THE EFFECTS OF CLUSTERING ON RECALL OF TELEVISION COMMERCIALS

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Abstract

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The subjects, 160 adults, were randomly split between two treatment groups. Each saw a 30-minute television program with one of two types of commercial placement: four 1-minute breaks or one 4-minute cluster. Commercial recall, measured by a paper and pencil device, was analyzed using multivariate and univariate analysis of variance for a 2x8 factorial design with one nested factor. A significant increase ($p < .05$) in related recall was found for those subjects who saw the commercials in the 4-minute cluster. No significant difference was found for recall of situation/visual or message elements or interaction between presentation and position. Some form of clustering was preferred by 98% of the subjects. Two conclusions were suggested. First, clustering may lead to a drop in the number of viewers who watch commercials. Second, the recall of commercials among the audience which remains would likely not be lowered and might in some instances increase.

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CHAPTER 1

Introduction

The North American system of television broadcasting has recently come under heavy criticism because of advertising practices (e.g., Kershaw, 1974; Marting, 1973; Ostrow, 1973; Simko, 1973). There is a growing fear among those in the advertising and broadcasting industry of a consumer revolt spawned by increasing public irritation toward advertising (Gerstle, 1971; Graham, 1971; Gwyn, 1974; Roger, 1974c). Attention has particularly focused on the clutter of commercials on television arising from the proliferation of 30-second advertisements since the early 1960s (McMahan, 1971; Weiss, 1972; Wilson & Muncie, 1973).

In Canada, concern with televised advertising has centered around the Canadian Broadcasting Corporation's (CBC) commercial policy, particularly in light of the CBC's status as a crown corporation. In the report of the 1974 CBC license renewal hearings, the Canadian Radio-Television Commission (CRTC, 1974) stated that, "There is a growing concern that broadcasting in general and television in particular has become excessively influenced by the North American

merchandising system" ("Decision CRTC 74-70," p. 36). As a result of the hearings on the CBC's application for license renewal the CRTC recommended, among other things, that, "interruptions for advertising material should only be permitted if the flow or mood of the program will not be disturbed" ("Decision CRTC 74-70," p. 43) and that, "the number of interruptions and the number of commercial or other messages in an interruption should vary according to the nature of the program" ("Decision CRTC 74-70," p. 43).

The CRTC concluded that the CBC should undertake a reconsideration of its commercial policy and should take the leadership in working out ways of improving the programming of commercial messages on television. In addition, the CRTC suggested that the CBC eliminate, as far as possible, the excesses and undesirable effects of commercials on its television service and assist advertisers and advertising agencies who want to improve advertising practices.

Subsequent to the hearings, Pierre Juneau (1974), then chairman of the CRTC, stated that there was a consensus among broadcasters, advertisers, and agencies that something should be done about the congestion of commercials on television. Laurent Picard, president of the CBC, stated that the CBC was determined to develop a new way of scheduling commercials in and around programs (Craig, 1974).

In searching for a means of improving the programming of commercials, the CRTC and a joint committee of Canadian

advertisers (comprised of the Institute of Canadian Advertising and the Association of Canadian Advertisers) both stated a desire to know how a system of "clustering" commercials, such as the British use, might be applied to the Canadian networks (CRTC, 1974). For its part, the CBC said that it was prepared to try a new approach to advertising and that the British concept of "clustering" had already been discussed (CRTC, 1974). The principal concern regarding this type of system, expressed by both the joint committee of advertisers and the CBC, was that the British method of programming commercials, as applied to the North American situation, might increase the clutter of messages on the air.

It is necessary to define a few of the terms that arise in a consideration of this problem and which will be used in this study before going any further:

Advertising-	any non-program material.
Clutter-	any extended series of advertising messages.
Chain-	the actual string of commercials.
Position-	the placement of a commercial within a chain.
Normal breaks-	1- or 2-minute commercial breaks separated by approximately 10 minutes of program material.

Clustered breaks- long (in excess of three minutes) commercial breaks; in this study 4-minute blocks of commercials separated by approximately 30 minutes of program.

Noting- in commercial testing, a yes or no response indicating that the viewer remembers seeing a commercial.

Recall- in commercial testing, a correct identification of the product being tested.

Related recall- in commercial testing, a correct identification of the product being tested combined with memory of at least one situation/visual or message element of the commercial.

A major portion of the complaints about commercials center around the effects of and solutions to the problem of clutter (ACTRA, 1970; Juneau, 1974; Roger, 1974a; Wilson & Muncie, 1973). Of particular concern is the frequency of commercial breaks and the number of messages in each break. Lumping all the commercials together in only two or

three breaks in an hour, as in the British commercial system, would reduce the number of interruptions to a program and decrease the clutter surrounding the contents of the program, thus quite possibly pleasing the viewing audience. On the other hand, this plan would increase the clutter within the commercial break and possibly lessen the effectiveness of commercials positioned in the middle of chains of advertisements, thus antagonizing the advertisers. Unfortunately, to this date there has been a lack of significant research into the specific effects of clustering commercials both on audience attitude and on retention of commercial messages (CRTC, 1974; Ostrow, 1973; Shiffman, 1973; Simko, 1973).

This study was a controlled attempt to establish the actual effects on commercial recall which arise from clustering commercials at 30-minute intervals. The primary intent of the study was to determine if recall went down as the length of the break increased and if commercials in the middle positions of long breaks were recalled less than those in the first or last positions. The effects of television viewing habits, attitude toward commercials, and product usage were measured and controlled. Similarly, the attitude of the subjects toward the presentation of commercials in clusters was determined. In sum, this study was an attempt to determine the total effect of clustering commercials and the results advertisers can expect would

arise from using that form of presentation, so as to more accurately predict the desirability of adopting this form of commercial broadcasting.

Related Research

An exhaustive review of research in advertising reveals very little directly concerned with the question of the potential effect of clustering commercials on recall. What research there is analyzes the effects of the already existing clutter of commercials. This clutter, the outcome of the proliferation of 30-second advertisements in the last 10 years, has led to a dramatic rise in the number of commercial messages and consequently the number of messages per break. McMahan (1971) notes that in 1971 the number of 30-second spots in prime time had passed 90% on the networks in the United States. In Canada, the percentage of 30s has reached 76% in prime time (Wilson & Muncie, 1973).

Simko (1973) has pointed out that the total number of commercials on United States television increased by 88% in 10 years. On the other hand, the amount of time devoted to commercials has not substantially increased. The resulting cluttered breaks are similar, although generally somewhat shorter in duration than the clustered breaks in which we were interested.

Research into the effects of clutter does provide some insight into the potential effects of clustering. A comparison

of the respective effectiveness of 30-second and 60-second commercial messages shows that the shorter messages achieve a percent noted of 25% less and a recall of 47% less than the longer commercials (Gerstle, 1971). There seems to be little argument within the advertising industry that 30-second commercials produce lower recall scores than 60-second ones. However, the cost factor and the ability of the advertiser to spread 30-second commercials throughout the broadcast schedule to obtain a higher frequency of exposure seem to make up for this deficiency. Thus the current popularity of the 30-second commercial.

The concern of the advertising industry as it relates to commercial clutter seems to be threefold: first, that the effect of clutter is to diminish the effectiveness of advertising; second, that there is a growing public antipathy toward the number and frequency of commercials and commercial breaks on television; and third, that this continued proliferation of advertisements will lead to government regulation (Gerstle, 1971; McMahan, 1971; "Roundtable 1: Clutter," 1973). Weiss (1972) suggests that,

> "Neither television nor other forms of advertising will curb their excesses voluntarily. Therefore, it seems safe to prophesy that some time between 1975 and 1980, TV commercials will be placed under several types of restrictions, very likely patterned after some of those now in effect for European TV" (p. 74).

The implication of this statement is, of course, that commercials will be limited and clustered by regulatory agencies. This belief obviously gives further impetus to the advertisers' desire to learn more about the results of clutter.

The exact effects on the television audience of the proliferation of short commercial messages seem to be a matter of some contention. Simko (1973), writing in the United States, and Roger (1974b), writing in Canada, both point out that there is no substantive research that would conclusively show a negative impact arising from the clutter of commercials on television, leaving aside the differences that do arise because of varying lengths. Simko (1973) cites a number of studies which point out the conflicting nature of the current research. These are summarized here:

1. A 1963 study reported by Brown and Williamson found that a commercial was 38% more effective when alone than when in a cluttered position.
2. A 1964 Gallup and Robinson report indicated that clutter did not exert an adverse influence on commercial performance.
3. A Baker Advertising study in 1967 showed that unaided recall for nine commercials was greater when they were shown in an isolated position than when shown in groups of three.

4. A 1970 Gallup and Robinson report stated that one minute breaks containing one or two commercials performed no differently from two or three commercials in a two minute break.
5. A Doyle, Dane and Bernbach study in 1970 reported that the greater the number of commercials in a show, the lower the recall of each.
6. A Needham, Harper and Steers study in 1965 reported that there was no difference in recall between clutter or island positions.

The Needham, Harper and Steers study (Barclay, Doub & McMurtrey, 1965) is indicative of the methodology that has been used in a number of studies. Telephone interviews of housewives were conducted to determine the content recall of commercials presented in daytime and the evening and those seen within a program as opposed to those seen between programs. Commercials within the programs were further divided into two categories: clutter and island. In this study, clutter commercials were defined as those occurring near the beginning or end of programs and island commercials as those appearing near the middle. Results indicated no differences arising as a result of daytime or nightime broadcast, or between clutter or island positions. A higher recall was found for commercials contained within the program as opposed to commercials between programs.

This study by Needham, Harper and Steers points out some of the difficulties of on-air research into commercial effectiveness. It was necessary to derive results by comparing different commercials contained within different programs. Although the results were averaged across all the commercials appearing in a particular position, it is still possible that the results reflect the fact that different types and even qualities of commercials are often broadcast in different time slots. In addition, the effects of position within the commercial break may have contributed to the effects noted. No effort was made to control for this factor. In effect, this study, as many do, generalizes its findings on the basis of existing commercial programming patterns. The results may thus reflect the differences arising from the type of commercials shown in particular positions as much as the results of the placement process.

A novel approach to studying commercials was adopted by Steiner (1966) in his well-known study of advertising. Families watching television were, unknown to them, observed and their reactions to commercials noted. (The observers were members of the family who also were university students.) The audience behaviour observed indicated that the position of a commercial within its series was far more important than its general position within a program. Although attention differences between opening, closing, and middle positions in a program were found, these were smaller than the

attention level differences that were a function of the position of a commercial within a break. Results were based on observation of each family by only one observer and do not reflect recall of specific commercials. The results are thus very much dependent on the rating skills of the observer and his ability to remain unobtrusive. In addition, no relationship between attention to the commercials, the trait being rated, and the effectiveness of the commercial was established.

The research that deals the most specifically with the question of effects arising from clustering of commercials is contained in a 1972 Burke Marketing report (Schneider & Siebert, 1972). This report summarizes the results of Burke studies conducted between 1965 and 1971 and attempts to determine the differences in recall that arise when commercials are presented in a chain of up to eight messages. It was concluded that clutter had not diminished the ability of a message to communicate, as measured by related recall test scores. Although a net commercial audience loss for long strings of advertisements was noted, results from the recall test indicated no significant differences related to position in the string. A potential 16% drop in audience for all commercials was predicted if commercials were clustered with long intervals between commercial breaks. Again, as in previous studies, no effort was made to compare a single commercial in different positions and the

commercials measured were contained in many different programs.

The results of the Burke and Steiner studies appear to support each other so far as attention to commercials is concerned. However, Steiner's study does not relate attention to recall. Neither study made any attempt to correlate product use to either attention or recall and there was no direct comparison of positions using the same commercial. As a result, it is possible that the least interesting commercials came during the most involving program or vice versa.

None of the studies analyzed seem broad enough in scale to allow adequate generalizations on the effect of clutter or the potential effect of clustering, particularly because of their lack of control of moderating variables. This conclusion is supported by Shiffman (1973) in a survey of research undertaken in this area. He points out that in many cases the results were perhaps a by-product of the testing of recall across commercials with widely varying degrees of memorability. He does, however, indicate two general trends in the data to date:

1. Television program audiences appear to drift away from the TV set as the commercial chain grows in length and return to see the last commercial in the chain.
2. Clutter does not have any effect on advertising recall among those people who are in the commercial audience at any given time.

The other area of concern arising from the clutter of commercials on television is the attitude of the viewing public to television advertising. Although several studies indicate that the public approves of commercials and feels that advertising is a fair price to pay for our form of broadcasting (Roper, 1969; 1973; Steiner, 1966), a number of other surveys indicate a large degree of dissatisfaction with the way commercials are presented on television (American Council for Better Broadcasts, 1972; "Public Wants," 1972; Schneider & Siebert, 1972). A 1962 Canadian Broadcasting Corporation (1963) study found 2/3 of the people interviewed in a cross Canada survey felt that commercials either "very often" or "quite often" interfered with their enjoyment of programs.

More recent CBC (CRTC, 1974) studies found approximately 90% of the respondents either moderately or very unfavorably disposed toward commercials on television. A Burke study (Schneider & Siebert, 1972) found that 50% of those surveyed felt there is more advertising than programs on television are worth and 63% stated a desire to have commercials consolidated at the start/end of a program. Only 10% of those surveyed opted for the present system. These results were supported by a recent Canadian study (Rich, Ellenbogen, Owens & Phillips, Note 1), which found 80% of those questioned in a telephone survey desired a change in the placement of commercials, the

majority favouring a placement of breaks at the beginning or end of programs.

Because of the evident dissatisfaction of the viewing public with the current form of commercial presentation on television, broadcasters have been urged to explore the possibility of clustering commercials on television (CRTC, 1974; Moore, 1974). Although the CBC has stated its willingness to explore alternate forms of commercial programming, the research to date has not given an adequate base for predicting the effect of an alternate form of presentation, such as clustering commercials at half hour intervals (Craig, 1974; CRTC, 1974). There exists a general feeling in the advertising and broadcasting industry that more research into the effects of clutter and of alternate methods of commercial placement is needed (Davidson, 1972; Moore, 1974; Ostrow, 1973; Roger, 1974b).

The need was for a controlled experiment, which would isolate presentation variables and measure the recall of commercial elements which resulted when advertisements were presented in the proposed form of a clustered break as opposed to the present form of placement. Particular attention to effects which might arise because of position within a string of commercials was necessary. On the basis of past research, it was felt necessary to ensure that the same commercials were being compared in different positions and via different methods of presentation and that one program be

used, so as to eliminate the effects of particularly memorable commercials or involving programs. In addition, it was felt desirable to determine the audience's attitude toward commercials presented by the clustered method after having experienced that method.

Hypotheses

In light of the concerns expressed by those in the broadcasting and advertising industries, and on the basis of past research into the effects of advertising, three principal hypotheses were set forward for examination in this study.

> Hypothesis 1: The effectiveness of 30-second television commercials, as measured by scores on a paper and pencil content recall test administered immediately after viewing a 30-minute television program, will be significantly less when commercials are presented in 4-minute clusters every 30 minutes than when those same commercials are presented in 1-minute breaks separated by approximately 10 minutes of program.

The independent variable in this first hypothesis is the method of presentation of the commercials: clustering versus normal placement. The treatment involves randomly

assigning the subjects to either of two groups. The control group will be shown a 30-minute television program containing four commercial breaks each consisting of two 30-second commercials. Three breaks will be as evenly spaced as possible through the program with the fourth at the end of the program. The experimental group will be shown the same 30-minute program but with all the commercials grouped in one 4-minute block at the end of the program.

The dependent variable is the effectiveness of the commercials as measured by a paper and pencil content recall test administered to the subjects directly after viewing the 30-minute television presentation. The use of this type of measure to determine advertising effectiveness is suggested by Gruber (1966), Rao (1970), and Wolfe (1962).

The recall test is divided into four components, for each of which a score is obtained: situation/visual recall, message recall, related recall, and incorrect brand recall. Related recall is determined by correct identification of the brand concerned in conjunction with the identification of at least one situation/visual or message element in the commercial.

As the concern of advertisers is that their commercials are lost in the clutter of messages on television, the intent of this first hypothesis is to determine if there is an overall change in commercial recall as a direct result of clustering. This would serve to indicate the general

effectiveness or lack of it for this form of presentation.

Previous research has revealed conflicting views as to whether or not the clustering form of presentation leads to a general drop in audience recall (Simko, 1973) The Burke findings, perhaps the most extensive, do indicate the possibility of a loss of audience for clustered commercials but not necessarily a drop in recall for those attending to the commercials (Schneider & Siebert, 1972). No direct controlled comparison of the two modes of presentation, as performed in this study, was found in previous research.

> Hypothesis 2: The effectiveness of individual 30-second television commercials, as measured by scores on a paper and pencil content recall test administered directly after presentation of a 30-minute television program, will be significantly less when those commercials occupy the middle position of a 4-minute cluster than when they occupy either the beginning or end positions of the cluster.

The independent variable in this hypothesis is the position of the individual commercials within a chain of commercials. Where the intent in the first hypothesis is to look at the overall recall of a number of commercials, this hypothesis is designed to determine the differential effects arising from positioning within the cluster. The dependent measure, as in the first hypothesis, is a content recall test

yielding four separate scores. The focus is on the experimental groups' recall scores for each of the eight commercial positions.

Past research is conflicting in its findings as to the recall of individual commercials within chains. The difficulty in forecasting results of clustering on the basis of past research arises from a lack of identifcation of the specific position in a chain for commercials tested. The two studies found which did identify commercial position indicated the possibility of audience attention drift during long strings of commercials (Schneider & Siebert, 1972; Steiner, 1966). These studies did not, however, indicate any loss of recall resulting from positioning of commercials.

If the first hypothesis was supported, that recall would drop as a result of clustering, then it seemed logical to assume that this loss of recall might manifest itself in lowered recall scores for specific positions within the chain. This hypothesis was formed on the assumption that audience attention would wander during the middle of the chain, as indicated in previous studies, not returning until near the end.

Hypothesis 3: When given several choices of commercial grouping, subjects who have experienced the clustered form of presentation

of television commercials will express a greater preference for that form than will subjects who have experienced only the current method of presenting commercials, as indicated on a paper and pencil measure administered directly after seeing a 30-minute television program containing commercials presented in one of those two forms.

The independent variable in this case is again the form of commercial presentation: clustered or normal. The dependent variable is the preferred form of commercial placement chosen when the subjects are given a number of alternatives. The alternatives were: 1- or 2-minute commercial breaks approximately every 8 minutes, 4- or 5-minute commercial breaks at the end of every half hour, 8 to 10 minutes of commercials at the end of every hour, or a 1-hour block of commercials every evening.

Whereas previous studies asked the subjects what form of presentation they preferred without exposing them to the clustered format, the intention here was to examine the attitude to clustering commercials after that form of presentation has been experienced. Because of the apparent strong desire for a change in the form of commercial placement evidenced in previous studies (Schneider & Siebert, 1972; Rich, Ellengogen, Owens & Phillips, Note 1), it was felt that experiencing the clustered presentation

would heighten the subjects' desire to change the method of presentation. This difference could be exposed by analyzing the differences in attitude to this form of presentation by the control and experimental groups as shown on the dependent measure. On the other hand, there was the possibility that the actual experience of 4-minute blocks of commercials by the subjects might lead them to conclude that this was not a desirable form of presentation.

All three of these hypotheses deal with specific areas of concern relating to clustering commercials which have not been adequately dealt with by past research. It was felt that the chief deficiency in previous studies was the lack of control over intervening variables. Because of the difficulties in presenting multiple parallel forms of commercial grouping over the air, it was decided that only a controlled experimental study would lead to an accurate examination of the recall and attitudes resulting from both the clustering of commercials and the positioning of commercials within a cluster.

The three hypotheses proposed still leave unaccounted for the possibility of differences in recall that might arise as the result of the subjects' television viewing habits, attitudes to commercials, brand use, or demographics. As a result, a fourth hypothesis presented itself.

Hypothesis 4: Subject differences in attitudes to television commercials, viewing habits, brand use,

and demographics, as determined by a paper and pencil measure, will significantly affect the recall of television commercials, as measured by a paper and pencil device administered directly after viewing a half hour television program.

The specific aim of this hypothesis is to determine if the four general moderating factors involved have an effect on the recall of commercials. If a significant effect is found and if there is a significant difference between the groups studied for these factors, then it will be necessary to use them as covariates in the analysis of the first two hypotheses. Because of the nature of the dependent variable in Hypothesis 3, it is not amenable to covariance analysis.

The measuring device used to determine the subjects' standing on the four moderating factors was administered before viewing the television presentation. Attitude to commercials was defined by a score derived from subjects' answers to a number of separate questions about their views on commercials. The demographic factors analyzed were age, years of schooling, and income. Brand usage was defined as never, occasionally, or frequently. Number of hours spent watching television per day was the viewing habit measured.

This use of covariates to match treatment groups in advertising research is suggested by Barrow (1971),

and Wind and Denny (1974). They point out a number of instances where the insertion of covariates, such as those suggested, has significantly affected recall findings. It was deemed particularly desirable to determine if there were differences arising between the groups as the result of intervening factors in this study because of the necessity of using four different groups of subjects.

CHAPTER 2

Methodology

Subjects

Subjects used in this study were 200 English speaking adults drawn from various community organizations in the Montreal metropolitan area. Five different groups participated in the study: two church groups, two home and school associations, and one residents' association. One of the church groups was used in a pilot study while the other four groups provided the subjects from which the experimental data was derived. Each organization yielded 40 subjects whose test scores were usable in the final data analysis.

Participation of the organizations in the experiment was solicited by letter (see Appendix A). A diversity of groups was contacted in an attempt to get a reasonable cross section of the Montreal viewing public. Those organizations which agreed to participate were asked to provide between 60 and 70 people, the only qualification being that the subjects had to be over 18 and speak English. The community organizations were also asked to provide meeting facilities for conducting the experiment.

Early conversations with these groups had quickly indicated the difficulty of getting this number of subjects out on one evening. It was felt necessary to pay for the volunteers in order to ensure a sufficient number of subjects. Rather than pay the participants directly, each organization that participated was paid for the number of

volunteers that it provided. Payment was $10 per subject up to a limit of $700 per group.

Materials

Eight 30-second color commercials were obtained from Cockfield-Brown and Company Limited for use in this study. All commercials were suitable for presentation to a general adult audience and represented typical high quality commercials for nationally advertised products. Products advertised were a soft drink, a major oil company, an airline, two beers, a hair shampoo, a dairy product, and a public utility. The program selected as a presentation vehicle for the commercials was a 25-minute color light comedy film, "The Railrodder", obtained from the National Film Board. Although this film is not a new one, there was nothing in the content to date it and only 16% of the subjects indicated that they had seen it before (releases in Appendix B).

The commercials and the program they were to be inserted into were packaged into a 29-minute presentation using the facilities of the Instructional Communications Centre at McGill University. For the treatment consisting of a normal presentation of commercials, positions within the program were located following standard broadcasting practice. Natural breaks in the action were readily located which corresponded to an opening position after the program introduction, a break at the 10-minute point, and a break at the

20-minute point. The final commercial position used was immediately after the closing titles. For the clustering form of presentation the commercials were grouped in a 4-minute block at the end of the program. All the commercial breaks were preceded and followed by a quick fade to black to provide a transition from commercial to program material as required by the CRTC.

Every effort was made to make the presentation of commercials in the program as natural as possible and to retain as high a technical quality of production as possible. Care was taken to ensure proper color and audio quality so that no production or technical elements would detract from the program. Each of the eight treatment versions was packaged on a separate 3/4" video cassette for playback to the subjects. Packaging was done directly from the original film to video tape. The beginning of each tape contained 30 seconds of color bar and tone to allow the color monitors to be aligned for proper color and sound rendition on playback. This was separated from the program by 10 seconds of black picture with no audio, which allowed the video tape to be precisely cued to the beginning of the program.

Design

The design for the experiment was a 2 x 8 factorial pattern with a third nested factor of four levels. The complete design is diagrammed in Table 1. The first

Table 1

Design: Hypotheses 1, 2 & 3

Groups[b]		Presentation Form[a]: Normal	Presentation Form[a]: Clustered
Position 1	1	xy_{111}	xy_{121}
	2	xy_{112}	xy_{122}
	3	xy_{113}	xy_{123}
	4	xy_{114}	xy_{124}
2	1	xy_{211}	xy_{221}
	2	xy_{212}	xy_{222}
	3	xy_{213}	xy_{223}
	4	xy_{214}	xy_{224}
(continued for 8 positions)			

[a]Subjects randomly assigned from within the four groups to either the clustered or normal form of presentation.

[b]40 subjects in each group split evenly between the two presentations.

[c]Commercials rotated through the positions in pairs, each group seeing them in a different order.

x = Dependent Variables
- Related Recall
- Incorrect Brand
- Message and Situation/Visual Elements

y = Moderator Variables
- Demographics
- Viewing Habits
- Brand Use
- Attitude

treatment variable was the normal presentation of commercials, the control method, versus the clustered presentation of commercials, the experimental method. The second treatment variable contained eight levels, both in the clustered and the normal form of presentation, which comprised the eight commercial positions available. The final factor consisted of the four groups that were involved in the experiment. The groups were nested with commercial position and crossed with clustered and normal forms of presentation.

The ideal situation would have been to have used a 2 x 8 factorial design with eight replications, each replication using a different group of subjects drawn from the same population. For each replication the commercials would have been rotated to a new position so that each commercial appeared in each position once over the course of the experiment. Because of the number of separate presentations of the stimulus program, 16, and the number of subjects necessary from a single population, it was not feasible to conduct the experiment in this manner. Instead, the commercials were rotated through the positions in pairs thus reducing the number of groups necessary by one half. As a result, each commercial appeared in half the positions available. Any given commercial appeared in either all the odd or all the even numbered positions.

The subjects in the four groups were randomly assigned to either the clustered or normal form of presentation.

This partial nesting allowed for a direct comparison of commercial performance within groups of subjects from one population and provided a means of varying the commercials presented so that the effects of any one particular commercial could be averaged out.

The necessity for using four separate sets of subjects made it seem particularly advisable to include a provision for controlling variances in recall arising from differences in the population. Thus provision was made in the design for the addition of moderating factors if the factors so designated were found to have a significant effect on recall. The factors examined for their moderating effect on the dependent variable were attitude to commercials, age, schooling, income, brand use, and amount of television viewing.

The dependent variable was the subjects' recall of the particular commercials presented. The specific type of recall used was related recall as defined by Burke Marketing Research (Schneider & Siebert, 1972). This consists of the correct identification of the brand advertised in addition to at least one correct situation/visual or message element from the commercial. Related recall yields a simple positive or negative indication of whether or not the subject can prove memory of the commercial. This score can additionally be broken down into its component parts with separate scores derived for the correct number of message and situation/visual elements remembered by the subject.

As each subject was asked to recall all of the commercials seen in the program, eight sets of scores were derived from each subject. Each of the four nested groups contained 40 subjects. These were split into control and experimental sub-groups, each made up of 20 subjects who were asked questions about eight separate commercials. Each cell of the design thus consisted of 20 sets of scores. The 64 cells resulted in a total of 1280 sets of scores. Each set consisted of scores for related recall, situation/visual and message elements, attitude, brand use, demographics, and viewing habits.

To test the influence of the covariates, dependent variables in Hypothesis 3, and the dependent variable in Hypothesis 4, variations in the preferred type of commercial grouping, it was necessary only to collapse the elements of the design. In the case of the proposed covariates the four groups are collapsed into one. A comparison could then be made for the control group against the experimental group over the 160 subjects and eight commercials. The analysis was treated as if there were 1280 subjects.

To determine any differences in commercial grouping preference, the element involving commercial position is eliminated and the four groups are combined into one. The design then becomes a comparison of the subjects who had the normal form of presentation against those who had the clustered form of presentation. The treatment in this case is still the form of presentation and the dependent variable the subjects' choice of type of grouping (see Table 2).

Table 2

Design: Hypothesis 4

Commercial Presentation Preference

Presentation Form[a]	Groups[b] 1	2	3	4
Normal	x_1			
Clustered	x_2			

[a]Subjects randomly assigned from within groups to one of the two presentation forms.

[b]Each group contained 40 subjects; scores summed across groups for analysis.

x = Subjects' preferred form of commercial presentation.

Instrumentation

Three measuring devices were administered during the course of this experiment. Attitude toward commercials, viewing habits, and demographics were determined by answers given on a paper and pencil device administered to the subjects directly before they viewed the prepared television program. Commercial recall was measured by a paper and pencil device administered immediately after the treatment ended. Brand usage was recorded on a form given to the subjects when they had completed the recall test.

The attitude, viewing habits and demographics measure was given before the subjects viewed the program in order to ensure that answers were not affected by the treatment. The device used was developed in an earlier study conducted by Rich, Ellenbogen, Owens and Phillips (Note 1). The questionnaire used is found in Appendix C. It consisted of 30 questions, all but two of which (years of schooling and occupation) were closed questions requiring the respondent to select from two or more answer categories. The 17 attitude questions constituted a Likert-type scale. Subject responses were converted to a numerical value. These values were summed for the 17 attitude questions, yielding a single attitude score for each subject.

Content of the attitude measure was validated by an expert in media research. The internal reliability was determined in the previous study by means of phi coefficients

derived by comparing subject responses to seven pairs of related questions. These questions all correlated significantly ($p < .001$) indicating a good degree of internal reliability (Rich, Ellenbogen, Owens & Phillips, Note 1).

Subjects were additionally asked about their preference for placement of commercials, previous exposure to the program, and brand use. Placement preference involved having the subjects choose among four methods of grouping. To measure brand use, the subjects were given a list of 25 products and asked to indicate whether they did not use, occasionally used, or frequently used them. This list contained, in random order, groups of similar products including the eight advertised in the program. This questionnaire is found in Appendix D.

The related recall measure used in this study was based on the standardized Burke (1974) Day-After Recall Television Commercial Test. A complete formulation of that measure was obtained from Burke Marketing Research (Note 2). Suitable changes to the form were made to adapt it to self-administration by the subjects. The complete recall measure is found in Appendix E.

Subjects were asked nine multiple part questions on the commercials they had seen. Eight concerned the actual advertisements contained in the program while the ninth was a bogus question on a product not advertised. The products appeared in the measure in a random order. The questions consisted

of a prompt asking the subjects if they remembered seeing a commercial for a type of product or service, i.e. "Do you remember seeing a commercial for a soft drink?". This was followed by six questions asking for specific information: brand name, scene elements, what was said, ideas communicated, and any other elements remembered from the commercial.

Palda (Wheatley, 1969) points out that this type of prompted recall behaves like a measure of memory and makes it difficult for respondents to raise their scores by guessing or other spurious methods. In addition, he contends that a reasonable assumption is that the sales effectiveness of an advertisement is related to the memory impression that it makes. Furthermore, there is some indication that this memory effect may be more important than the liking of commercials by the subject.

There are, however, certain dangers implicit in the use of recall measures. Wolfe (1962) points out that although recall provides an indication of commercial effectiveness, knowledge, and performance, it is not a conclusive measure. Further, the recall measure was administered immediately after viewing the program and viewing environment for the presentation was atypical. Since this study was not designed to test the actual potential of a particular commercial to raise sales but was rather designed to study the effects of a number of commercials in a particular type of placement, these defects should not prove serious. Twyman (1973) offers evidence

that similar results are obtained from immediate and delayed recall tests and Sadowski (1972) contends that atypical settings, while possibly inflating responses, do not significantly alter the effects that arise from different experimental manipulations.

Recall was scored using a procedure similar to that developed by Burke Marketing. Subjects were awarded a related recall if in addition to the brand name they correctly listed at least one sales message or situation/visual element. The definitions of these elements, adapted from Burke's (Note 2), are as follows:

Related Recall: Recall of brand name plus either a specific, correct sales message or situation/visual element from the test commercial, whether or not accompanied by any incorrect details or general, nonspecific recall.

Sales Messages: Recall of benefits, attributes, or reasons to buy or use the product or service advertised. Sales messages may come from either the audio or video portions of the commercial. Sales messages which are expressed in the recall of situation/visual commercial elements are coded under both.

Situation/Visuals: Recall of video details, the story line or plot of the commercial. Recall of situation/visual element which contains a message is coded under both.

In order to determine the sales messages and situation/visual elements in each commercial, a complete transcript was made of all the audio and visual elements in the commercial. The elements were identified by the researchers and then verified by two separate judges. The subject responses were compared to the elements designated as sales messages and situation/visuals on the commercial scripts and coded appropriately. (Commercial scripts are available from the authors, Note 3.) Detailed coding instructions for all the measures used are contained in Appendix F.

Pilot Test

The measures used in and developed for this study were pilot tested with a group of 40 subjects under conditions identical to those to be used in the actual study. The instructions, both oral and written, were checked to make sure no confusion arose about the procedure. The data was scrutinized to make sure no anomalies arose and that data collection procedures were adequate. Playback and viewing conditions were closely observed to ensure that they were satisfactory for the purpose of the experiment.

The pilot group's responses to the questions on commercial recall were checked and coded by two people working independently. The results were then correlated using Statpak Statistical Program on the IBM 370 Model 158 computer at McGill University. Comparison was made between the two raters'

results for each commercial over the entire group. Results are summarized in Table 3. Highly significant correlations were obtained for the three sets of scores checked: related recall r (6) = .987, $p < .01$; messages r (6) = .956, $p < .05$; and situation/visual r (6) = .979, $p < .05$.

The pilot results were analyzed for each individual subject to determine where any differences between the raters arose. The instructions for scoring and the identification of commercial elements were then reviewed to make sure they were as clear as possible. In order to eliminate any possible differences that might arise from using multiple raters, all the marking and coding for the actual experiment was done by only one of the raters involved in the pilot study. All results were reviewed and double checked for accuracy and consistency by one of the experimenters.

Procedure

Experimentation took place on four week nights between June 9th and 27th, 1975. Upon arrival at the experimental location subjects were assembled in one room. The experiment was conducted by the two researchers, who followed a strict procedure outlined in the Protocol found in Appendix G. Exactly the same procedure was followed in each of the four sessions. Instructions were read from the Protocol to ensure that no deviations from the procedure were made.

Table 3

Correlation Of Raters
On Pilot Test Recall Scoring

Factor	Sums		r
	Rater 1	Rater 2	
Related Recall	184	178	.987**
Message Elements	139	106	.956**
Situation/Visual Elements	323	311	.979**

**$p < .01$.

The subjects were never told that the purpose of the experiment was to determine their recall of television commercials. They were simply informed that they were to watch a television program. Upon starting the session all subjects were requested to sign their name in a book to ensure an accurate accounting of those present. The group was then randomly divided into two sections by having the subjects pull cards out of a bowl. The cards contained a letter designation, which determined their group and number. The number was their identification code and was recorded by the subject on the three measures he was given.

The two equal sized subgroups of subjects were assembled in separate rooms according to the letter they had drawn. One experimenter went with each subgroup. The experimenters switched groups they went with on succeeding nights so that over the course of the experiment each was with the control and experimental groups two times.

The attitude and demographic measure was then administered to the subjects. When all subjects had completed it, the measure was picked up and the television program was shown. Each subgroup saw the program under as nearly identical conditions as possible. The only difference was that one group saw the experimental or clustered version of the program while the other saw the version with commercials in a normal form of placement.

The video tapes were played back on Sony VP 1000 video-cassette players and shown on Sony Trinitron 19" television receivers. Color balance and adjustment of the sound levels were done each time the programs were shown before the subjects arrived. Playback took place in a darkened room. The experimenters left the room during the playback.

After the presentation the recall measures were distributed to the subjects. They were given as much time to complete it as they needed. Subjects were not allowed to converse while answering the questions. When they had completed the recall measure, the subjects were given the brand use measure to complete. The experiment was terminated when all subjects had completed the forms.

All data was scored and coded into machine readable form by one person. It was then keypunched and printouts were obtained. These were hand checked against the original data sheets to ensure accuracy.

The data from all the subjects who took part in the experiment was not used. Those subjects who had not completed their questionnaires were immediately discarded from the analysis. Subject group sizes then ranged from a low of 20 in some treatment groups to a high of 33. Subjects were randomly discarded from the larger treatment groups until a size of 20 was reached for each. This equal group size was essential for the type of multivariate analysis carried out on the data.

Analysis

Several different types of analyses were performed on the data. Chi-square analysis using Statpak Statistical Program on the IBM 370 Model 158 computer at McGill University was carried out on the data from different subject groups to determine disparities in demographics and viewing habits. Where expected frequencies were less than 5 in any cell, Yates's correction for continuity was applied (Ferguson, 1971).

Regression analysis was carried out on attitude to commercials, viewing habits, and a number of demographic factors in order to determine if any of these could be used as predictors for the situation/visual and message recall scores. As suggested by Green and Tull (1975), the program used was BMD03R. Analysis was carried out on McGill's IBM 360 Model 75 computer. The BMD03R program is particularly useful in this type of analysis in that it provides a multiple correlation coefficient and coefficient of determination plus an F-statistic for determining significance and partial correlation coefficients for the factors involved.

As recall of commercials is made up of several elements it was decided to use a multivariate analysis of variance for the recall data. Both Wind and Denny (1974) and Green and Tull (1975) strongly recommend this type of approach when dealing with recall of advertising messages. The specific program recommended by these authors was BMD12V (formerly BMD-X69), which is available on the McGill IBM 360 system.

The BMD12V program has several advantages for easing the process of data analysis. It provides not only a multivariate analysis of variance but also a univariate analysis and both univariate and multivariate analyses of covariance. In addition, it can easily accommodate either nested or crossed designs and it provides an approximate F-statistic as an output. This program allowed for the ready addition of covariates to the analysis if they were found by the regression analysis to be significant factors. The only qualification was that the program requires equal cell sizes.

The output of the BMD12V multivariate analysis program is in the form of a U-statistic, which is a function of Wilks's lambda statistic. This entails, as outlined by Green and Tull (1975), a three part distribution based on the number of groups, observations, and criterion variables. It is essentially a ratio of determinants obtained from the variances. From each U-statistic an F-statistic is computed. This statistic and the degrees of freedom calculated by the program allow for interpretation in essentially the same manner as that for a normal analysis of variance.

When significant factors are determined by the multivariate analysis the univariate function can be used to check where these relationships arise in connection with the criterion variables. The output of the univariate analysis for the BMD12V program is the traditional F-statistic. For those factors where a significant relationship was found and

multiple levels of a variable were involved, multiple comparison tests were conducted using the Scheffé method as outlined by Ferguson (1971).

In the case of all the statistical procedures used, chi-square, analysis of variance, multivariate analysis of variance and Scheffé multiple comparison tests, a probability of less than .05 alpha type error was required for rejection of the null hypothesis.

CHAPTER 3

Results

A large quantity of data was generated by this study. The essential elements related to commercial recall, demographics, viewing habits, brand use, and attitudes will first be summarized. Then a more indepth analysis of the specific results as they relate to the four hypotheses will be presented.

Over all the groups and within the two presentation forms and the eight positions, a fairly high level of commercial recall was found, ranging from a low of 35% to a high of 100%. Related recall of commercials for each subject group by position and presentation method is presented in Table 4. It should be reiterated here that related recall by itself does not take into account the total number of commercial events remembered but is based on the correct identification of brand plus at least one element from the commercial. The frequency of recall was found to be generally higher for the experimental group, which was presented the commercials in a cluster. A somewhat higher recall was found for commercials appearing in the first position within the cluster.

Data was also gathered on the amount of brand misidentification. Table 5 shows the number of times the wrong brand was identified. A fairly persistent brand misidentification was found for two particular commercials, which accounted for 27 out of 37 incorrect brand responses. The total number of

Table 4

Related Recall By Position And Treatment For Subject Groups

Subjects[a]	Commercial Position							
	1	2	3	4	5	6	7	8
Group 1								
Normal	65%	55%	50%	95%	35%	55%	85%	50%
Clustered	95%	65%	55%	85%	50%	75%	100%	50%
Group 2								
Normal	45%	75%	45%	40%	60%	45%	85%	85%
Clustered	80%	90%	60%	60%	85%	60%	90%	80%
Group 3								
Normal	45%	45%	55%	40%	65%	65%	35%	65%
Clustered	50%	35%	60%	40%	40%	55%	35%	85%
Group 4								
Normal	55%	35%	85%	55%	70%	90%	55%	65%
Clustered	85%	60%	75%	80%	75%	100%	45%	70%

[a] n = 20 for each group.

Table 5

Number of Brand Misidentifications
By Position And Treatment
For Subject Groups

Subjects[a]	Commercial Position							
	1	2	3	4	5	6	7	8
Group 1								
Normal	0	2	1	0	3	1	0	0
Clustered	0	5	0	1	3	1	0	0
Group 2								
Normal	0	0	0	3	0	0	0	2
Clustered	0	0	1	0	0	0	0	2
Group 3								
Normal	1	0	0	0	0	2	0	0
Clustered	1	0	0	0	0	1	1	0
Group 4								
Normal	2	0	0	1	0	0	2	0
Clustered	0	0	0	1	0	0	0	0

[a] n = 20 for each group.

commercial misidentifications for the control group was 20 while 17 were found for the experimental.

Demographic characteristics of the subjects are presented in Table 6. The majority of them, 42%, were in the 35 to 44 age group. Of the total number, 71% were female, 86% were married, and 89% listed English as their first language. The two largest occupation groupings were housewife and professional with 70% of the subjects being in those two categories. The sample tended to be well educated with 34% having had 14 to 16 years of education. The family income also tended to be high with 40% having incomes in excess of $20,000.

The television viewing habits of the subjects are presented in Table 7. While almost all of the subjects owned a television, the number of black and white and color sets was almost evenly divided. A large percentage, 94%, of the subjects watched television between 6 and 12 in the evening and 63% indicated that they watched less than two hours per day. In addition, 62% of the subjects said that they did not switch channels often. The most frequently watched channels were, as would be expected, the two English language stations in Montreal. It should be noted here that although the subjects were cautioned to list only the channel which they most frequently watched, a number listed more than one. As a result the total percentage for channels watched exceeds 100%.

Table 6

Demographic Distribution of Sample

Sex	BASE=160
Male	29.4%
Female	70.6%

Marital Status	BASE=160
Married	85.6%
Single	14.4%

First Language	BASE=156
English	88.5%
French	3.2%
Other	8.3%

Age	BASE=160
18-24	8.8%
25-34	21.3%
35-44	41.9%
45-54	16.9%
55-64	4.4%
65-69	3.1%
70 And Over	3.8%

Schooling	BASE=157
Up To 7 Years	1.9%
8 To 11 Years	21.0%
12 To 13 Years	22.9%
14 To 16 Years	33.8%
17 Years And Over	20.4%

Occupation	BASE=158
Professional	36.7%
White Collar	12.7%
Blue Collar	1.9%
Student	5.1%
Housewife	36.1%
Other	7.6%

Household Income	BASE=154
Under $2,000	1.9%
$ 2,000-$ 3,000	0.6%
$ 3,000-$ 5,000	3.2%
$ 5,000-$ 7,000	4.5%
$ 7,000-$10,000	10.4%
$10,000-$15,000	19.5%
$15,000-$20,000	19.5%
$20,000 And Over	40.3%

Table 7

Viewing Habits Of Sample

Own TV	BASE=160
Yes	97.5%
No	2.5%

Own Colour TV	BASE=159
Yes	48.4%
No	51.6%

Switch Channels	BASE=159
Yes	37.7%
No	62.3%

Hours Watched	BASE=157
6 A.M. To 12 Noon	0.0%
12 Noon To 6 P.M.	1.9%
6 P.M. To Midnight	93.6%
After Midnight	4.5%

Number Of Hours	BASE=160
Less Than 2 Hrs.	63.1%
2 To 5 Hrs.	32.5%
5 To 10 Hrs.	4.4%
More Than 10 Hrs.	0.0%

Channels Watched	BASE=160
CBMT	29.4%
CFCF	31.3%
CBFT	1.9%
CFTM	0.0%
WCAX	13.1%
WPTZ	11.9%
WMTW	6.3%
WEZF	0.6%
WETK	5.6%

Note. Some subjects listed more than one channel.

Chi-square tests were performed on the data for demographics and viewing habits to determine what differences existed between the four groups of subjects. The results for demographics are summarized in Table 8 and for viewing habits in Table 9. Significant differences were found between the groups for age (χ^2 (6) = 36.06, $p < .05$), family income (χ^2 (9) = 37.51, $p < .05$), and years of schooling (χ^2 (9) = 23.48, $p < .05$). The only significant viewing habit was the number of hours of television watched (χ^2 (3) = 20.92, $p < .05$).

Brand usage for the eight products or services advertised in the experimental program is summarized in Table 10. Differences between the groups in the use of the products were analyzed by chi-square test. No significant differences were found (see Table 11). It will be noted that two of the products were quite often used by the subjects and two occasionally used. The other four products or services were infrequently used.

The subjects were asked if they had seen the program they were presented on a previous occasion. Only 26 out of 160 subjects had. Chi-square tests were performed to determine if there were any significant differences between the control and experimental groups or among the four community groups from which the subjects were drawn. No significant differences were found in either instance (see Table 12).

Table 8

Demographics

Chi-Square Analysis of Group Differences

Question	Number of Subjects	Degrees of Freedom	Chi-Square
What is your age category?	160	6	36.06*
What is your sex?	160	3	3.71
Are you married?	160	3	7.46
What is your first language?	156	3	4.67
How many years of schooling have you completed?	157	9	23.48*
What is your approximate household income?	154	9	37.51*
What is you occupation?	158	9	3.86

*$p < .05$.

Table 9

Viewing Habits

Chi-Square Analysis of Group Differences

Question	Number of Subjects	Degrees of Freedom	Chi-Square
Do you own a television set?	160	3	2.82
Do you own a colour television set?	159	3	5.48
When do you watch television most frequently?	157	3	3.25
How much television do you watch per day?	160	3	20.92*
When watching television do you switch channel often?	159	3	1.89

*$p < .05$.

Table 10

Subject Usage of Advertised Brands

Brands	Use		
	None	Occasional	Regular
Product A	29%	55%	16%
B	87%	11%	2%
C	70%	23%	7%
D	80%	14%	6%
E	90%	8%	2%
F	65%	24%	11%
G	4%	6%	90%
H	5%	8%	87%

Note. BASE = 160.

Table 11

Brand Use

Chi-Square Analysis Of Group Differences

Brands	Number of Subjects	Degrees of Freedom	Chi-Square
Commercial 1	160	6	8.98
2	160	6	3.79
3	160	6	6.59
4	160	6	4.30
5	160	6	10.37
6	160	6	3.35
7	160	6	4.30
8	160	6	3.94

*$p < .05$.

Table 12

Previous Exposure To Program By Treatment

Chi-Square Analysis

Group	Seen	Not Seen
Normal	13	76
Clustered	11	67

Number = 158, df = 1, χ^2 = .1414

Previous Exposure To Program By Subject Group

Chi-Square Analysis

Group	Seen	Not Seen
1	5	34
2	6	34
3	6	33
4	7	33

Number = 158, df = 3, χ^2 = .335

*$p < .05$.

Complete response data to individual questions in the attitude survey will be found in Appendix H. The highlights are summarized here. More than 80% of the subjects in the study indicated that they felt the placement of commercial breaks should be changed. When given a choice of grouping commercial breaks as is presently done or grouping them in either the middle or at the end of programs, 87% chose the end of the program as their preferred placement. Two separate questions were asked concerning whether commercials should be dropped altogether from television and whether commercials are a fair price to pay for television. While 54% felt commercials should be dropped, 57% indicated that commercials were a fair price to pay for television. There was no clear consensus regarding what the effect of dropping commercials would be.

More than 93% of the subjects felt that there were too many commercials in each break, that breaks were too long, that individual commercials were repeated too often and that in general there were too many commercials on television. Close to half of the subjects said that when commercials are shown they do not watch but remain in the room. When asked what they would do if commercials were presented in breaks lasting four minutes, 41% specified they would remain in the room but not watch while the number who stated they would leave the room increased from 22% to 35%.

Overall, a large measure of dissatisfaction with the way commercials are presented on television was evidenced. In addition, little attention was paid to commercials by 60% of the subjects and 80% rated commercials as "seldom helpful".

The primary objective of this study was to determine the effectiveness of presenting commercials in 4-minute clusters every 30 minutes as opposed to four 1-minute breaks spread through the program. The data for correct related brand recall and related recall with the wrong brand identified were subjected to multivariate analysis of variance, program BMD12V. The results are presented in Table 13. The approximate F-statistics derived reveal a significant difference in recall between control and experimental groups resulting from clustering, $F(2,23) = 5.586$, $p < .05$, and significant differences in recall for the four groups of subjects, $F(48,46) = 4.687$, $p < .05$.

In order to check the results of the multivariate analysis, the two components were subjected to univariate analysis, program BMD12V. The outcome is presented in Table 14a & b. A significant difference was found in the amount of correct related recall as a result of the form of presentation of commercials, $F(1,24) = 11.502$, $p < .05$. In addition, significant differences were observed among the subject groups for both related recall, $F(24,24) = 6.683$, $p < .05$, and recall with incorrect brand, $F(24,24) = 3.629$, $p < .05$. This supports the findings in the multivariate analysis.

Table 13

Related Recall And Incorrect Brand Identification

Multivariate Analysis Of Variance

Source	Generalized Variance	U-Statistic	Degrees of Freedom	Approximate F-Statistic
Position (8 levels)	7.650	0.616	14/46	0.902
Treatment (clustered and normal)	7.561	0.673	2/23	5.586*
Subject Groups (nested in position)	10.712	0.029	48/46	4.687*
Interaction (position and treatment)	7.572	0.666	14/46	0.741
Within Cells	7.165			

*$p < .05$.

Table 14a

Related Recall

Univariate Analysis of Variance

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Position (8 levels)	37.734	7	5.391	1.312
Treatment (clustered and normal)	47.266	1	47.266	11.502*
Subject Group (nested in position)	659.125	24	27.464	6.683*
Interaction (position and treatment)	28.609	7	4.087	0.995
Within Cells	98.625	24	4.109	

*$p < .05$.

Table 14b

Incorrect Brand Identification

Univariate Analysis of Variance

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Position (8 levels)	2.484	7	0.355	0.649
Treatment (clustered and normal)	0.141	1	0.141	0.257
Subject Group (nested in position)	47.625	24	1.984	3.629*
Interaction (position and treatment)	2.234	7	0.319	0.584
Within Cells	13.125	24	0.547	

*$p < .05$.

The data provided for analysis by related recall itself is rather limited. Each cell of the design is made up of a single score representing the number of subjects who remembered a particular commercial. The related recall score, by definition, is a broad measure including both those subjects who remembered many parts of the commercial and those who remembered only one bit in addition to the brand name. This score can, however, be broken down into its two component parts: message element recall and situation/visual recall. These give scores for each subject amenable to analysis of variance.

Message and situation/visual element recall scores were submitted to multivariate analysis of variance. As can be seen in Table 15, three significant factors were found. Type of presentation was not found significant but commercial position, F (14,2430) = 3.038, $p < .05$, and subject group, F (48,2430) = 10.046, $p < .05$, were. In addition, the interaction between subject group and type of presentation was found significant, F (48,2430) = 1.516, $p < .05$.

Univariate analysis of variance on message and situation/visual recall supported the approximate F-statistics derived from the multivariate analysis (Table 16a & b). Two significant factors were discovered for message element recall: subject groups, F (24,1216) = 10.657, $p < .05$, and the interaction between groups and type of presentation, F (24,1216) = 1.686, $p < .05$. For situation/visual recall two significant

Table 15

Message And Situation/Visual Recall

Multivariate Analysis of Variance

Source	Generalized Variance	U-Statistic	Degrees of Freedom	Approximate F-Statistic
Position (8 levels)	12.950	0.966	14/2430	3.038*
Treatment (clustered and normal)	12.919	0.997	2/1215	2.113
Subjects Groups (nested in position)	13.277	0.696	48/2430	10.046*
Interaction (position and treatment)	12.929	0.987	14/2430	1.168
Interaction (treatment and group)	12.974	0.943	48/2430	1.516*
Within Cells	12.915			

*$p < .05$.

Table 16a

Message Element Recall

Univariate Analysis Of Variance

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Position (8 levels)	5.434	7	0.776	1.897
Treatment (clustered and normal)	1.250	1	1.250	3.055
Subject Group (nested in position)	104.662	24	4.361	10.657*
Interaction (position and treatment)	4.638	7	0.663	1.617
Interaction (treatment and groups)	16.563	24	0.690	1.686*
Within Cells	497.618	1216	0.409	

*$p < .05$.

Table 16b

Situation/Visual Element Recall

Univariate Analysis Of Variance

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Position (8 levels)	30.505	7	4.358	5.384*
Treatment (clustered and normal)	2.363	1	2.363	2.920
Subject Group (nested in position)	173.019	24	7.209	8.906*
Interaction (position and treatment)	4.593	7	0.656	0.811
Interaction (treatment and groups)	25.819	24	1.076	1.329
Within Cells	984.263	1216	0.809	

*$p < .05$.

factors were also found, one again being the subject groups, F (24,1216) = 8.906, $p < .05$. The other one was the position of the commercial, F (7,1216) = 5.384, $p < .05$. In no case were significant interactions found between the method of presentation and the placement of individual commercials.

As commercial position was determined to be a significant factor in the recall of situation/visual elements, the means for each of the eight positions were submitted to multiple comparison tests using the method described by Scheffé (Ferguson, 1971). The results are presented in Table 17. Significant differences in recall were found between commercials appearing in positions one and six, F (7,1272) = 17.848, $p < .05$, positions one and eight, F (7,1272) = 16.308, $p < .05$, and positions five and six, F (7,1272) = 14.362, $p < .05$.

A multiple regression analysis, program BMD03R, was next performed to determine if any of the covariates exerted a significant influence on the dependent variables. The dependent variables used were recall of message and situation/visual elements. The chi-square tests performed on subject demographics and viewing habits revealed significant differences between the four groups from which the subjects were drawn on age, family income, years of schooling, and amount of television watched. As a result these were used as predictor variables. To them were added two more predictors; brand use and attitude to commercials.

Table 17

Multiple Comparisons

Between Commercial Positions

Variance	Degrees of Freedom	N	F'
.8094	7/1272	160	14.07

Position	F	Position	F	Position	F
1-2	.988	2-5	.313	4-5	5.574
1-3	.467	2-6	10.437	4-6	2.049
1-4	7.816	2-7	.652	4-7	.988
1-5	.189	2-8	9.267	4-8	1.544
1-6	17.848*	3-4	4.462	5-6	14.362*
1-7	3.246	3-5	.062	5-7	1.868
1-8	16.308*	3-6	12.541	5-8	12.984
2-3	.097	3-7	1.251	6-7	5.871
2-4	3.246	3-8	11.255	6-8	.035

*$p < .05$.

The results of the multiple regression on recall of message elements are given in Table 18. The coefficient of determination, 0.0663, was rather low; however, the F test revealed that the multiple correlation coefficient was significantly different from zero, $F\ (6,1273) = 15.075$, $p < .05$. A closer analysis of the data reveals that the sum of squares of deviation from regression is much higher than the sum of squares attributable to regression.

Table 19 gives the data derived from the multiple regression on recall of situation/visual elements. Again the coefficient of determination is low, 0.0682, but signifcant, $F\ (6,1273) = 15.538$, $p < .05$. The deviation about regression also accounts for the majority of the variation in this case. The results of the two regressions indicate that the predictor variables account for approximately 6.6% of the variation in the recall of message elements and 6.8% of the recall of situation/visual elements.

Finally, the subjects' selection of preferred commercial placement was analyzed. After seeing the program, they were given four choices of commercial placement and asked to select the one they preferred. The results are contained in Table 20. All but 11% chose some form of grouping. The most frequently selected placement, 38%, was 4- or 5-minute blocks every half hour. A chi-square test was performed on the results of placement choice for those who had seen the commercials in a cluster compared to the choice of those who had not.

Table 18

Regression Of Covariates On Message Recall

Coefficient of Determination	0.0663
Multiple Correlation Coefficient	0.2576
Variance of Estimate	0.4623
Standard Error Estimate	0.6799

Analysis Of Variance For The Regression

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Due to Regression	41.816	6	6.969	15.075*
Deviation about Regression	588.530	1273	0.462	

*$p < .05$.

Table 19

Regression Of Covariates On Situation/Visual Recall

Coefficient of Determination	0.0682
Multiple Correlation Coefficient	0.2612
Variance of Estimate	0.8935
Standard Error of Estimate	0.9453

Analysis Of Variance For The Regression

Source	Sum of Squares	Degrees of Freedom	Mean Square	F
Due to Regression	83.300	6	13.883	15.538*
Deviation about Regression	1137.449	1273	0.894	

*$p < .05$

Table 20

Preferred Commercial Placement By Treatment

Chi-Square Analysis

Group	Current	4 To 5 Minute Clusters	8 To 10 Minute Clusters	1-Hour Block
Normal	7	29	21	20
Clustered	9	19	22	14

Number = 151, df = 3, $\chi^2 = 1.273$

Preferred Commercial Placement By Subject Group

Chi-Square Analysis

Group	Current	4 To 5 Minute Clusters	8 To 10 Minute Clusters	1-Hour Block
1	4	16	11	4
2	1	16	12	11
3	6	14	9	9
4	5	12	11	10

Number = 151, df = 9, $\chi^2 = 8.217$

*$p < .05$.

It yielded no significant differences resulting from the method of presentation, χ^2 (3) = 1.273, $p < .05$.

A large body of anecdotal data was also obtained in the course of this study. At the end of the recall measure subjects were provided a space in which to write any comments they might have on the experiment. Almost half of the subjects did write in some comment with the preponderance being specifically about television commercials. A summary of these appears in Appendix I.

A great number of the comments focused on specific criticisms of commercials; that they were too loud, or too disruptive, or in bad taste. Some viewers expressed surprise at how little they remembered from commercials and a number commented that at home they "tuned out" or left the room when commercials came on.

Several of the subjects mentioned the desirability of paying a licensing fee to have at least one channel free of commercials. On the other hand, several expressed the view that commercials were a "necessary evil" and that the elimination of commercials would degrade the quality of television. Only one subject appeared particularly upset by the actual experiment. That person asked if the experimenters were "commie pinkos, trying to destroy free enterprise".

CHAPTER 4

Discussion

Hypothesis 1: The effectiveness of 30-second television commercials, as measured by scores on a paper and pencil content recall test administered immediately after viewing a 30-minute television program, will be significantly less when commercials are presented in 4-minute clusters every 30 minutes than when those same commercials are presented in 1-minute breaks separated by approximately 10 minutes of program.

This hypothesis was not supported. In fact, so far as related recall was concerned, the opposite was found to be true. The multivariate analysis of related recall and incorrect brand recall showed a significant difference as the result of form of presentation. The univariate analysis revealed that the difference arose from a significantly greater recall of the brands by the clustered group, 68% correct, as opposed to 59% for the normal group.

On the other hand, when the related recall score was broken up into its component parts, message and situation visual elements, no significant differences were found as the result of the method of presentation. The mean number of message elements remembered was .50 for the normal

presentation and .57 for the clustered form. The mean number of situation/visual elements remembered was 1.08 for the normal group and 1.17 for the clustered one. In both cases the amount of recall was slightly higher as a result of clustering.

One other factor is of interest as it might affect recall for the different forms of grouping. The multivariate analyses for related recall and incorrect brand and for situation/visual and message elements revealed a significant difference arising from the subject groups. A comparison by groups of the mean number of subjects remembering the commercials and the mean number of elements remembered is seen in Figure 1. In particular it can be seen that the subjects in Group 3 tended to have lower recall than the other three groups.

This variation in recall among the four groups of subjects did not interact with treatment on related recall, incorrect identification of the brand, or recall of situation/visual elements. It did significantly interact with recall of message elements. It should be noted that the F-statistic for the interaction of subject groups and treatment on situation/visual recall is high although not significant.

Figure 2 shows the interaction between groups and treatment for message and situation/visual recall. The differences between the treatments seem to result from increased variance among the subject groups that received the clustered commercials.

Figure 1

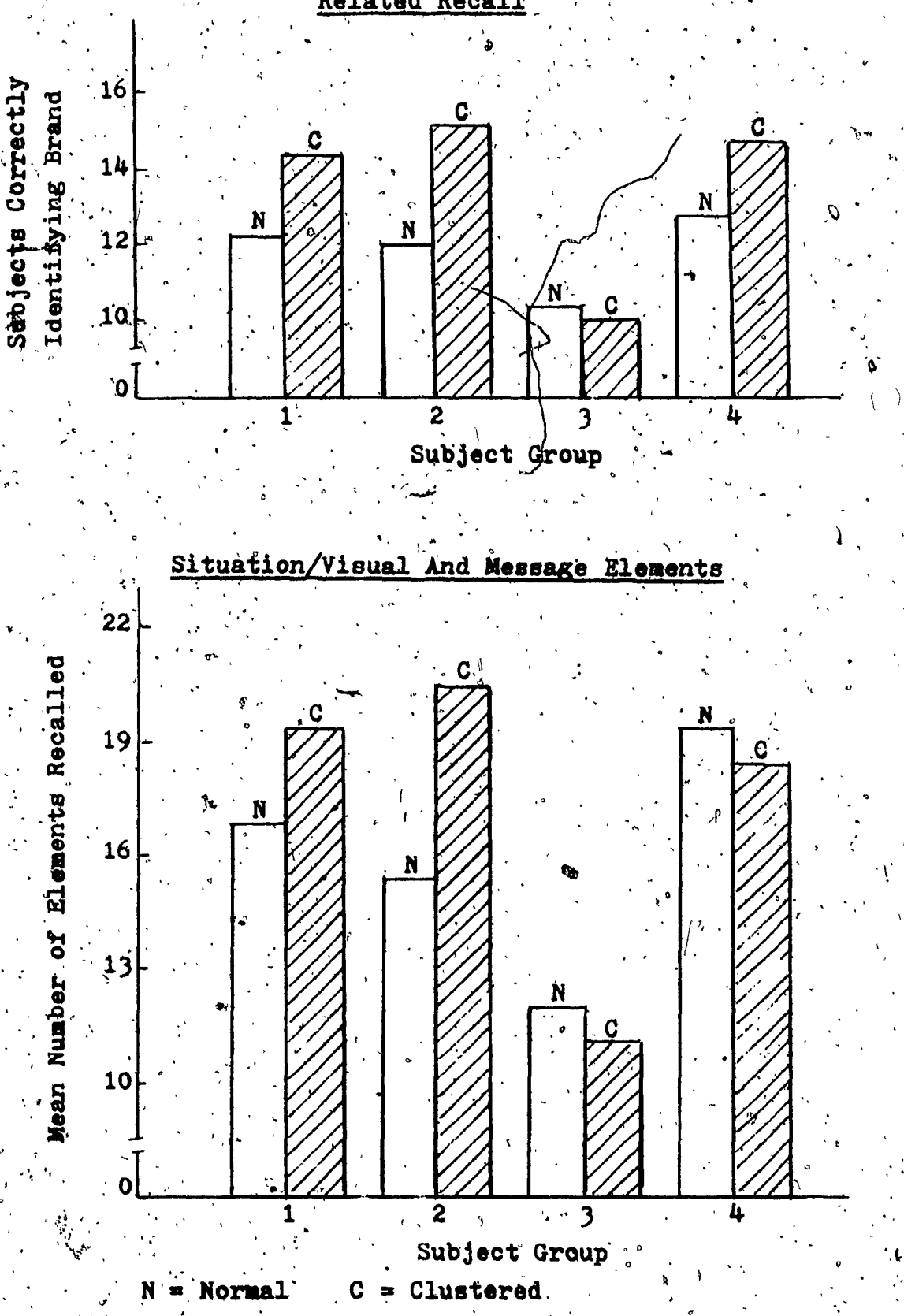
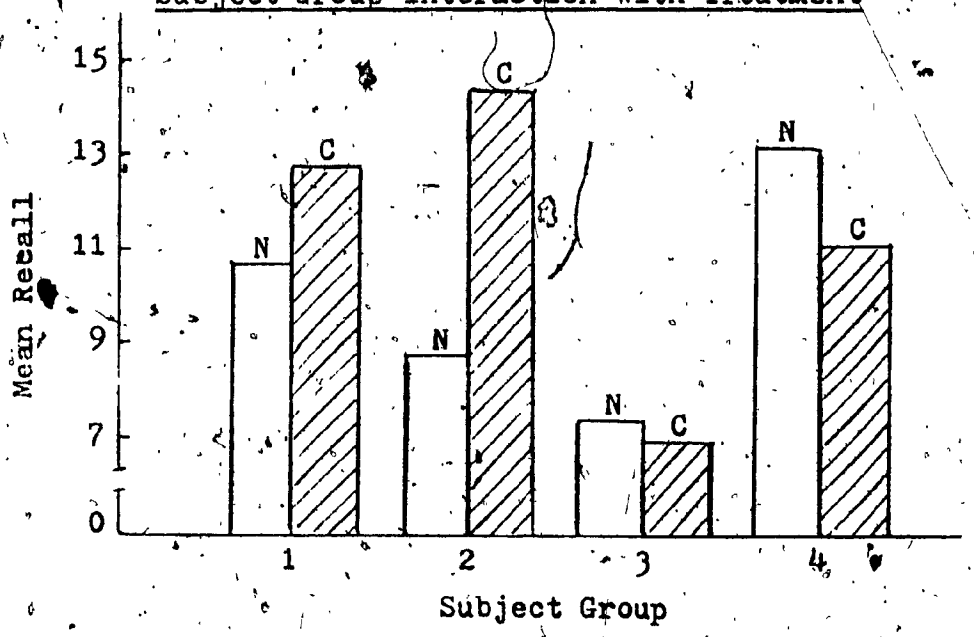

Related Recall
Subjects Correctly Identifying Brand
16
14
12
10
0
N
C
1
2
3
4
Subject Group
Situation/Visual And Message Elements
Mean Number of Elements Recalled
22
19
16
13
10
0
N = Normal
C = Clustered

Figure 2

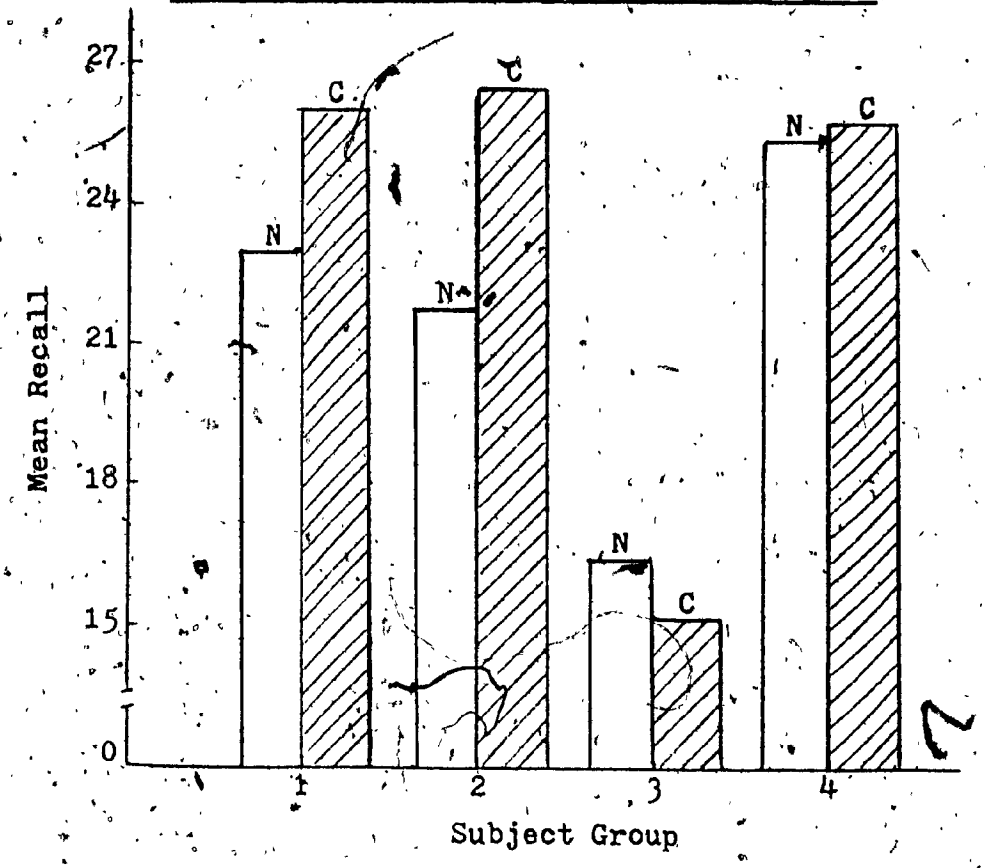
Message Elements

Subject Group Interaction With Treatment



Situation/Visual Elements

Subject Group Interaction With Treatment



N = Normal C = Clustered

As was the case for related recall, the results for Group 3 were particularly low.

Since the subject groups represent the nested factor in the experiment (they were drawn from different populations), it is difficult to determine exactly why the scores were lower for Group 3. They could have been influenced by several factors. Group 3 tended to be older, watch more television, and own more color television sets than the other subject groups. For whatever reason, the results did differ among the groups.

When considered alone, the results for related recall would seem to contradict those obtained by Burke Marketing (Schneider & Siebert, 1972), that clustering does not affect recall. However, when the elements that make up recall are analyzed separately, support for the Burke position of no significant difference as a result of grouping is indicated. The contradictory interpretations may be a result of effects in the viewing audience produced by clustering. One of these effects seemed to be to slightly increase the number of people who were aware of the commercial and might not otherwise have recalled it. On the other hand, clustering did not appear to particularly increase the total number of commercial elements remembered.

Hypothesis 2: The effectiveness of individual 30-second television commercials, as measured

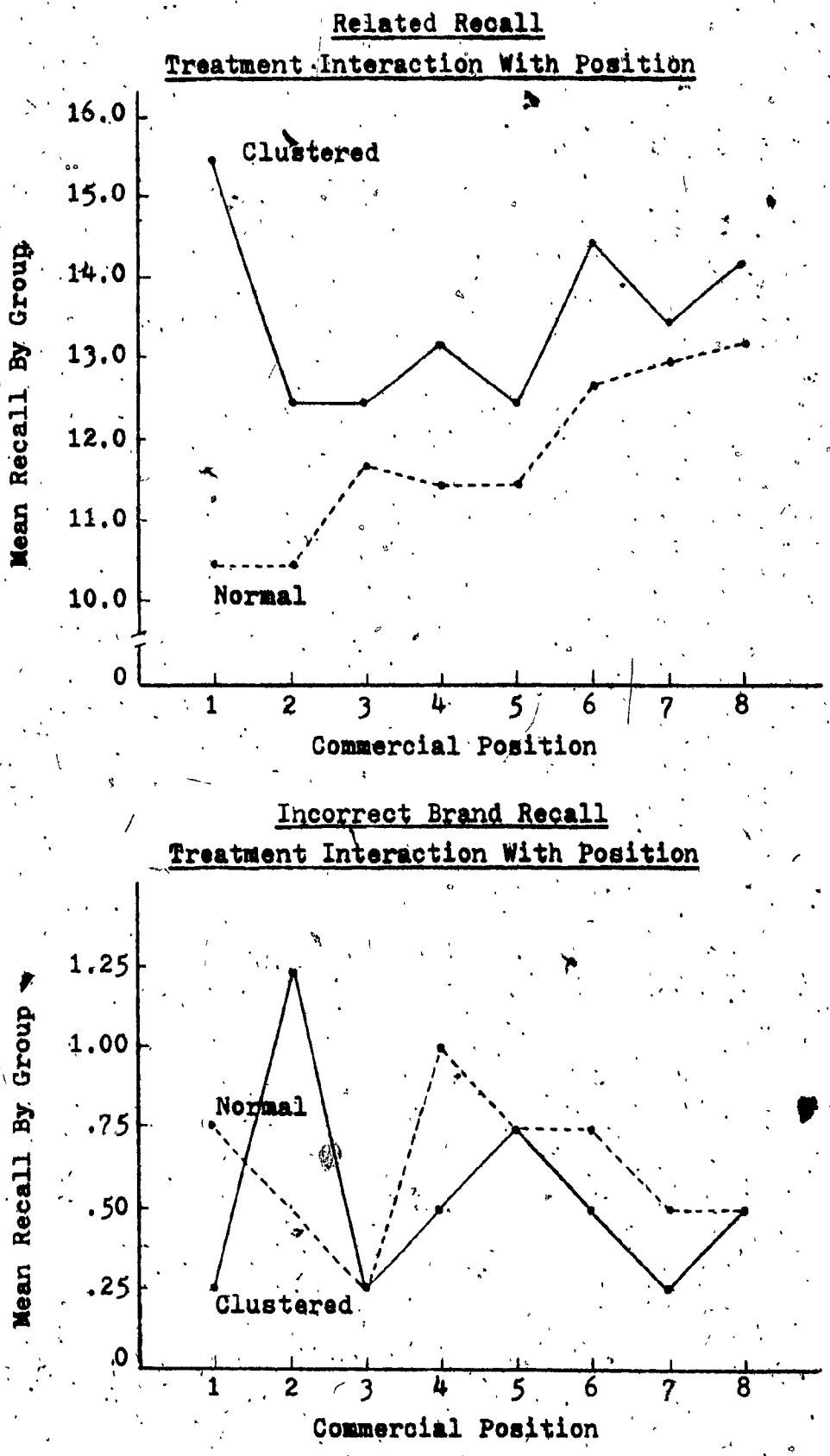
by scores on a paper and pencil content recall test administered directly after presentation of a 30-minute television program, will be significantly less when those commercials occupy the middle position of a 4-minute cluster than when they occupy either the beginning or end positions of the cluster.

This hypothesis was not supported by the data. Analysis of related recall and incorrect brand identification indicated no significant differences arising from position when all subjects were combined. More specifically, no significant differences were found in the interaction between type of presentation and position of the commercials. Figure 3 shows this lack of interaction and also illustrates the findings of the previous hypothesis: that clustering significantly increases related recall.

The only anomalies found were the sudden drop of recall for the second commercial position and the increase in incorrect brand recall for the second commercial, both occurring in the clustering treatment. Other than this, the recall and incorrect brand identification were similar for the normal and clustered groups.

The hypothesis of a significant lessening of recall for commercials in the middle of a cluster was also rejected as a result of the analysis of data for message and situation/visual elements. The conclusion was not quite as clear-cut

Figure 3


Related Recall
Treatment Interaction With Position
Mean Recall By Group
16.0
15.0
14.0
13.0
12.0
11.0
10.0
0
Clustered
Normal
1
2
3
4
5
6
7
8
Commercial Position
Incorrect Brand Recall
Treatment Interaction With Position
Mean Recall By Group
1.25
1.00
.75
.50
.25
0
Normal
Clustered
1
2
3
4
5
6
7
8
Commercial Position

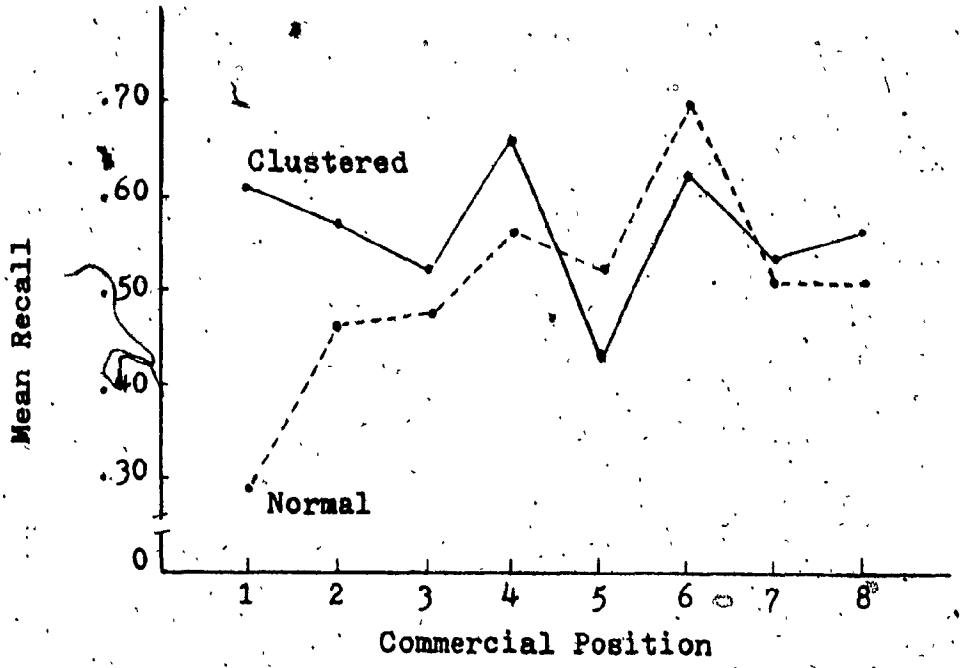
here, however. The interaction between treatment and position is the interesting factor. The mean recall scores for messages and situation/visual elements are diagrammed in Figure 4. It can readily be seen that there is a variation in recall associated with position. Although the effects seem to be somewhat more pronounced in the case of the clustered commercials, they are also apparent in the normally presented commercials. The univariate analysis indicated that this variation was not significant in either case. When the two elements were combined in a multivariate analysis, the results still remained non-significant.

When the data was analyzed for effects of position without any consideration for type of grouping, significant differences were found in the recall of situation/visual elements. Referring again to Figure 4, it is readily seen that for situation/visual elements there was generally an increase for each succeeding commercial position. This was particularly evident in the normal presentation group. Multiple comparisons showed the mean responses to be significantly different for positions one and six, one and eight, and five and six.

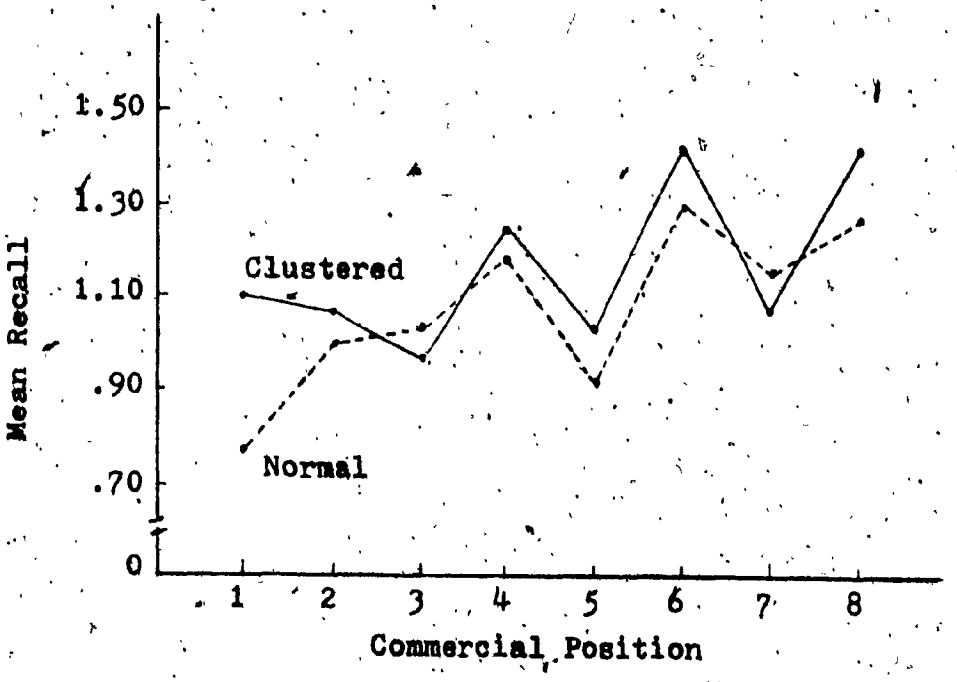
This leads us to an important consideration with regard to the design of the experiment. As mentioned earlier, it was necessary to rotate the commercials in groups of two. Thus individual commercials appeared in either all the odd or all the even numbered commercial positions. The multiple

Figure 4

Message Recall
Treatment Interaction With Position



Situation/Visual Recall
Treatment Interaction With Position



comparisons of position revealed no significant differences when the same commercials were compared in different positions. The differences that did arise were all odd positions against even numbered positions, in other words, two different sets of commercials.

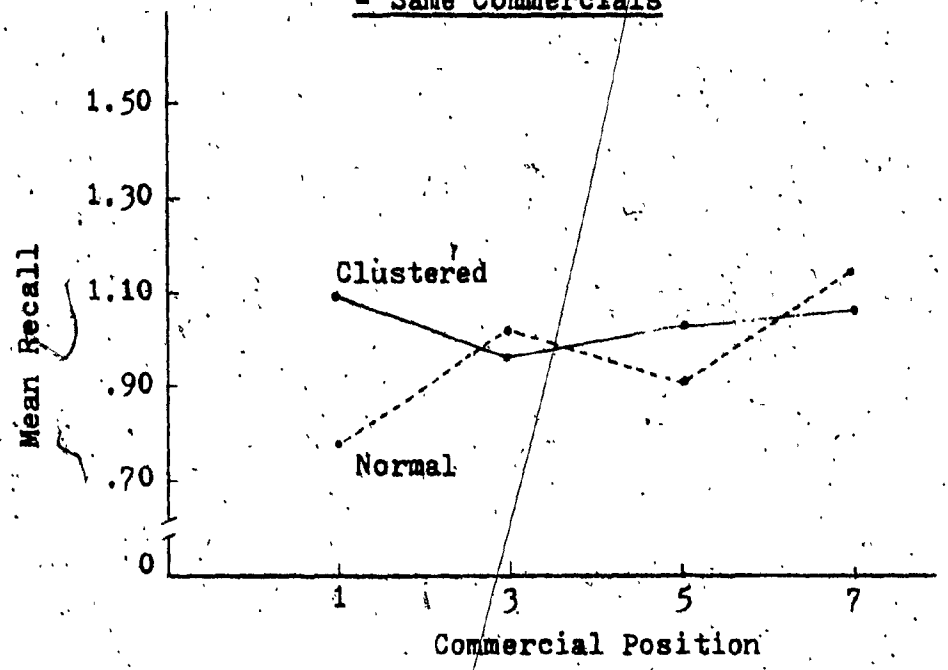
If the odd numbered and even numbered positions are diagrammed separately for situation/visual recall, differences resulting from position are much less apparent (Figure 5). The two treatments are much the same with a slight bit more variation noted among the odd numbered positions.

Essentially the same results are noted when message elements are diagrammed separately according to commercial position, using the odd-even split (Figure 6). Again, greater differences are found among the odd numbered positions. The greatest difference in recall between the two treatments occurs for position number 1. After that position the disparities tend to lessen.

As a result of this analysis it would appear that recall differences arising from placement in a string of commercials are minimal for both the normal and the clustered form of presentation. This would seem to directly contradict the findings of Steiner (1966). As noted earlier, his conclusions were in relation to attention and the relation of attention to recall was not clearly established. The findings in this study do support those obtained by Burke (Schneider & Siebert, 1972) when analyzing the results of a number of years of recall studies.

Figure 5

Situation/Visual Recall
Treatment Interaction With Position
- Same Commercials



Situation/Visual Recall
Treatment Interaction With Position
- Same Commercials

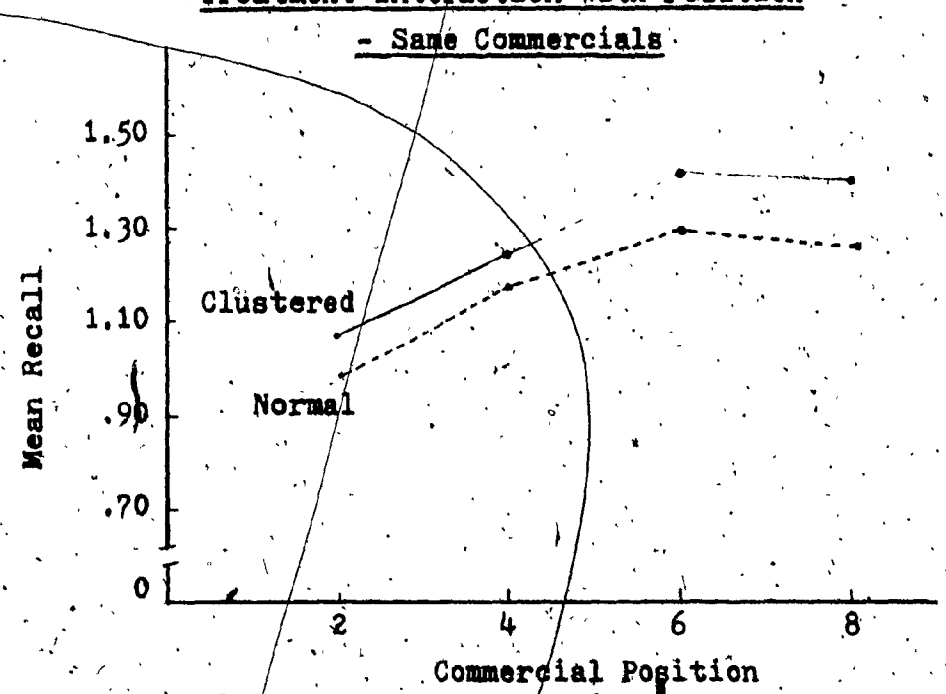
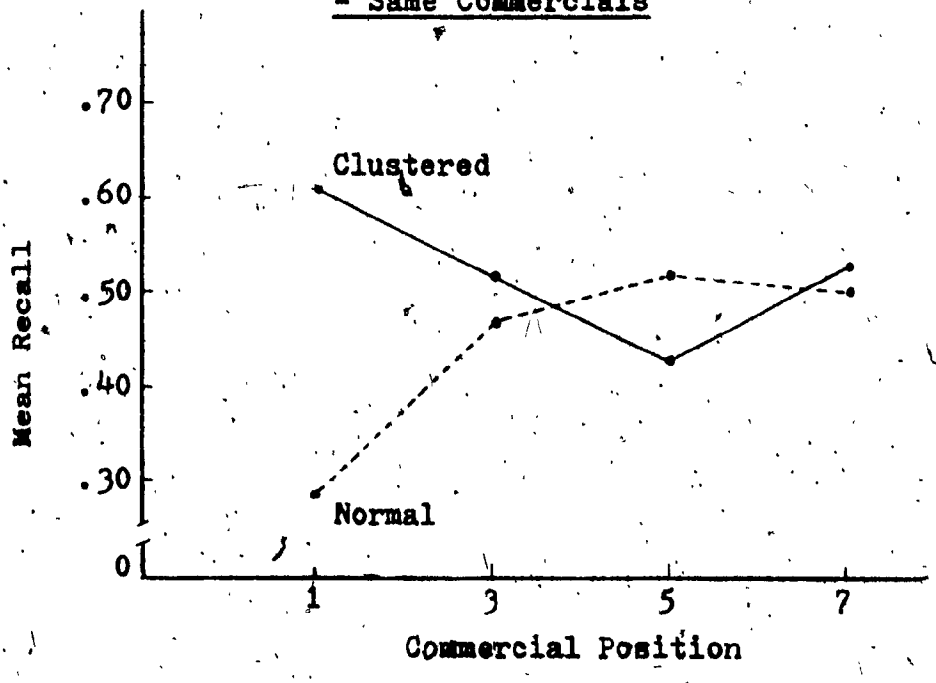
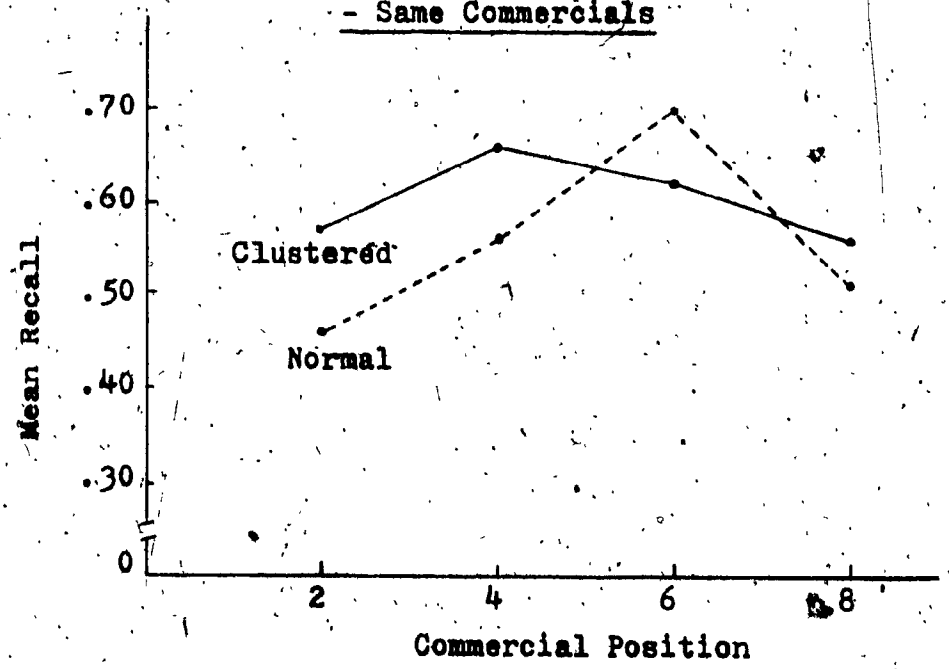


Figure 6

Message Recall
Treatment Interaction With Position
- Same Commercials



Message Recall
Treatment Interaction With Position
- Same Commercials



One interesting suggestion in the Burke study is the possibility of a loss of audience attention for commercial positions following the first one in a clustered form of presentation. If the Burke hypothesis is correct, a drop in audience attention should result in a decline in recall after the first commercial. This was found to be true. A drop in related recall and memory of message and situation/visual elements was noted after the first position. The effect was much more pronounced for related recall than for the two components of recall taken individually. In the case of both messages and situation/visuals there were two positions out of eight where the recall of elements dropped for the clustering group below that of the normal group. Three out of the four positions were odd numbered (see Figures 5 and 6). On the other hand, the overall level of recall was higher for the clustered group.

The implication of the difference between the odd and even numbered commercials and the drop in recall for the clustered group is that some effects may have arisen from the commercials used. It is possible that the clustering form of presentation is somewhat more sensitive to audience reaction to specific commercials. It should be reiterated, however, that for related recall, incorrect brand identification, message recall, and situation/visual recall no significant interactions were found between type of presentation and commercial position.

Hypothesis 3: When given several choices of commercial grouping, subjects who have experienced the clustered form of presentation will express a greater preference for that form than will subjects who have experienced only the current method of presenting commercials, as indicated on a paper and pencil measure administered directly after seeing a 30-minute television program containing commercials presented in one of those two forms.

This hypothesis was not supported. Subjects seeing both types of presentation overwhelmingly chose some form of grouping. There were no significant differences between the subject groups. There was a less clear indication of which type of grouping was preferred. Although 38% did choose 4 to 5 minute blocks, 29% chose 8 to 10 minute blocks every hour and 23% chose a 1-hour block every evening. This held true for both treatment groups, although the 1-hour block was slightly less favored by the subjects who received the clustered form of presentation.

The anecdotal comments of the subjects tend to back these findings up. A large number of the comments focused on alternative ways of presenting commercials with the subjects stating that commercials are necessary for our form of broadcasting but that they would like to see experimentation with

other forms of presentation. This supports the findings of two previous surveys of attitude to commercials (Rich, Ellenbogen, Owens & Phillips, Note 1; Schneider & Siebert, 1972). Evidently the subjects' desire to change the form of presentation was already so high that the program they were shown had little effect on their attitude to clustering.

It is worth noting that a change to a clustered form of presentation of commercials might have a specific effect on the size of the commercial audience. While the majority of the sample in this study expressed their desire to have commercials grouped, they also indicated that if that happened they would be more likely to leave the room. When compared to what they do now, the percentage who said they would leave the room if commercials were grouped increased from 22% to 35%. Most of this change appeared to come from those who had said that currently they do not watch but remain in the room. There was only a 4% decrease in the number who said they would watch the commercials.

Hypothesis 4: Subject differences in attitudes to television commercials, viewing habits, brand use, and demographics, as determined by a paper and pencil measure, will significantly affect the recall of television commercials, as measured by a paper and pencil device administered directly after viewing a half hour television program.

This hypothesis was supported by the results of the analysis of variance performed to test the significance of the regression on the criterion variables. However, the inclusion of the covariates in the analysis of recall of situation/visual and message elements was rejected. The difficulty with using the predictors was that the coefficient of determination was low (.06) and the sum of squares of deviation from regression was high. This would seem to indicate that the proposed covariates were simply being used to predict values of the dependent variable in the regression analysis.

The small sum of squares attributable to regression was the determining factor in rejecting the use of the covariates. Their use would seem to do little to correct bias in the results arising from attitudes, demographics, viewing habits, and brand use. It might, on the other hand, introduce error into the analysis because of the large amount of deviation not accounted for.

Some of the difficulty may be due to a lack of linearity of several of the proposed covariates. For instance, a large proportion of the subjects watched television two hours or less per day and most of them held rather strong negative attitudes toward television. In addition, it was difficult to establish a truly linear measure of brand use.

As seen in Table 21, brand use was a significant factor in the regression on messages, t (2558) = 6.45, $p < .05$, but not in the regression on situation/visual recall, t (2558) =

Table 21

Significance of Variables In

Multiple Regression On Message Recall

Variable	Mean	Regression Coefficient	Proportion of Variance	t[a]
Amount of Viewing	1.413	-0.020	0.003	-0.558
Age	3.113	-0.063	0.020	-4.225*
Schooling	3.488	0.054	0.006	2.622*
Income	6.569	0.018	0.002	1.378
Brand Use	0.740	0.142	0.030	6.454*
Attitude	41.719	-0.010	0.004	-2.417*

Significance Of Variables In

Multiple Regression On Situation/Visual Recall

Variable	Mean	Regression Coefficient	Proportion of Variance	t[a]
Amount of Viewing	1.413	-0.044	0.006	-0.899
Age	3.113	-0.110	0.036	-5.333*
Schooling	3.488	0.144	0.015	5.040*
Income	6.569	0.005	0.000	0.289
Brand Use	0.740	-0.003	0.000	-0.085
Attitude	41.719	-0.024	0.011	-3.906*

*$p < .05$.

[a]df = 2558.

.09, $p < .05$. It thus accounted for the large proportion of the variance in the regression on message recall and almost none of the variance in situation/visual recall. Similarly, amount of schooling and attitude accounted for a large proportion of the variance in situation/visual recall and less than half the same amount of variance in message recall. The only predictor somewhat consistent in its effect is subject age. As a result, the use of the covariates in the analysis of variance was rejected.

As seen in Figure 2, there was some evidence of interaction between the subject groups and the form of presentation. This was particularly manifested in Subject Group 3, which was significantly different from the other groups for age and amount of television viewing. The latter had little effect on the regression but, as already noted, age had the most effect. Considering this, it is perhaps unfortunate that the amount of variation in the regression did not allow for confident use of the factors involved as covariates.

Conclusions

The results of this experiment suggest that the effects of clustering commercials on related recall or on memory of specific sales messages and situation/visual elements are not inherently negative. In fact, there was an increase in the number of correct recalls of the brands advertised as a

result of clustering. A significant increase in the recall of situation/visual and message elements for the clustering presentation was not found. These findings taken together would seem to indicate that during the clustering presentation viewers kept "tuning in" to see what was coming next. Once the next commercial was noted, their attention dropped to a level similar to that found for the normal presentation.

Care should be taken in generalizing these findings. The experimental situation was, of necessity, somewhat artificial. The recall measure was administered immediately after the subjects had viewed the program rather than after a 24 hour delay as is commonly done. These factors, as indicated by Sadowski (1972) and Twyman (1973), need not invalidate the findings. However, they did perhaps lead to a higher than normal recall of commercials and elements. This would be manifested in both groups, not just the one that received the clustered placement. In any case, the findings strongly support those of Burke Marketing (Schneider & Siebert, 1972), that clustering by itself does not significantly decrease recall.

This study also produced evidence against the contention that long strings of commercials lead to an increased loss of recall for commercials buried in the middle. Variation in recall was noted for different positions, but this occurred for both methods of presentation. There was evidence to support

the conclusion that some of this variation was due to one or more of the specific commercials used in the study. This leads one to hypothesize that audience reaction to specific commercials may be a significant factor in position recall.

One possible negative effect of clustering is noted in connection with placement. Although not reaching significance, a drop in recall was noted for commercials appearing after the first commercial in the clustering presentation. This would seem to support the Burke survey findings (Schneider & Siebert, 1972) that attention wanders after the first commercial in a string, thus producing a loss of audience. The nature of this study makes it difficult to determine if that is what happened. The statements made by the subjects about what they would do during clustered breaks support a hypothesis of potential loss of audience if commercials are clustered.

There seems little doubt that the subjects studied and the viewing public at large are dissatisfied with the way commercials are presented on television. This is amply evidenced by the significant majority of subjects who chose some form of grouping as their preferred form of presentation. It is also well supported in the anecdotal comments. The subjects studied seemed worried about the consequences of eliminating commercials but very willing to try another form of presentation.

Contrary to the findings of Barrow (1971) and Wind and Denny (1974), little demonstrable effect on recall was noted as a result of demographics, viewing habits, brand use, or attitudes. As already indicated, this may arise from the nature of the subjects in the study. They cannot be considered as a proportional sample of the viewing public. Perhaps the only way to get that type of sample would have been to conduct an "over the air" experiment. The number of presentations of the program required and the difficulty of setting up this type of experiment eliminated it from consideration as a viable means of experimentation.

A significant interaction between subject groups and form of presentation was found. It's effect was strongest for clustering and tended to lower the score for the subjects who experienced that treatment. Since clustered presentation scores were higher overall, the interaction would not seem to seriouly affect the conclusions drawn.

It seems that the questions still left unanswered about the consequences of clustering would best be determined by a long term study analyzing the results arising from actually broadcasting commercials in groups. Only by this type of study can the novelty of an unfamiliar presentation form wear off sufficiently to determine the results.

Two conclusions seem evident as a result of this study. First, clustering of commercials may lead to a drop in the

number of viewers who watch commercials. Second, the recall of commercials among the audience which remains would likely not be lowered and, in fact, may in some instances increase. Further studies in this area would seem most beneficial if they enable the accurate forecasting of the amount of audience that might be lost as a result of clustering.

Schneider and Siebert (1972) point out that negative attitudes toward advertising are currently fashionable. On the other hand they contend that the strength and widespread nature of the criticism indicate that this negative attitude is probably very real.

The strong public dissatisfaction with the way commercials are currently broadcast would indicate the willingness of the viewers to experiment with the presentation of commercials, such as clustering them at 30-minute intervals. Whether advertisers are willing to chance a drop in commercial audience in order to satisfy the viewing public remains to be seen.

Reference Notes

1. Rich, T., Ellenbogen, I, Owens, D., & Phillips, M. Criticisms of television commercials: a survey of Montreal viewer attitudes. Manuscript submitted for publication, 1975.

2. Burke Marketing Research, Inc. Day-after recall report: Colossal Laundry Starch. Dummy report available from Burke Marketing, Cincinnati, Ohio.

3. Commercials used in this study were obtained with the understanding that the advertisers' names not be published. Information about the commercials may be obtained by contacting the authors.

References

ACTRA. Letter to the editor. Performing Arts, 1970, 7(1), 5.

American Council for Better Broadcasting. Report of the look-listen opinion poll, 1971-1972. Madison, Wisc.: Author, 1972. (ERIC Document Reproduction Service No. ED 063 754)

Barclay, W. D., Doub, R. M. & McMurtrey, L. T. Recall of TV commercials by time and program slot. Journal of Advertising Research, 1965, 5(2), 41-47.

Barrow, L. C. New uses of covariance analysis. In D. A. Aaker (Ed.), Multivariate Analysis in Marketing. Belmont, Calif.: Wadsworth Publishing, 1971.

Canadian Broadcasting Corporation. What the Canadian public thinks of the CBC. Ottawa: Author, 1963.

Canadian Radio and Television Commission. Radio frequencies are public property. Ottawa: Author, 1974.

Craig, S. Not everyone hates commercials. Marketing, February 25, 1974, pp. 1.

Davidson, J. Effort to sweep 'clutter' off TV screen runs into trouble. Financial Post, November 11, 1972, pp. 10.

Ferguson, G. A. Statistical analysis of psychology and education. New York: McGraw-Hill, 1971.

Gerstle, J. The clutter crises. Media Decisions, December 1971, pp. 42-43, 82-86.

Graham, A. Controlling commercials: a view from the middle. Advertising Quarterly, 1971, 29. 28-34.

Green, P. E. & Tull, D. S. Research for marketing decisions. Englewood Cliffs: Prentice-Hall, 1975.

Gruber, A. Position effects and the Starch viewer impression studies. Journal of Advertising Research, 1966, 6(3), 14-17.

Gwyn, R. A showdown over the CBC. Montreal Star, October 29, 1974, pp. A7:1-4.

Juneau, P. Juneau calls for action on clutter. Marketing May 13, 1974, pp. 3.

Kershaw, A. Less for more for television advertisers. Broadcasting, November 4, 1974, pp. 28.

Marting, L. British control of TV ads. Journal of Broadcasting, 1973, 17, 159-172.

McMahan, H. W. Brand misidentification grows with clutter of :30 spots. Advertising Age, May 10, 1971, pp. 53;54.

Moore, L. TV advertising in good shape in Canada. Toronto Globe and Mail, August 7, 1974, pp. B5:1.

Ostrow, J. The schizophrenic nature of advertising clutter. Media Decisions, March 1973, pp. 75-76.

Public wants more TV without ads. Advertising Age, February 28, 1972, pp. 2, 101.

Rao, A. G. Quantitative theories in advertising. New York: John Wiley & Sons, 1970.

Roger, B. Do 30-second spiels really 'clutter' television. Financial Post, August 10, 1974a, pp. C5.

Roger, B. CTV, clutter and other things. Financial Post, October 5, 1974b, pp. A14-16.

Roger, B. Is clutter ruining your life. Financial Post, October 19, 1974c, pp. C4.

Roper, B. W. A ten year view of public attitudes toward television and other mass media 1959-1968. New York: Television Information Office, 1969.

Roundtable 1: clutter. Media Decisions, March 1973, pp. 43-47.

Sadowski, R. P. Immediate recall of TV commercial elements - revisited. Journal of Broadcasting, 1972, 16, pp. 277-287.

Schneider, R. A. & Siebert, D. E. Viewer attitudes toward commercial clutter on television and media buying implications. Presentation to the 18th Advertising Research Foundation Conference, November 14, 1972.

Shiffman, P. Still no facts on how clutter cuts effectiveness. Media Decisions, February, 1973, pp. 76; 79.

Simko, G. What to do about cluttervision. Media Decisions, November 1973, pp. 158; 163-164.

Steiner, G. The people look at commercials: a study of audience behavior. Journal of Business of the University of Chicago, 1966, 36, 272-304.

Twyman, W. A. Designing advertising research for marketing decisions. Journal of Market Research Society, 15(2), pp. 77-100.

Weiss, E.B. Advertising meets its era of social accountability. Advertising Age, October 23, 1972, pp. 74.

Wheatley, J. J. (Ed.). Measuring advertising effectiveness. Homewood, Ill.: Richard D. Irwin, 1969.

Wilson, B. & Muncie, C. Broadcast's hottest issue - and how they cooled it off. Marketing, April 23, 1973, pp. 22-28.

Wind, Y. & Denny, J. Multivariate analysis of variance in research on the effects of TV commercials. Journal of Marketing Research, 1974, 11, 136-142.

Wolfe, H. D. Measuring advertising results. New York: National Industrial Conference Board, 1962.

APPENDIX A

Subject Solicitation

McGILL UNIVERSITY
P.O. BOX 6070, STATION 'A', MONTREAL, QUE., CANADA H3C 3G1 392-8031
Instructional Communications Centre

Dr. William Hillgartner
Mr. Tom Rich

Perception of Television Experiment

We are conducting an experiment on the effects of different types of editing on the perception of television programs. This research is being funded by the Canadian Radio-Television Commission and results will be submitted to that body.

Subjects will view a television program (light comedy) and their reaction to it will be analyzed. Groups of between 60 and 70 people are needed. The only qualification is that they be over 18 and speak English. Groups will be split in half and will view the television program in two separate rooms. If 60 people cannot be obtained from one group it is possible to combine subjects from different organizations. Total time required of the subjects is one and one half hours.

Funding is available to pay the subjects. It is suggested that this money take the form of a donation to the organization supplying the subjects. $10 per person will be paid up to a limit of $700 per group.

Arrangements can be made for playback of the programs at McGill or the equipment can be transported to a meeting place provided by the organization supplying volunteers.

Evenings between June 23 to 27 are scheduled for the experiment. It is necessary to have all of the subjects from a particular organization present at the same time.

Your help in this research will be greatly appreciated.

Tom Rich
Producer-Director

Releases

COCKFIELD, BROWN & COMPANY LIMITED/200-CANADA CEMENT BUILDING / MONTREAL H3B 1L1 TEL. AREA CODE 514 / 861-1771

April 1st, 1975.

Mr. Tom Rich
Principal Researcher
Instructional Communications
Centre
McDonald Chemistry Building
McGill University
Montreal, P.Q.

Dear Mr. Rich:

Accompanying this letter, please find 8-30 second television commercials on 16mm film. I have received client approval on the release of each of these commercials on the basis that no advertiser mention is given in any subsequent reporting. I hope these commercials are to your satisfaction and trust you will return them to my attention at the completion of your project. I would like to add that we all anxiously await the outcome of your research as it appears to be tremendously interesting.

Sincerely,

Leo P. McCullagh
Account Manager

Enclosure
LPM:cl
cc: D. Angier

NATIONAL FILM BOARD OFFICE NATIONAL DU FILM

CANADA

P. O. Box 6100, Station A
Montreal, Que. H3C 3H5

May 9, 1975

Mr. Tom Riche
Instructional Media Center
McDonald Building
McGill University
Montreal, Que.

Dear Mr. Riche,

This letter will serve as permission to you to use the National Film Board of Canada production "RAILRODDER" as part of your study on the effects of commercials.

You may transfer the film to tape and add commercials as required by your research, on the condition that immediately after such use, any and all tapes of the film will be erased and also that the tapes will not be used for telecast or in any other manner except as mentibned aboge.

We are pleased to assist you in this venture and look forward to eventually seeing the results of your study.

To indicate your acceptance of the above conditions, would you please sign this letter where indicated and return a copy of it to me.

NATIONAL FILM BOARD OF CANADA

Gerald M. O'Halloran

A G R E E D:

Tom Riche

Questionnaire Form A

We are going to ask you a few questions about your attitudes toward television. Please answer all of the questions to the best of your ability. Do not write your name on this paper. All questionnaires are confidential. We do not wish to know your name. Please check the appropriate answer or fill in the blank. Check only one answer per question.

1. Do you own a television set?

_____ yes

_____ no

2. Do you own a colour television set?

_____ yes

_____ no

3. When do you watch television most frequently?

_____ 6 a.m. to 12 noon

_____ 12 noon to 6 p.m.

_____ 6 p.m. to midnight

_____ after midnight

4. What channel do you watch most frequently? (name)

_____

5. How much television do you watch per day?

_____ less than 2 hours

_____ from 2 to 5 hours

_____ from 5 to 10 hours

_____ more than 10 hours

6. When watching television do you switch channel often?

_____ yes

_____ no

7. How much attention do you pay to television commercials?

_____ a lot

_____ some

_____ little

8. How helpful do you find television commercials?

_____ usually helpful

_____ sometimes helpful

_____ seldom helpful

9. Do you think that individual commercials are...

_____ too long

_____ too short

_____ about the right length

10. Do you think the number of commercials presented at one time during a commercial break is...

_____ about right

_____ too many

_____ too few

11. Do you think the length of these commercial breaks is...

_____ too short

_____ too long

_____ about right

12. Do you think that the placement of these commercial breaks in a program should...

_____ remain the same

_____ be changed

13. In your opinion, has the amount of time devoted to commercials on television...

_____ increased

_____ remained about the same

_____ decreased

14. Do you think that commercials are a fair price to pay for television?

_____ no

_____ yes

15. Do you think that the number of interruptions in a program for commercials should depend on the type of television program (drama, sports, comedy)?

_____ yes

_____ no

16. Would you like to see commercials on television...

_____ grouped at the beginning or end of a program

_____ grouped at the middle of a program

_____ continued as now

17. What do you do during commercial breaks?

_____ watch the commercials

_____ do not watch but remain in the room

_____ leave the room

18. If the breaks in programs for commercials lasted four minutes and came only every thirty minutes, what would you do?

_____ watch the commercials

_____ not watch but remain in the room

_____ leave the room

19. Do you think that commercials should be dropped from television?

_____ yes

_____ no

20. Do you think that the type of commercials shown within a program should suit the type of program?

_____ no

_____ yes

21. What effect do you think the removal of commercials would have on the type of programs broadcast?

_____ bad effect

_____ no effect

_____ good effect

22. Do you think there are too many commercials on television?

_____ yes

_____ no

23. Do you think that individual commercials are repeated...

_____ too seldom

_____ too often

_____ about the right amount

24. What is your age category?

____ 18 to 24	____ 55 to 64
____ 25 to 34	____ 65 to 69
____ 35 to 44	____ 70 and over
____ 45 to 54	

25. What is your occupation?

_____

26. How many years of schooling have you completed?

_____

27. What is your approximate household income?

____ under $2,000	____ 7,000 to 10,000
____ 2,000 to 3,000	____ 10,000 to 15,000
____ 3,000 to 5,000	____ 15,000 to 20,000
____ 5,000 to 7,000	____ 20,000 and over

28. What is your first language?

____ English

____ French

____ other - specify _____

29. What is your sex?

____ male

____ female

30. Are you married?

____ yes

____ no

Questionnaire Form C

Occasionally	Regularly	
____	____	CP Air
____	____	Air Canada
____	____	Eastern Airlines
____	____	Laurentide Ale
____	____	Labatt's 50
____	____	Carlsberg Beer
____	____	Molson Export Ale
____	____	Head & Shoulders Shampoo
____	____	Clairol Herbal Essence Shampoo
____	____	Breck Basic Shampoo
____	____	Dr. Pepper
____	____	Coca Cola
____	____	Sprite
____	____	Esso
____	____	Gulf
____	____	Shell
____	____	Bell Canada
____	____	CPCN Telecommunications
____	____	Milk
____	____	Coffee
____	____	Soft Drinks
____	____	Tea
____	____	Ford
____	____	Chevrolet
____	____	Plymouth

APPENDIX E

Questionnaire Form B

The presentation you just saw on television contained a number of commercials. We are going to ask you a few questions about them. Please answer in the space provided. Do not write your name on this paper. All questionnaires are confidential. No consultation with your neighbours, please.

1. Do you remember seeing a commercial for a soft drink?

   A. What was the brand name?

   B. What was the scene in the commercial?

   C. What do you remember about the commercial?

   D. What did they say about the soft drink?

   E. What ideas about the soft drink were brought out?

   F. What else do you remember about the commercial?

2. Do you remember seeing a commercial for an airline?

A. What airline was it?

B. What was the scene in the commercial

C. What do you remember about the commercial?

D. What did they say about the airline?

E. What ideas about the airline were brought out?

F. What else do you remember about the commercial?

3. Do you remember seeing a commercial for a beer?

A. What was the brand name?

B. What was the scene in the commercial?

C. What do you remember about the commercial?

D. What did they say about the beer?

E. What ideas about the beer were brought out?

F. What else do you remember about the commercial?

4. Do you remember seeing a second commercial for a beer?

A. What was the brand name?

B. What was the scene in the commercial?

C. What do you remember about the commercial?

D. What did they say about the beer?

E. What ideas about the beer were brought out?

F. What else do you remember about the commercial?

5. Do you remember seeing a commercial for a shampoo?

A. What was the brand name?

B. What was the scene in the commercial?

C. What do you remember about the commercial?

D. What did they say about the shampoo?

E. What ideas about the shampoo were brought out?

F. What else do you remember about the commercial?

6. Do you remember seeing a commercial about dairy products?

A. What dairy products were talked about?

B. What was the scene in the commercial?

C. What do you remember about the commercial?

D. What did they say about the products?

E. What ideas about the products were brought out?

F. What else do you remember about the commercial?

Do you remember seeing a commercial for an automobile?

A. What kind of automobile was talked about?

B. What was the scene in the commercial?

C. What do you remember about the commercial?

D. What did they say about the automobile?

E. What ideas about the automobile were brought out?

F. What else do you remember about the commercial?

8. Do you remember seeing a commercial for an oil company?

A. What oil company was the commercial about?

B. What was the scene in the commercial?

C. What do you remember about the commercial?

D. What did they say about the oil company?

E. What ideas about the company were brought out?

F. What else do you remember about the commercial?

9. Do you remember seeing a commercial for a public utility?

A. What public utility was the commercial about?

B. What was the scene in the commercial?

C. What do you remember about the commercial?

D. What did they say about the utility?

E. What ideas about the company were brought out?

F. What else do you remember about the commercial?

10. Have you seen the film you just watched, "The Railrodder", before?

_____Yes

_____No

11. In what way would you prefer to see commercials placed in a program?

_____ one or two minute commercial breaks approximately every 8 minutes.

_____ four or five minute commercial breaks at the end of every half hour.

_____ eight to ten minutes of commercials at the end of every hour.

_____ a one hour block of commercials every evening.

Comments:

Thank you very much for your participation in this experiment.

Coding Instructions

Questionnaire A

Multiple choice questions 1-3, 5-24, 27-30:

If 1st choice checked - code 1

" 2nd " " - " 2

" 3rd " " - " 3

etc.

Question 4/Channels Watched:

Channel 6	(CBMT)	Column: 10
" 12	(CFCF)	11
" 2	(CBFT)	12
" 10	(CFTM)	13
" 3	(WCAX)	14
" 5	(WPTZ)	15
" 8	(WMTW)	16
" 22	(WEZF)	17
" 33	(WETK)	18

For channel(s) watched use code 1 in appropriate column(s).

Question 25/Occupation:

Code	Occupational Group	Subcategories
1	Professional	managerial, administrative teaching medicine and health natural sciences engineering, mathematics social sciences religion artistic, literary recreational
2	White Collar	clerical sales service
3	Blue Collar	farming, horticultural animal husbandry fishing, hunting, trapping forestry and logging mining and oil processing machining product fabricating assembling, rapairing construction transport equipment operation
4	Student	student
5	Housewife	housewife
6	Miscellaneous	other

Question 26/Schooling:

Code	No. of years of schooling
1	up to 7
2	8 - 11
3	12 - 13
4	14 - 16
5	17 and over

Questionnaire B

Multiple choice questions 10-11:

Fill in as on Questionnaire A.

Questionnaire C

If 'Occasionally' checked - code 1

" 'Regularly' " - " 2

N O T E

WHERE THERE IS NO RESPONSE - CODE 0

Questionnaire B 1-9/recall

Each question concerning a commercial will be rated in four parts: claimed recall, sales messages, situation/visuals, and related recall. Rating will be done directly on the coding sheet. Spaces 1-5 are for subject identification (e.g. 4E01B). The "4" designates group 4; the "E" that it is the experimental section; the "01" is the subject number; and the "B" that this is questionnaire B. The 20 subjects comprising the experimental or control section of a particular group will be done on one sheet in numerical subject order. Columns 7-10 are for commercial 1, columns 12-15 for commercial 2, and so on, skipping one space between each commercial. Commercials are coded in the order they appear on the measure, not in the order they appeared in the program.

Coding

Claimed Recall: Subject correctly identifies the product or gives enough of the name to make it certain that he recognizes it. In the first block for that question put the answer -

0 = no brand name
1 = correct brand name
9 = wrong brand name

(Columns 7, 12, 17, 22, 27, 32, 37, 42, 47)

Sales Messages: Recall of benefits, attributes, or or reasons to buy the product or service advertised.

Sales messages may come from either the audio or video portions of the commercial. Sales messages which are expressed in the recall of situation/visual commercial elements are coded under both the sales message and situation/visual sections of the recall content table. On the accompanying commercial text, the sales messages possible are designated by the circled numbers. These are the only messages we are concerned with. Mark the number of messages recalled for each commercial in the appropriate space.

(Columns 8, 13, 18, 23, 28, 33, 38, 43, 48)

Situation/Visuals: Recall of video details, the story line or plot of the commercial. Recall of a situation/visual element which contains a message is coded under both the sales message and situation/visual sections of the recall content table. Situation/visuals are designated by the circled letters on the accompanying text. These are the only situation/visuals we are concerned with. Mark the number of situation/visuals recalled for each commercial in the appropriate space.

(Columns 9, 14, 19, 24, 29, 34, 39, 44, 49)

Related Recall: Recall of brand name plus either a specific, correct sales message or situation/visual from the test commercial, whether or not accompanied

by any incorrect details or general, non-specific recall.

0 = no related recall

1 = correct related recall

9 = related recall but wrong brand

(Columns 10, 15, 20, 25, 30, 35, 40, 45, 50)

Note It is not possible to have a correct related recall without also having a correct claimed recall.

APPENDIX G

Protocol

All subjects are initially assembled in one room and an exact count made of those present.

"Good evening. I am _____ and this is _____. We are from McGill University and will be conducting the experiment you are participating in tonight. First of all we would like you to sign your name in the book that is being passed around. This is needed as an official record of the number of people that were present and will in no way be used to identify you. (Books are passed around). For the purposes of the experiment we must split you into two groups. We are going to pass around a bowl with numbered slips of paper in it. Everyone please pick out one slip without looking into the bowl. (Bowl is passed around). The number on the slip is your subject number. Make sure you keep this all night as you will need it later. Now will all those with a _____ stay in this room and all with a _____ go to the other room."

All "C's" are then assembled in one room and "E's" in another. The experimenters may not answer any questions about the nature of the experiment except to say that the subjects reactions to

a television program are being studied. Experimenters must be careful not to help the subjects with the questionnaires. In addition experimenters should insure that subjects do not talk to each other or help each other during the administration of the measures. Experimentation begins with the distribution of the Attitude Measure (Form A). Text for the introduction of the tests and program follows. Experimenters should stick as close to the form as possible so that information given out is the same.

> "We are conducting a television experiment. Before we show you a program we would like to ask you a few questions about your attitude toward television. (Distribute questionnaire A & pens.) First of all, please write your subject number, the number you received when you came in, on the top right hand corner of the first sheet of the questionnaire. This allows us to know group you were in. Please answer each question to the best of your ability. If you are not sure of your feeling mark the answer that most closely corresponds to your attitude. Mark only one answer per question. All questionnaires are confidential. We do <u>not</u> wish to know your name."

Pick up questionnaires when subjects are finished. Check that subject numbers are written in.

"We would now like you to watch a television program. We'll talk to you about your reactions to it afterwards. Please save your number slips. Ok, here is the program."

Play videocassette. Experimenter leaves room until program completed.

"You will now receive a questionnaire which contains some questions about the program you have just seen. Please mark your subject number on the upper right hand corner of the first sheet. (Distribute questionnaire B). Please answer all the questions as completely and with as much detail as you can. Again, do not write your name on the paper. We do not wish to know which paper is yours. You will be given as much time as you need to complete the questionnaire. You may begin."

Pick up commercial questions. Make sure subject number is on it.

"There is one final sheet to fill out. Please check off all the brands or companies listed on this form that you use or patronize. (Pass out questionnaire C). Again, write your subject number on the upper right hand corner."

Pick up brands list. Check that subject number is on it.

Pick up pens and subject number slips.

"That is all. Thank you very much for your help in this experiment. We will keep you posted as to the results of our study. If by chance you know anyone else who is scheduled to take part in this study but he has not yet done so please do not discuss it with them. Again, thank, and goodbye."

APPENDIX H

Attitude Questionnaire Results

Question	% Yes	% No
Do you think that there are too many commercials on television? Note. BASE=157	91.1	8.9

	% Increased	% Remained About The Same	% Decreased
In your opinion, has the amount of time devoted to commercials on television...? Note. BASE=157	64.3	30.6	5.1

Question	% Too Many Long/Often	% About Right	% Too Few Short/Seldom
Do you think the number of commercials presented at one time during a commercial break is about right, too many, or too few?			
Note. BASE=160	93.8	5.6	0.6
Do you think the length of these commercial breaks is too short, too long, or about right?			
Note. BASE=160	87.5	8.8	3.8
Do you think that individual commercials are repeated too seldom, too often, or about the right amount?			
Note. BASE=159	86.8	9.4	3.8
Do you think that individual commercials are too long, too short, or about the right length?			
Note. BASE=159	64.2	35.8	0.0

Question	% Yes	% No
Do you think that the number of interruptions in a program should depend on the type of television program? Note. BASE=159	78.0	22.0
Do you think that the type of commercials shown within a program should suit the type of program? Note. BASE=157	66.9	33.1

Question	% Yes	% No
Do you think that commercials are a fair price to pay for television? Note. BASE=159	57.2	42.8
Do you think that commercials should be dropped from television? Note. BASE=157	45.9	54.1

	% Good Effect	% No Effect	% Bad Effect
What effect do you think the removal of commercials would have on the type of programs broadcast? Note. BASE=158	33.5	29.7	36.7

Question	% Remain The Same	% Be Changed
Do you think that the placement of commercial breaks in a program should...? Note. BASE=159	15.1	84.9

	% Continued As Now	% Grouped At The Middle	% Grouped At The Beginning Or End
Would you like to see commercials...? Note. BASE=159	2.5	10.7	86.8

Question	% A Lot	% Some	% Little
How much attention do you pay to television commercials? Note. BASE=160	2.5	37.5	60.0

	% Usually Helpful	% Sometimes Helpful	% Seldom Helpful
How helpful do you find television commercials? Note. BASE=160	1.9	18.1	80.0

	% Watch Commercials	% Do Not Watch But Remain In Room	% Leave Room
What do you do during commercial breaks? Note. BASE=158	27.8	50.0	22.2
If the breaks for commercials lasted four minutes and came only every 30 minutes, what would you do? Note. BASE=157	24.2	40.8	35.0

APPENDIX I

Anecdotal Comments

Group PC

- The commercials were not evenly distributed through the film, causing further tension and irritation. Not connected in subject matter.
- I would only have to "tune them out" once (i.e. if presented in 4-minute blocks).
- Commercials presented in 5-minute breaks would allow viewer choice of leaving room or watching.
- Should be shorter commercials.

Group 1C

- None of the above. I would rather see 2-3 minute - after every half hour.
- I found the commercials breaking the mood of the film and thereby cut down my enjoyment of same.
- I prefer seeing commercials at the beginning and at the end, 3 minutes before - 3 minutes end. Not too many for each program so I could concentrate more.
- I am surprised that I don't remember all of the commercials.
- I think there were too many different kinds of commercials for such a short film.
- Actually I know that advertising helps to pay for the TV programs and if it were not for advertising we would not be able to have the programs as they are, but 4 or 5 commercials in a 15 minute interval is a bit much.

- Commercials are the price we pay for watching TV. Where they are made entertaining, amusing, funny, they can be enjoyable and get their message across.
- Most commercials are far too loud.
- Even though I paid special attention to the commercials because I thought there might be some questions about them and even though I have seen some of them before, I found I could remember very little about them.

Group 2C

- I believe that commercials appear to be a necessary evil. I don't see how television companies could produce decent programs without the financial backing which commercials generate. I don't believe that commercials influence my purchases at all, and I believe that at least 90% of commercials are ridiculous in that they make no meaningful statements about their product; either none at all or else vague generalities that would apply equally to any competitor's products. The only good commercial is a funny one. Perhaps we should have TV licences as in Britain. This would depend on the price people are willing to pay.
- Commercials have their place on TV. But not the hogwash, trash, and Madison Avenue hardsell we see today.
- I don't care for commercials. I can always find something more useful to do. However, I think they deserve a place and the odd one is very good.
- One does not remember commercials all that well, especially when one hates them!
- The fact that there was no vocal sound, just music, in the film made me pay fresh attention to the words of the commercials.

- My mind seems to be a complete blank about these commercials as if they went in one ear and out the other. I would really prefer no commercials at all.
- This particular film was helped by the commercials because it is a little long and boring with Keaton as the only saving grace.
- Did not feel the commercials too much - two at a time seems reasonable!

Group 3C

- I seem to shut out commercials as much as possible. The first part of the first commercial blended so well in that it took me a moment to realize it was not part of the film.
- I would have preferred no commercials for this film because it ruins the whole idea of this film.
- Commercials would be better placed beginning and end of show, and therefore would not break continuity of show. Unless show is more tha 1 hour in duration.
- I think commercials are necessary but would be better in one block hour rather than spread throughout the programming.
- Got tired and thus had less concentration as time passed.
- Too many commercials and I lose interest in them.
- The beer commercial (Laurentide) was the only one that made use of humour and the one I found least unpalatable.
- Commercials are one of the reasons I don't watch much television. I think they are an insult to one's intelligence and an infringement of privacy.
- The latter (1-hour block) would be ideal for the listener but not the advertiser.

- Commercials are used subliminally and repetitively to push a product upon a person.
- I find some commercials quite embarrassing (the beltless - for light days...). Commercials are sometimes repeated within 10-15 minutes. Sometimes tasteless - girls in the jean shop selling pants ... Poor, poor! Too many shampoo commercials.
- Commercials are too repetitive.
- In a drama would much prefer to have commercials at beginning and end of program.

Group 4C

- The previous questionnaire was better in suggesting all commercials at the beginning of each program.
- And not the same hour every station. (1-hour block)
- I do not watch TV on any regular basis, normally pay no attention to commercials except occasionally when something of interest is shown for the first time. I do not watch any particular station though I indicated channel 12, but sometimes like items on channel 33. I would prefer programs with NO commercials but realize the financial implications.
- To my knowledge TV commercials do not influence my buying decisions. My cars have been purchased without their help - my recent Mazda and previous VW. In some case I react to obnoxious ads - such as the current TEXACO 'coast-to-coast' ad and make a point of not buying their products. I am completely opposed to TV commercials unless they precede programs and I am sending financial support to channel 33 in the U.S. In other words, I would gladly pay for commercial-free TV.

- I prefer the British system by which you pay for a TV licence and have two out of three channels free of commercials. Commercial breaks drive me mad. They ruin children's concentration - have you ever noticed how many children have an attention span of 10 minutes - or the distance between commercials?
- I have just discovered that I have a marvellous capacity for tuning out that which I do not wish to see or hear.
- I realize commercials are necessary to sponsor TV. I find them amusing but seldom informative.
- Commercials can be of interest - can be entertaining. If always so - then a 1-hour block would be acceptable.
- These commercials seemed shorter than the usual ones. Were they?

Group PE

- I feel that people will only remember visual impact items, not words.
- Really found very little interest in the commercials. Only watched them because of the situation we are in.
- Commercials that are related in a comedy scene are pleasant to remember and so one retains more about them. Also, if you put the commercials at the end, I wouldn't place my money with the man whose commercial was say 8th in line. After first four, kind of boring.
- These programs (commercials?) are an insult to the intelligence of the people and I do believe that they are bad for the morale of the family unit.
- Prefer short commercials during program. Seeing several at the end is confusing and hard to remember. Not more than 1-2 minutes.

- I realize too many at one time one does not concentrate on them. Enough to remember all advertisers wished us to.
- I enjoy the program more, but I don't remember the commercials easily.
- I find most commercials are not relating to life as it is lived. They cannot command my attention. They are contrived. Occasionally a great one comes along.
- This would make for better continuity of the program material (i.e. 4-5 minute breaks).

Group 1E

- The number of commercials shown after this film are acceptable at longer intervals than more frequent intervals when one or two commercials are aired at one time.
- I don't like commercials and had the urge to leave the room when they started.
- Prefer no commercials unless they can be 'extremely entertaining', as in Italy - confined to a period of time in evening and do not push by 'hard sell' or treat audience as group of relatively unintelligent or stupid beings.
- I very seldom watch TV and when I do I don't watch the commercials.

Group 2E

- This TV show needed a commercial break, even though it was only half hour long. The reason being no dialogue. But the eight commercials at the end of the program were just right. I have nothing against commercials as long as they are factual and convey information I could use (as well as

entertaining). The type of commercial need not relate to the program as variety holds a person's attention. The same commercials should not be repeated at the end of the next prgram.

- At times the commercials are too much. When a film is shown commercials interrupt the thought and mood of the film. I am not happy about it.
- Commercials should be televised with <u>much</u> more care on <u>quality</u> and time shown.
- If commercials were more honest, less long, better done, more witty they would probably be more useful.
- Enjoyed the film very much, especially the fact that it wasn't interrupted.
- The choice made in no, 11 is made with the idea that during the 1-hour block of commercials in the evening I would occupy myself with something else like a long evening walk outdoors.
- If TV users in Canada paid a license as in U.K. I think "non-commercial" television would result in higher standards of viewing and viewing material.
- I enjoyed having all the commercials at the end of the programme but found there were a few too many to remember and absorb them all. It certainly was a pleasure seeing the film without commercial interruptions.
- The need for television commercials is evident if only for the purpose of funds. Seeing a commercial for the first time can be entertaining in some instances; however, I find the constant showing of a single commercial throughout an evening or even throughout a single program can be a bit trying. I do not rush out and buy a product because I have witnessed a remarkable fact on TV. I have been 'turned off' a product by some commercials.

Group 3E

- If it is necessary to block commercials together do so before main course. You then have a captive audience - provided the time and number of sales pitches are varied for each program.
- Commercials are sometimes entertaining but are generally a pain in the neck and distracting. The relationship between the people in the commercials and people in real life leave much to be desired.
- Eyes to see and see not, ears to hear and hear not.
- Would prefer to pay more for TV and not be bothered with commercials.
- I think the 1-hour commercial spot would be fine. If one is not interested it could be turned off.
- Too many commercials - one after the other - jade the appetite.
- When commercials come on I go and do my work.
- It is obvious to me that the commercials I have seen many times on TV were digested by my mind even against my will. The others I just do not remember.

Group 4E

- 1. Would like to know the objective of this survey. 2. Note that all my answers are influenced by the fact that I dislike commercial messages but realize they are necessary in order to cover the cost of programming.
- As I watch TV so little I'm probably not a very typical viewer - the other questionnaire asked hour of TV watching on a per day basis - I answered two hours - probably over the year two hours per week would be more accurate -

usually ignore commercials almost completely - but tried to watch tonight. I really question whether the thousands of $ spent on TV advertising give commensurate return.

- Eight to ten commercials at a time are a little too time consuming and they lose their audience. I found I was more willing to 'pay the price' and watch after seeing an uninterrupted show but obviously forgot some. Mind is more receptive with longer viewing between breaks.

- Commercials do not interest me. The longer they are, the more inclined I am to leave the room and so something else while they are on. If commercials must be and you want to reach others like myself they would have to be short and often.

- TV commercials are far too loud and the sound (volume) of commercials is much higher than the regular program this is extremely annoying.

- I answered the above #11 this way (1-hour block) because one would know in advance when not to watch. On second thought - if the hour used for commercials was say between 8 and 10 it would make program scheduling rather awkward.

- That placing of commercials (1- or 2-minute breaks) would be for just this type of boring films.

- Are you guys commie pinkos, trying to destroy free enterprise?

- None of the above. The obvious answer is to group the odious ads in a block, but who would watch them? The only acceptable commercial was 9 which I consider public service programming. All others are either ridiculous or offensive and disturb enjoyment of any programme. But to put commercials in a block, they must be of the calibre of Xerox or McMillan Bloedel or G.E., etc. and have interest.