

EFFECTS OF ENTERTAINMENT AND ENJOYMENT OF TELEVISION PROGRAMS ON PERCEPTION AND MEMORY OF ADVERTISEMENTS

CLAIRE E. NORRIS AND ANDREW M. COLMAN

This study focuses on the hypothesis that entertainment and enjoyment properties of television programs have effects on recall, recognition, and perception of accompanying advertisements similar to the effects of program involvement reported by Norris and Colman (1993). Ninety-nine subjects each watched one of three television programs accompanied by six unfamiliar advertisements and then responded to questionnaires designed to measure perceptions of the programs and advertisements and memory for the advertisements. Correlations between program ratings and memory for advertisements were consistently negative but nonsignificant, and program ratings showed no consistent relationship with perceptions of the advertisements. The results provide no evidence that program entertainment and enjoyment, in contrast to involvement, influence advertisement effectiveness, which suggests that observed context effects depend on the predictor variables investigated.

Norris and Colman (1993) recently suggested that a useful direction for future research into context effects would be the investigation of the enjoyment and entertainment properties of program contexts and their influence on the effectiveness of accompanying advertisements. During the last three decades, many aspects of a program or (in the case of the print media) editorial context have been hypothesized to influence advertisement effectiveness (see Norris & Colman, 1993, for a review). In particular, program-induced audience involvement has often been reported to be an important context variable (Bryant & Comisky, 1978; Lloyd & Clancy, 1991; Norris & Colman, 1992, 1993, 1994; Park & McClung, 1986; Siebert 1978; Soldow & Principe, 1981; Thorson & Reeves, 1986; Thorson, Reeves, & Schleuder, 1985).

Claire E. Norris, Department of Human Communication, De Montfort University, Leicester, England, and Andrew M. Colman, Department of Psychology, Leicester University, England. We wish to thank Dr Chris Nicklin for help with scoring the questionnaires. Please address correspondence and reprint requests to: Dr. Claire E. Norris, Department of Human Communication, De Montfort University, Scraptoft Campus, Leicester, LE7 9SU, England.

In contrast to the predictor variable involvement, however, few studies have hypothesized subjects' entertainment or enjoyment as variables mediating advertisement effectiveness, although these variables are salient aspects of viewers' perceptions of television programs. The few studies that have made specific reference to the entertaining or enjoyable properties of programs have operationalized entertainment and enjoyment in a variety of ways and, as with the context literature investigating program involvement, have yielded contrasting and apparently contradictory results.

Two unpublished studies by Channel Four in the United Kingdom (both discussed in Channel Four, 1993) have reported what appears to be a positive relationship between program enjoyment and recall of advertisements. Other studies have also suggested a positive relationship between reported enjoyment or entertainment and advertisement effectiveness (Gullen, 1993; Lloyd & Clancy, 1991). In an experiment conducted by RBL in conjunction with Channel Four (cited in Johnson, 1992), a U-shaped curvilinear relationship appeared to exist, with advertisement awareness poorest at moderate levels of enjoyment and interest in programs. Other studies have reported a negative relationship between program-induced viewer enjoyment and entertainment and various indices of advertisement effectiveness (Norris & Colman, 1992).

Norris (1992) and Norris and Colman (1993, 1994) have recently suggested that a possible reason for the inconsistencies in the context literature may well lie in the variables measured within these studies. Several of the above studies measured not only entertainment and enjoyment of the program, but also other program-induced factors (e.g., an appreciation index, an overall opinion index, and claimed attention level in RBL, cited in Johnson, 1992). Thus the inclusion of other program-induced factors, not necessarily associated with enjoyment or entertainment, may be responsible for the contrasting results.

Lloyd and Clancy (1991) included a triple-barrelled question measuring entertainment, thought provocation, and the perceived quality of television programs. Because of the multi-dimensional nature of such scales, it is not entirely clear what underlying context variables were being measured. In some studies enjoyment was apparently measured using a unitary scale, but the precise details of testing procedure are not clear (Gullen, 1993; Channel Four, 1993). What is clearly lacking is research based on empirically validated measures of entertainment and enjoyment.

Moreover, several studies were initially designed to measure audience involvement (e.g., Lloyd & Clancy, 1991; RBL, cited in Johnson, 1992) but the scales used were not empirically validated as measures of either involvement or entertainment. It is not clear whether these studies in fact measured program-induced involvement or

entertainment/enjoyment. Norris and Colman (1994) have described a multivariate investigation designed to generate empirical definitions of involvement, entertainment, and enjoyment through the use of cluster analysis. The results revealed that involvement is quite distinct from entertainment and enjoyment, although these latter two show a degree of overlap. It is clear from these results that entertainment and enjoyment should not be treated interchangeably with involvement or any other predictor variables. However, there appears to be a tendency in the reviews of the context literature (e.g., Lloyd & Clancy, 1991; Schumann & Thorson, 1990) to treat the predictor variables as interchangeable or homogeneous.

In a study designed as a methodological improvement on previous research, Norris and Colman (1993) investigated the relationship between program-induced viewer involvement and advertisement effectiveness, using the empirical definitions described in Norris and Colman (1994). Subjects were chosen from the general population of a major city and were asked to watch one of three programs together with six unfamiliar advertisements in an experimental setting. The aim of the study was to isolate involvement from entertainment and enjoyment, and programs were chosen on the basis of a large-scale pilot study in order to induce a wide range of involvement in the viewers. The pilot study indicated that the programs differed sharply in terms of involvement, but not entertainment or enjoyment. Subjects then responded to sophisticated measures of both recall and recognition of the advertisements, product types, and brand names, together with measures of attitudes toward the advertisements and intention to buy the product. The results indicated that while subjects' memory for the advertisements correlated negatively with several empirical measures of involvement, attitudes toward the advertisements and brands and rated intention to buy the products correlated positively with several indices of program-induced involvement. These results were explained with reference to an information-processing model of memory, attention, and attitudes.

This suggests an interesting question. Would the same results be observed if, using the same improved methodology, the predictor variable *involvement* were to be replaced with *entertainment* and *enjoyment*? Using empirical definitions of entertainment and enjoyment provided by Norris and Colman (1994) in place of involvement, would the same relationships be observed? The study reported in this article aims to investigate the relationship between the entertainment and enjoyment properties of programs – in isolation from involvement and other predictor variables - and advertising effectiveness using the same basic methodology, advertising materials, and testing procedure as those used in the Norris and Colman (1993) study. This should enable a comparison to be made between the influence of program-induced

involvement on the one hand and program-induced entertainment and enjoyment on the other, to establish whether different program variables produce different context effects. Once again, therefore, subjects were selected from the general population of a large city and were asked to watch one of three television programs (in this case selected from the pilot study to provide varying levels of entertainment and enjoyment) in which were embedded six unfamiliar advertisements. These were the same six advertisements that were used in Norris and Colman (1993), recorded off air from Australian and South African television so as to be entirely new to the subjects and to refer to familiar product types with completely novel brand names. Subjects then responded to a series of questionnaires containing sophisticated measures of perceptions of the programs and advertisements and recall and recognition of advertisement, product types, and brand names.

METHOD

SUBJECTS

The subjects were 99 members of the general population of Leicester, England (47 men and 52 women), over the age of 16. Table 1 shows the composition of the total sample and the sex, age, and numbers of years of formal education of the subjects in each treatment condition. The subjects were recruited via three small display

TABLE 1
COMPOSITIONS OF SUBJECT SAMPLE

	Sex		Post-16 Educ. (Yrs)					
	M	F	0	1	2	3	4	5+
All Subjects	47	52	36	4	13	8	10	27
Music	14	19	9	0	4	2	6	11
Drama-soap	16	17	15	2	4	3	1	8
Comedy	17	16	12	2	5	3	3	8
	No. in Each Age Band (Yrs)							
	16-19	20-29	30-39	40-49	50-59	60-69	70-79	80+
All Subjects	25	33	13	11	6	5	4	2
Music	9	12	2	3	4	2	1	0
Drama-soap	9	10	3	3	1	3	2	2
Comedy	7	11	8	5	1	0	1	0

advertisements in a local newspaper offering “£3 for just 1 hour of your time. Take art in our TV Research.” People who responded to the advertisements by telephone were allocated randomly to three treatment conditions subject to the limitation of an equal number of subjects in each condition.

MATERIALS

Programs. The three programs used in the experiment were selected from a sample of ten programs taken from Australian and Satellite television channels, enabling English-language material to be used that the subjects were unlikely to have seen before. A pilot study using 115 students from the University of Leicester and 36 members of the general population of Leicester confirmed that the programs had not been seen by subjects before. The pilot study also confirmed that the three programs chosen differed significantly on seven 7-point counterbalanced rating scales measuring viewers’ reactions to scales shown in the cluster analysis to be related to entertainment and enjoyment: entertaining, $F(8, 242) = 3.52, p < .001$; enjoyable, $F(8, 242) = 2.85, p < .01$; exciting, $F(8, 242) = 5.24, p < .001$; humorous, $F(8, 242) = 5.90, p < .001$; amusing, $F(8, 242) = 2.75, p < .01$; fun, $F(8, 242) = 5.44, p < .001$; funny, $F(8, 242) = 5.48, p < .001$. The programs thus chosen were as follows:

Condition 1 – Music: “Blue Night” (23 minutes and 17 seconds, excluding advertisements), an alternative popular music program.

Condition 2 – Drama-soap: “Flying Doctors” (24 minutes exactly, excluding advertisements), a drama-soap opera program.

Condition 3 – Comedy: “Murphy Brown” (23 minutes and 17 seconds, excluding advertisements), an American comedy program.

The pilot study revealed that the drama-soap program was significantly more entertaining and exciting than the music program and that the comedy program was significantly more humorous, fun, funny, and amusing than the music program ($p < .05$ in each case).

Advertisements. One advertisement break (total length 2 minutes and 24 seconds) containing six advertisements appeared within each television program an average of 12 minutes and 55 seconds ($SD = 0.004$) from the end of the program. The advertisements were selected from a total sample of 41 advertisements taken from Australian and South African television channels, which again enabled target advertisements and brand names to be chosen that were unlikely to be known to subjects and that therefore allowed the assessment of memory effects uncontaminated by prior exposure – a problem that bedevils much of the published research in this area. The six advertisements were chosen to represent a wide variety of products. A second pilot study using 103 students from the University of Leicester confirmed that the advertisements and brand names were unfamiliar to subjects and that the six

advertisements did not differ significantly in subjects' perceptions as measured by a counterbalanced set of eleven 7-point rating scales measuring subjects' attitudes toward the advertisement, attitudes toward the brands, and intentions to buy the products.

The order of the six advertisements in the advertising break was chosen randomly. The order was Cool Charm deodorant, IXL jam, Canola oil, Drive laundry liquid, Sard stain remover, and Skinny milk.

Questionnaires. Several questionnaires were used to measure the subjects' perceptions of the programs and advertisements and their recall and recognition of the advertisements. After supplying details of their sex, age, and years in education since their sixteenth birthday, subjects were asked if they had ever seen the program prior to the experiment (none of them had done so). Subjects then responded to the following six questionnaires in the order shown.

Program Ratings: Subjects responded to a counterbalanced set of seven 7-point rating scales relating to the programs they had just watched with regard to their entertainment and enjoyment properties. These rating scales were the same scales across which the three programs were found to differ in the initial pilot study. They constituted empirical definitions of the terms *entertainment* and *enjoyment* derived from a full-scale cluster analysis (reported in Norris & Colman, 1994) of a very large number of candidate items that have been used as indices of *entertainment* and *enjoyment* in previous research. Analysis of variance was performed on the subjects' ratings of the programs to confirm the results of the initial pre-experimental pilot study used to select the programs. The results revealed highly significant differences between the ratings of the three programs, particularly in a global measure of overall entertainment and enjoyment, $F(2, 93) = 5.35, p < .01$, and in ratings of the program as enjoyable, $F(2, 96) = 6.86, p < .01$; exciting, $F(2, 95) = 4.88, p < .01$; humorous, $F(2, 95) = 5.62, p < .01$; and funny, $F(2, 94) = 8.77, p < .001$. The drama-soap program was rated significantly higher in terms of global ratings of entertainment and enjoyment and was also rated significantly more enjoyable and exciting than both the music program and the comedy program. The results also indicated that the music program was rated as significantly less humorous and less funny than the drama-soap and comedy programs. This pattern of results is similar to that produced by the pilot study, although this study failed to find significant differences for the ratings of the programs as entertaining, amusing, and fun ($p > .05$ in each case).

Measures of recall and recognition: Subjects' recall and recognition of the six advertisements were quantified with the following four measures:

(a) Free Recall: Subjects were asked to write down as much as they could remember about the advertisements including brand name, product type, and details of the advertisement.

(b) Recognition of Products: Subjects were asked to recognize the six product types from among a total of 48 randomly organized products types also commonly advertised on television. The target six product types appeared randomly within the other 42.

(c) Cued Recall of Brand Names: The six product types relating to the target advertisements were given, and subjects were asked to recall the corresponding brand name.

(d) Recognition of Brand Names: Each brand name was randomly placed beneath the relevant product type with five other possible brand names. The subject's task was to circle the appropriate brand name. For authenticity, the non-target items were culled from Capitman (1976) and Crowley (1979) and from products advertised in Australian and South African television advertisements and American magazines not available in Britain. This precaution ensured that the non-target brand names would also be unfamiliar to subjects.

Advertisement ratings: Subjects were presented with brief summaries of the six advertisements and were asked to respond to a counterbalanced set of eleven 7-point scales measuring the attitude toward the advertisements, attitude toward the brands, intention to buy the products, and subjects' estimations of their own memory for the advertisements (metamemory). Subjects who estimated their memory for the advertisement to be very low were not asked to fill in the remaining advertisement ratings scales, because they could not be expected to provide information on their attitudes toward advertisements that they could not remember. In order to confirm the results of the pilot study finding that the brand names were all quite new to the subjects, the subjects were asked if they had heard of the brand names prior to the experiment.

PROCEDURE

Subjects were assigned to treatment conditions quasi-randomly (with equal numbers in each treatment condition) and tested in groups of between 13 and 33. They were told that the research related to psychological aspects of television viewing and that they were about to watch a program taped from an English-speaking foreign television channel. They were also told that the program would last about 25 minutes, after which they would fill in a few short questionnaires. They were requested to relax and simply watch to the program. No mention was made of the advertisements.

After watching the program and advertisements, the subjects were asked to respond to the questionnaires in the order described above. They were not allowed to backtrack

in order to change or supplement their responses to earlier questionnaires in the light of information provided in subsequent questionnaires. Subjects were given two minutes to complete their personal details and the program ratings. A further six minutes was given for the completion of the free recall of advertisements questionnaire (a). The remaining three memory questionnaires (b, c, d) were completed in six minutes. The completion of the advertisement ratings was untimed. After completing all the questionnaires, the subjects were given £3.00 and debriefed.

Scoring of Questionnaires. The 7-point rating scales were each scored from zero (low) to six (*high*). In the scoring of the recognition measures, one point was awarded for a correct choice and zero for an incorrect choice. Free recall descriptions of advertisements were marked out of 30 according to lists of 30 salient points compiled in advance. These turned out to cover virtually all the details mentioned in subjects' descriptions.

Free recall of product types was scored on a 3-point scale: two marks for perfectly or virtually correct answers, one mark for substantially correct but insufficiently precise answers (e.g., salad oil instead of cooking oil), and zero for incorrect answers. Free recall and cued recall of brand names was scored on a 5-point scale: four marks for exactly or virtually correct brand names; three marks for almost correct names containing small mistakes or omissions (e.g., IXI instead of IXL); two marks for incorrect answers with recognizable elements of the brand's sound or appearance (e.g. XYL instead of IXL); one mark for answers with the initial letter correct or the correct number of syllables but no other recognizable elements of brand name's sound or appearance (e.g., IFG instead of IXL).

Two independent judges scored the free recall and cued recall questionnaires, using the lists of salient points and the marking scheme described above. When there was a discrepancy, the mean of the two judges' scores was taken. As a check on the reliability of the scoring procedures, correlations between judges' scores were calculated; the correlations were found to be $r = .99$ ($p < .001$) for both free recall and cued recall.

The questionnaire measuring perceptions of the programs produced seven scores pertaining to the seven individual rating scales and a global entertaining/enjoyable score (termed "global ratings") produced by combining the scores from the individual scales.

The recall questionnaires (a) and (c) (free recall and cued recall) were combined to form a global recall score. The recognition questionnaires (b) and (d) (recognition of products and brand names) were similarly combined to form a global recognition scale. All the memory scores formed a global memory score for each subject.

RESULTS

PROGRAM RATINGS AND MEMORY FOR ADVERTISEMENTS.

The correlations between subjects' ratings of the programs and their recall, recognition, and global memory scores for the advertisements are shown in Table 2. The most striking feature of Table 2 is that all the correlations between and program ratings are negative. However, none of the correlations reached significance ($p > .05$ in every case).

CORRELATIONS BETWEEN ADVERTISEMENT AND PROGRAM RATINGS

Table 3 shows the correlations between the advertisement ratings and program ratings. None of the correlations between program and advertisement ratings were significant ($p > .05$ in every case) and the direction of the correlations showed no consistent pattern.

TABLE 2
CORRELATIONS BETWEEN PROGRAM RATINGS AND MEMORY FOR ADVERTISEMENT

Program Ratings	Recall	Recognition	Memory
Global Scores	-.09	-.12	-.10
Entertaining	-.07	-.13	-.09
Enjoyable	-.04	-.04	-.05
Exciting	-.09	-.10	-.10
Humorous	-.10	-.07	-.10
Amusing	-.10	-.17	-.11
Fun	-.00	-.07	-.01
Funny	-.09	-.11	-.10

Note: Global scores were derived by summing the scores of the seven individual scales.

TABLE 3
CORRELATIONS BETWEEN PROGRAM AND ADVERTISEMENTS RATINGS

Program Ratings	Attitude to Ad	Attitude to Brand	Intention to Buy
Global Scores	.08	.10	.16
Entertaining	-.08	-.03	.14
Enjoyable	-.01	.07	.19
Exciting	.14	.15	.19
Humorous	.20	.22	.25
Amusing	.06	-.01	.02
Fun	.24	.24	.20
Funny	-.06	-.06	.06

Note: Global scores were derived by summing the scores of the seven individual scales.

DISCUSSION

This experiment aimed to investigate the relationship between program-induced entertainment and enjoyment on the one hand and advertisement effectiveness on the other, and to determine whether these aspects of program contexts conformed to the relationship observed by Norris and Colman (1993) between program-induced viewer involvement and advertisement effectiveness.

The relationship between program ratings and memory scores was found, in fact, to be negative, as in Norris and Colman (1993). However, while all seven program ratings correlated negatively with the recall, recognition, and global memory scores, none of the individual correlations reached statistical significance. Ratings of the programs as entertaining, enjoyable, exciting, humorous, amusing, fun, and funny all correlated negatively but nonsignificantly with the memory scores for the advertisements embedded in the programs. Global ratings of the programs as entertaining and enjoyable also correlated negatively but nonsignificantly with memory scores. The U-shaped curvilinear relationship found in the RBL study (cited in Johnson, 1992) and the positive relationship reported in some previous studies (Channel Four, 1993; Gullen, 1993; Lloyd & Clancy, 1991) were not replicated here.

The lack of statistical significance among the correlations may in fact suggest that contexts that differ in terms of their entertainment or enjoyment properties do not have markedly different effects on memory for accompanying advertisements. It is possible that the effects of entertainment and enjoyment in previous studies are explicable by the very different scales used in those studies, by the way in which entertainment and enjoyment were operationalized, or by the fact that entertainment and enjoyment properties of programs simply do not produce strong context effects.

Turning to a discussion of the relationship between the program ratings and advertisement ratings, the majority of the correlations were positive, although once again they were statistically nonsignificant. The data do not provide statistical corroboration of the hypothesis that program-induced enjoyment and entertainment influence attitudes towards advertisements, attitudes toward brands, or buying intentions in any consistent way.

The results of this study contrast sharply with those of Norris and Colman (1993), who investigated the effects of program-induced involvement. Although the direction of the correlations was similar in both experiments, the relative smallness and non-significance of the effects in this study tend to suggest that program-induced entertainment and enjoyment produce weaker context effects than program-induced involvement. Both studies used an identical methodology, pilot studies, dependent

variable measures, and advertisements, and both drew subjects from the same population. The difference between the studies was that they focused on different predictor variables. It would seem that involving program contexts provide inhibiting environments for recall and recognition of advertisements and facilitating environments for attitudes toward the advertisements, whereas there is no convincing evidence that entertaining and enjoyable program contexts produce comparable effects.

What accounts for the striking differences between the results of the Norris and Colman (1993) study and the experiment reported in this article? According to the information processing interpretation used by Norris and Colman to explain the effects of context material on memory for advertisements, it is precisely *involving* context material that is likely to interfere with the encoding of memory for the advertisements, which may be viewed as relatively peripheral or incidental. The reason is that, almost by definition, high involvement entails intense occupation of a viewer's attention, whereas high levels of entertainment and enjoyment do not necessarily entail elevated attention or concentration. A viewer who is highly involved in a program has reduced information processing capacity for encoding the advertisements.

An information processing model cannot, however, easily explain the non-significant correlations between program entertainment and enjoyment on the one hand and the advertisement ratings on the other. There is evidence to suggest that an involving program may produce favorable moods or attitudes that transfer or carry over to create favorable attitudes toward the advertisements and brands to enhance purchasing intentions (Norris and Colman, 1993), but there is no clear evidence to show that an enjoyable or entertaining program influences attitudes and purchasing in the same way. The reason for this may be that the psychological states associated with entertainment and enjoyment are relatively passive, compared with involvement, and may therefore induce lower levels of mental activity, which may in turn result in less mood transfer or carry-over to the advertisements.

The most important finding of this study is that, compared to viewer involvement, viewer entertainment and enjoyment are relatively weakly related to advertisement effectiveness. These results imply that the entertainment and enjoyment properties of programs are not as strongly predictive of advertisement effectiveness as is program involvement. In particular, as regards memory for advertisements, it seems likely that

entertaining and enjoyable contexts do not reduce the information processing capacity of viewers to encode advertising information in the way that involving contexts apparently do.

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