. These explanations indirectly applied ELM and resource matching hypothesis. However this paper apart from ELM, Resource Matching Hypothesis, also used Mood Protection Mechanism from mood theory to explain the information processing of the ads.

This paper contributes theoretically by indicating that even with the usage of one type of resource; consumers might have other type of usable resource available e.g. when cognitive resources were used in cognitive program, affective resources were being used to assess the ads but not cognitive resources and hence affective ads were more effective in high cognitive involvement. Therefore this paper argues that there is need of more theoretical explanation of interaction of different types of resources (cognitive vs. affective) in information processing phenomena.

Managerial Implication

If a marketer/manager wants to place a cognitive ad in between the program, he should put it in initial breaks of the program because recall of cognitive ad goes down in later breaks. Moreover overall recall of cognitive ad is found to be higher than recall of affective ad in condition of low involvement with program. If a marketer wants to place an affective ad in

between the program, he should put it in later breaks of the program because recall of affective ad goes up in later breaks as compared to recall of affective ads in initial breaks. Channels, on the other hand, should charge higher price per second for affective commercials to be aired in later breaks of a program and should charge higher price for cognitive ads to be aired in initial breaks of a program.

Limitations and Future Directions

Here only two levels of involvement with the program is taken, however moderate level of involvement with the program was not considered. In future three involvement levels with the program namely low, moderate and high involvement can be considered to see the effect at different levels.

Since the study was done in experiment setting, respondents are forced to view ads as opposed to natural setting where they can move around, zip the channel. So the recall score obtained for each type of ads may be higher than what one would get in natural setting. But the scores are useful because a comparative evaluation of the score is performed. The high rate of rejection of responses is also a limitation but it helped to remove the bias from the study. Future study should incorporate those ads which are not seen by very high number of respondents.

Consistency effect model predicts that advertisement can be processed positively even in condition of negative mood due to program. But here comedy program was used as affective program where chances of negative mood are minimal. So mood protection mechanism was evident due to positive mood. Future research should look into mood protection mechanism in condition of negative mood due to program. In that situation consistency effect model might be helpful in explaining information processing phenomena.

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Footnotes

¹H1(a) to H1(c) are similar to H2(a) to H2(b) respectively. Still they are written here separately to show that mechanism/theoretical basis behind hypotheses is different in the two hypotheses.

²To avoid further bias, same manipulation check is included in main study which will help to discard those responses where respondents have seen any of the ads.

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