THE EFFECTS OF COLOR ON TELEVISION COMMERCIALS

Thesis for the Degree of M. A.

MICHIGAN STATE UNIVERSITY

Sherilyn Kay Zeigler

1966

ABSTRACT

THE EFFECTS OF COLOR ON
TELEVISION COMMERCIALS

By Sherilyn Kay Zeigler

A major question being asked in advertising agencies across the country today is: What effect does color have on television commercials? Now that color set penetration has passed the 10% mark, and network color programing will soon be 100%, television advertisers are rapidly climbing aboard the color bandwagon. It is generally assumed that color commercials are more effective than black-and-white, though evidence is scarce.

The present study attempted to determine whether or not color commercials were more effective than black-and-white in four areas: attitudes, sustained interest, recall, and perceived product value. An experiment was designed to compare effects across these four variables, for ten identical pairs of black-and-white and color commercials.

Subjects were students in two Introductory Advertising classes, at Michigan State University. Half of the first class saw five black-and-white commercials, and half saw the same five in color; half of the second class saw five different black-and-white commercials, and half saw the

the same in color. Thus, the experiment was actually replicated, in order to increase generalizability.

During commercial viewing, in each case, interest was measured at two points: halfway through each commercial (at thirty seconds), and immediately after it was over (at sixty seconds). Semantic Differential scales were used for responses, and the difference between the two scores was regarded as the amount of sustained interest.

Immediately following viewing, subjects indicated their attitudes toward the commercials, again by means of a Semantic Differential scale. They were then asked to estimate the cost of one of the five products appearing in the set of commercials-from seven prices provided. Finally, recall of commercial sales points was measured-both immediately following viewing, and one week later. Respondents indicated, as well as they could remember, which sales points from given lists were in the commercials they had seen.

Attitudes were not found to be more favorable toward color than toward black-and-white. Significant differences appeared for only four of the ten commercials; two of them favored color and two favored black-and-white. Attitudes toward color were found, however, to fall within a more restricted range than was true for black-and-white. Color was not found to increase favorability of attitudes

for commercials which were ranked high in either demonstration or emotional appeal, and it did not prove more beneficial to one product class (such as good) than to another (such as medicine).

No significant differences were found between black-and-white and color for sustained interest. When, however, thirty-second and sixty-second ratings were considered separately (instead of in combination, as an indication of change), some commercials fared better in color and other in black-and-white--again, without regard to product class.

Color was found to enhance memorability--though not greatly. Both immediate and delayed recall scores were higher for color than for black-and-white in almost all cases, although none of the differences were significant.

Products did not have a higher perceived value when shown in color than they did when shown in black-and-white; there were no significant differences in cost estimates.

Generally, there was little evidence from this experiment to support the belief that color commercials are more effective than black-and-white.

THE EFFECTS OF COLOR ON TELEVISION COMMERCIALS

By

Sherilyn Kay Zeigler

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Television and Radio

1966

Approved:
Kenneth L. Carter

ACKNOWLEDGMENTS

Special thanks must be given to Dr. Kenward Atkin, Associate Professor of Advertising, Michigan State University, for his expert counsel, helpful criticism, and continual encouragement in this work. The valuable assistance of Mr. Eugene Pomerance, Vice President and Director of Research, and Mr. John McArdle, Account Executive, both of Foote, Cone & Belding, Chicago, and the cooperation and generosity of the two who provided commercials used in the experiment: Mr. John Libberton, Vice President and Director of Commercial Production, Foote, Cone & Belding, Chicago, and Mr. Thomas Ford, Executive Television Producer, Benton & Bowles, New York, is also gratefully acknowledged. Finally, appreciation is given to the more than sixty organizations: advertisers, television networks, research corporations, and advertising agencies, who supplied information and advice; to students in the advanced course in Advertising Research, at Michigan State University, who assisted in the experiment; and to students in the Introductory Advertising classes, who served as subjects.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ILLUSTRATIONS

I. INTRODUCTION

Sunday evening, December 20, 1964, made television history. From nine o'clock to ten o'clock p.m., Eastern Standard Time, all three networks were transmitting in color. Since then, the spectacle has become almost commonplace, and predictions for the 1966-67 season suggest close to one-hundred per cent network color programing.

Television advertisers, anxious to join the color stampede, are flooding production houses with rush orders. The range of TV color-sold products has extended to almost every major brand--from Alka Seltzer through Zerex; and yet, many questions still are raised: Does color make <u>all</u> commercials more effective? Or are there occasions when black-and-white may be just as good--or better? Does "interest in" or "liking for" a particular color commercial, as opposed to one in black-and-white, necessarily insure its greater memorability? Advertisers and their agencies have drawn a number of inferences from existing data on color commercial effectiveness. For example:

1. People's attitudes toward color commercials are always more favorable than they are toward black-and-white, regardless of product, because color commercials are simple better liked.

2. Any commercial in color has a higher interest, and communicates more memorably than the same commercial in black-and-white.
3. None of the headache, neuritis, neuralgia-type of commercials will benefit from color, while all food commercials will be greatly enhanced.
4. Product demonstration commercials and animation will gain the most from use of color.[1]

The following study was an attempt to shed some light on the validity of such inferences.

An experiment was designed to compare the effects of color versus black-and-white across four variables: attitudes, interest, recall, and perception of value. Foote, Cone & Belding Advertising Agency, in Chicago, and Benton & Bowles Advertising Agency, in New York, provided the writer with identical copies of sixty-second commercials in color and black-and-white. Students in two Introductory Advertising classes at Michigan State University served as subjects.

Interest in the commercials during viewing was measured and compared between black-and-white and color groups. Attitudes toward the commercials immediately following viewing were similarly measured and compared, as were estimates of the cost of selected products shown in the commercials. Finally, recall of commercial sales points was measured and compared, both immediately after viewing, and one week later.

Products in the commercials studied represented four major categories: food, drugs, small electrical appliances, and general household products. Actual commercial presentations were also varied; some dealt entirely with product demonstration--a factual approach--while others never showed the product in use at all, but relied on an emotional appeal. It was possible, therefore, to study the effects of color across a variety of consumer goods and commercial techniques.

Background

A survey was made during the fall of 1965, to determine current opinions on the advantages and disadvantages of color television commercials. 230 letters were sent to advertisers, television networks, research organizations, and advertising agencies; 130 replies were received (almost fifty-seven per cent). A listing of sources supplying usable responses appears in the bibliography.

Advertisers and agency personnel (creative directors, media and commercial production directors, and research directors) agreed almost unanimously on three major problems regarding color commercials: cost, time required for processing, and limited color TV set penetration.

Color commercials are generally between fifteen per cent (for animation--requiring film and lab costs only)

to thirty-three per cent (for elaborate live action, special effects, special settings) more expensive than black-and-white commercials.[2] Because of the greater audience enjoyed by color programs and commercials, however, actual cost-per-thousand is often less for a color than for a black-and-white commercial.[3] Then, too, when media costs are added, and when costs are figured on a thirteen-week basis, for example, the additional cost for color over black-and-white has been found to average only one per cent.[4] Despite actual processing costs, therefore, in 1965, virtually all of the nation's top 100 television advertisers used color.[5] A color commercial cost breakdown, results of studies dealing with color program and commercial effectiveness, and a listing of color television advertisers can be found in Appendix B.

Similarly, the additional time required to process a color commercial is now a maximum of twelve days. (See Appendix C). It seems likely, also, that with increased facilities in the near future, production houses will be able to meet even tighter deadlines, without sacrificing quality.

In 1965, CBS-TV President John Schneider publicly proclaimed: "The color-set explosion is under way." Nearly twice as many color sets (almost 2,800,000) were sold that year as in all previous years combined.[6] Color

set penetration is now over eleven per cent, and is predicted to reach forty per cent by 1970. (See Appendix D). Thus, even this third problem is rapidly decreasing in magnitude. The top fifty color TV markets cover all parts of the country, station color facilities are increasing rapidly in quantity, and color television programing has increased 379 per cent in the last five years. Color TV audiences, likewise, have already begun to cut across educational and occupational lines. (The top fifty markets, station facilities, color programing hours by years, and color TV audience demographics are also in Appendix D).

Significance of Study

Because of the increasing importance of color in television commercials, advertisers are demanding that studies be made regarding the impact of color as opposed to black-and-white, across a number of product categories and commercial types. Knowledge of effects in these areas is extremely limited.

With the tremendous number of commercials currently being televised, advertisers are constantly vying for the viewer's interest; and, they are anxious to know whether the use of color holds and/or increases that interest better than black-and-white. Likewise, they are asking whether the color factor might increase favorability of attitudes toward commercials--and, hence, toward the products themselves.

Memorability of commercial sales points has long been deemed desirable. . .and color is thought to make more lasting impressions than black-and-white. If this is true, perhaps more sales points can be incorporated into a color commercial, without any loss in effectiveness.

Finally, there is a need for knowledge of color's effect on product value--or, in the consumer's terms, cost. If color influences perceived product values, in a value-oriented society, it may well affect sales potential.

II. BASIC PROBLEM AND HYPOTHESES

Problem Statement

In the areas of attitudes, sustained interest, recall, and perceived product value, which television commercials are more effective: those in color, or those in black-and-white?

Hypotheses

1. Because color commercials are still considered "novel" and impressive, attitudes toward them will be more favorable than attitudes toward black-and-white commercials.
2. Because color commercials provide more visual variety than black-and-white commercials, interest change will be greater during color than during black-and-white commercials.
3. Because color commercials are more realistic than black-and-white commercials, both immediate and delayed recall of sales points will be greater after color than after black-and-white commercials.
4. Because color commercials are regarded as higher quality commercials than black-and-white, products will have a higher perceived value when shown in color than when shown in black-and-white.

Definitions

1. Attitudes are defined as responses made on an adaptation of Osgood's Semantic Differential, using the Evaluative dimension only (GOOD/BAD).
2. Interest change is defined as the difference between two points of measurement: halfway through each commercial, and immediately after it was over. At both times, responses were again indicated through use of the Semantic Differential, Evaluative dimension only (INTERESTING/DULL).
3. Immediate recall is defined as the number of correct indications of sales points which did and did not appear in each commercial: responses were made immediately following commercial viewing.
4. Delayed recall is defined as the number of correct indications of sales points which did and did not appear in each commercial: but responses this time were made one week after commercial viewing.
5. Perceived product value is defined as the cost estimate of the product involved.

III. RELATED RESEARCH

Although color television commercials have been produced for more than a decade, research dealing with the effects of color, as opposed to black-and-white, commercials, is scarce. In the first such comparison study made, Schwerin found that sensory appeal products (food) benefited more from color than did others.[7] While a number of different products were represented, however, the literature does not state whether or not actual commercial presentations were varied (for example: high-demonstration versus low-demonstration, or high-emotional-appeal versus low-emotional appeal).

Lucas and Britt point out that the decision to use color must take into account the actual advertising message, as well as the product.[8] Similarly, VanderMeer, in a study of color versus black-and-white instructional films, found that subject matter was a factor just as important, if not more important, than the color factor, when it came to film preference.[9]

In May, 1960, Burke Marketing Research, in a study for the Crosley Broadcasting Corporation, found that a greater share of color TV viewers, as compared to black-and-white viewers, recalled seeing commercials (during selected test programs).[10] The same findings were claimed by NBC in its 1961 Impact Study.[11] No attempt was made,

however, to determine attitudes toward commercials, or the actual amount of interest created during commercial viewing.

Edith Brandt notes that color serves as a condition of vividness, and thus contributes to the memory value of items on which it is used. Hotchkiss and Franken found color advertisements thirteen per cent better than black-and-white advertisements for memory-value, as tested by the recognition method.[12]

Finally, in an April, 1965, summary of past research, Schwerin reported that recall of sales ideas was increased eleven per cent by color.[13] He did not, however, present any evidence regarding memory of commercial details over an extended period of time.

VanderMeer found that the control of color in instructional films was related more to retention of learning than to immediate acquisition of material.[14] Lucas and Britt likewise point out that the realism of color, its intensity, and its pleasant effect, all aid in retention and in later recall.[15]

IV. METHODOLOGY

General Research Design

Because of the noted shortcomings of previous research in this area, and because the objectives of this study required manipulation of variables, an experimental design was selected. To satisfy claims of internal validity, an experimental group-control group design, with randomized subjects, was used; and the experiment was replicated, so that generalizability might be increased.

Sample Design

Subjects for the experiment were male and female students enrolled in two sections of the beginning course in advertising, at Michigan State University. Students in each class were randomly assigned to two treatments: one black-and-white, and one color.

Ten pairs of commercials (identical black-and-white and color copies) were then randomly assigned to the two classes; and the black-and-white and color sets (five commercials in each set) were randomly assigned to the groups. Thus, half of the first class saw five black-and-white commercials, and half saw the same commercials in color. Half of the <u>second</u> class saw five <u>different</u> black-

and-white commercials, and half saw the same in color. The actual commercials, in the order in which they appeared on the reels, were as follows:

FIRST CLASS

Post Grape Nuts commercial

Pepto Bismol commercial

Sunbeam Electric Toothbrush commercial

Kleenex Facial Tissue commercial

Beechnut 5 Mint Chewing Gum commercial

SECOND CLASS

Johnson's Klear Floor Wax commercial

Kraft English Toffee commercial

Post Alpha Bits commercial

Sunbeam Electric Knife commercial

Gravy Train Dog Food commercial

Eighty-three students in the first class participated; eighty-one usable questionnaires were obtained. Seventy-six students in the second class participated; seventy-four usable questionnaires were obtained.

Questionnaire Design

Since each subject completed two questionnaires--one immediately after he saw the commercials, and one a week later--his name and address were requested, for matching purposes. Respondents were classified, according to the set of commercials which they saw, and according to the color or black-and-white medium employed.

Semantic Differential scales were used to measure attitudes toward commercials. The primary aim of research in the field of communication is the explanation and prediction of human behavior.[16] The ultimate purpose of advertising is to develop attitudes (or "predispositions to act"), and to induce action beneficial to the advertiser (usually the sale of a product or service).[17] In order to explain and predict an individual's buying decision, therefore, the communication researcher must focus on the direction and intensity of attitudes, both of which can be measured with a Semantic Differential scale.

Similarly, interest in the commercials shown was indicated by means of a Semantic Differential scale--administered once at the halfway point of each commercial, and once when each was over. In this way, interest <u>change</u> over the sixty-second period could be recognized. Interest in advertising copy is frequently reflected by "continued favorable attention"--and is usually <u>required</u>, if the advertising message is to be conveyed.[18] The degree of interest which an individual has in a television commercial, for example, affects the extent to which he will learn and retain the information presented.[19]

Accuracy of recall was measured through subjects' indication of sales points which they were sure <u>did</u> and <u>did not</u> appear in the commercials which they saw. Students in the advanced course in Advertising Research, at Michigan

State University, served as a panel of judges to determine the major sales points of each commercial. Additional sales points, which were not in the commercials presented, were selected from advertising campaigns of competing products. Eight statements were listed on the questionnaire for each commercial, though not more than five, nor less than three, actually appeared in each commercial used in the experiment. (The order in which statements were listed was determined randomly). Advertisers frequently accept the theory that an advertisement (or commercial) which fares well on a "memory" test will be remembered in such a way as to further the sale of the product or service advertised.[20]

Perception of product value was measured for one product in each set of commercials: the Sunbeam Electric Toothbrush, and Johnson's Klear Floor Wax. Respondents were asked, after viewing the commercials, to estimate the cost of one or the other of these products; seven possible prices were provided. Because there is a certain amount of bias in perception, introduced by an individual's expectations and system of values, it was felt that the color and black-and-white media might affect the estimate of cost in this instance.[21] Since viewers are beginning to react negatively to black-and-white commercials which appear in color programs, there appears to be a certain amount of "quality" associated with a color commercial.[22]

Copies of the questionnaire used for each set of commercials are in Appendix A.

Pretest

Questionnaires were pretested on a class of Television & Radio Advertising students. Recall questions answered incorrectly by more than forty per cent of the respondents were reworded; also, the original plan for indicating interest in the commercials at the twenty-second, forty-second, and sixty-second points, was revised (since too much of the message was lost in the process) to thirty-seconds, and sixty-seconds.

Experimental Situation

The first part of the experiment was conducted on May 9, 1966. Subjects in the first class involved were divided randomly into two groups--one of which left the room for approximately twenty-five minutes. The remaining subjects filled in the first page-and-a-half of their questionnaires (see first questionnaire, Appendix A).

Five sixty-second, black-and-white commercials were then shown, with "breaks" every thirty seconds; at these points, respondents indicated their interest in the commercial then being shown, or just over (second page of questionnaire).

After all commercials had been seen once, subjects indicated their attitudes toward them, and estimated the

cost of the Sunbeam Electric Toothbrush (third page of questionnaire). Respondents were then instructed to proceed through the recall questions (fourth and fifth pages).

When the questionnaires had been collected, the first group of subjects was dismissed, and the procedure was repeated with the second group. The only difference this time was in the use of color commercials instead of black-and-white; the actual copy was identical.

The entire experiment described above was replicated twenty minutes later with a second class. Only two changes were made: the first group in this case saw commercials in color, and the second group saw them in black-and-white; also, the commercials shown were different than those seen by the first class. . .and the cost estimate was for Johnson's Klear Floor Wax (see second questionnaire, Appendix A).

One week later, on May 16th, subjects in both classes, from both the black-and-white and color groups, filled out a second questionnaire (see Appendix A). It was different from the first in length only; no commercials were shown, so there was no reason to measure attitudes toward them, or interest in them during viewing.

The recall questions, however, were pertinent to the study; this was the measure of "delayed" as opposed to "immediate" recall. Hovland, Janis, Kelley point out

that an individual's rate of forgetting of content tends to be very rapid immediately after learning occurs. It begins to level off, however, after approximately seven days--hence, the one-week delay before remeasuring.[23] According to Gallup & Robinson, the major challenge facing advertisers today is to determine whether the current creative premium associated with the use of color is "lasting" or temporary (resulting only from a heightened interest in color per se).[24]

Statistical and Analytic Procedure

With the assumption of interval data (Semantic Differential scales), and an interest in the difference between means in the black-and-white and color groups, data for attitudes toward commercials was analyzed using a simple randomized analysis of variance. T tests were computed for interest change, and recall.

In order to make all results which were indicative of increase (that is, an increase in interest, or an increase in the accuracy of recall scores) appear as positive numbers, the interest and recall scores were treated as follows:

1. Interest ratings made at sixty seconds were subtracted from those made at thirty seconds. The Semantic Differential scales ran from "1" (VERY GOOD) to "7" (VERY BAD); thus, a higher

(less favorable) score at sixty seconds subtracted from a lower (more favorable) score at thirty seconds yielded a negative result, and the reverse, a positive result.

2. Recall accuracy scores (number of correct responses) made immediately after the commercials were shown were subtracted from those made one week later; fewer correct responses the second time, therefore, yielded a negative result, and more correct responses the second time yielded a positive result. It should be noted, however, that immediate and delayed recall scores were analyzed separately also, whereas thirty-second and sixty-second interest ratings were not. (In the latter case, the objective was to determine differences in interest change during the one-minute period).

The frequency data acquired from independent estimates of cost ("product value") was analyzed using a chi square test. An arbitrary dichotomy was made: in each case, the three lowest prices formed the first cell, and the four highest prices, the second cell.

V. FINDINGS

Attitudes Toward Commercials

Attitudes are not always more favorable toward color commercials than they are toward black-and-white. Significant attitudinal differences were found for only four of the ten commercials; and only two of the four favored color: Post Grape Nuts ($p>.01$), and Pepto Bismol ($p>.03$). In the other two instances, attitudes toward the black-and-white commercials were actually more favorable than they were toward the color versions: Sumbeam Electric Toothbrush ($p>.05$), and Sunbeam Electric Knife ($p>.09$). See Figure 1.

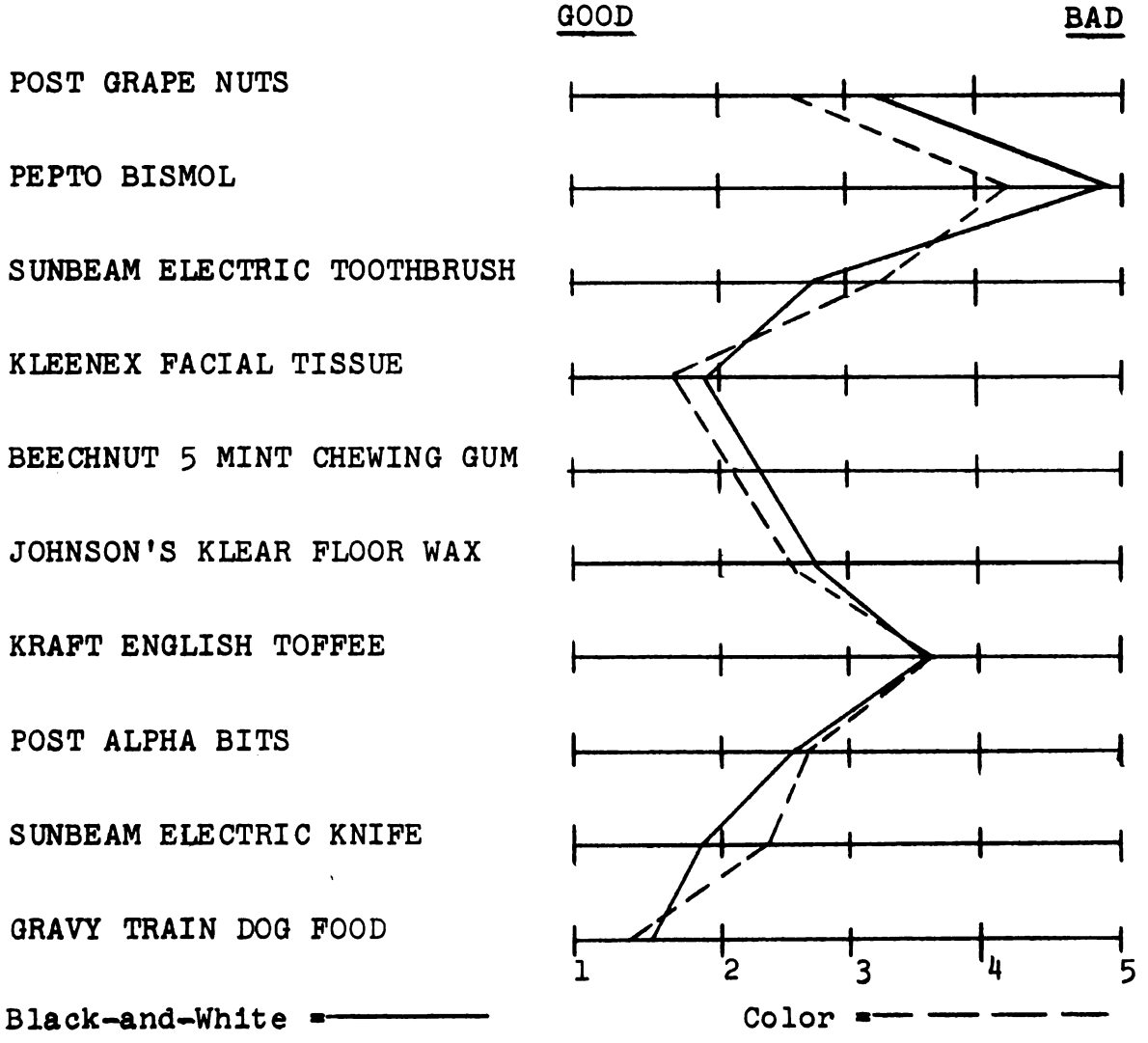
These findings are in direct contrast to one of the popularly held beliefs cited earlier. If "liking" a commercial is considered to be the same as "having a favorable attitude toward" it, color commercials are not "simply better liked" across all product categories.

Direction and intensity of attitudes in this case were measured on the Evaluative (GOOD/BAD) dimension of the Semantic Differential; "favorable attitudes" were indicated by VERY GOOD, GOOD, and SLIGHTLY GOOD, "unfavorable attitudes" by VERY BAD, BAD, and SLIGHTLY BAD, and neither favorable nor unfavorable attitudes by NEUTRAL. When

FIGURE 1

COMPARISON OF SEMANTIC DIFFERENTIAL MEANS FOR ATTITUDES TOWARD BLACK-AND-WHITE AND COLOR COMMERCIALS

COMMERCIAL	B/W	COLOR	F	ALPHA
Post Grape Nuts	3.29	2.58	6.42	.01
Pepto Bismol	4.95	4.22	4.88	.03
Sunbeam Electric Toothbrush	2.71	3.35	4.04	.05
Kleenex Facial Tissue	1.90	1.75	0.47	NS
Beechnut 5 Mint Chewing Gum	2.39	2.15	0.51	NS
Johnson's Klear Floor Wax	2.71	2.53	0.45	NS
Kraft English Toffee	3.58	3.61	0.01	NS
Post Alpha Bits	2.58	2.61	0.01	NS
Sunbeam Electric Knife	1.92	2.42	3.16	.09
Gravy Train Dog Food	1.53	1.47	0.12	NS



scores were analyzed individually, attitudes toward color commercials did fall within a more restricted range than was true for black-and-white commercials.

In only two of the ten cases, color viewers used more Semantic Differential spaces to indicate attitudes than did black-and-white viewers.* In three instances, black-and-white and color groups used the same number of spaces;** and for the other five commercials, black-and-white viewers used more spaces than did color viewers.*** The spaces most frequently omitted were at the extremes, and in the middle: VERY GOOD, VERY BAD, and NEUTRAL.

Another belief mentioned was that food commercials benefit from color, while headache-neuritis-neuralgia remedies do not. Here, while attitudes were more favorable toward color for Post Grape Nuts, there were no significant differences between color and black-and-white for Post Alpha Bits or Kraft English Toffee. On the other hand, Pepto Bismol was more effective in color, even though it could easily be classed with the headache-neuritis-neuralgia-type of product.

Finally, it appears that the nature of the actual commercial presentation (as well as the product itself) affects the degree to which color increases effectiveness.

---

*Post Alpha Bits and Sunbeam Electric Knife.

**Pepto Bismol, Kraft English Toffee, and Gravey Train Dog Food.

***Post Grape Nuts, Sunbeam Electric Toothbrush, Kleenex Facial Tissue, Beechnut 5 Mint Chewing Gum, and Johnson's Klear Floor Wax.

Students in the advanced course in Advertising Research, at Michigan State University, served at one point as a panel of judges, to rank the ten commercials in the experiment, according to "amount of demonstration used," and "amount of emotional appeal present." Results placed the Sunbeam Electric Toothbrush and Sunbeam Electric Knife commercials highest in demonstration:

RANKINGS OF COMMERCIALS ACCORDING TO
DEMONSTRATION AND EMOTION

DEMONSTRATION

Sunbeam Electric Knife (VERY HIGH DEMONSTRATION)
Sunbeam Electric Toothbrush
Kleenex Facial Tissue
Gravy Train Dog Food
Pepto Bismol
Post Alpha Bits
Post Grape Nuts
Beechnut 5 Mint Chewing Gum
Johnson's Klear Floor Wax
Kraft English Toffee (VERY LOW DEMONSTRATION)

EMOTION

Gravy Train Dog Food (VERY HIGH EMOTION)
Beechnut 5 Mint Chewing Gum
Kleenex Facial Tissue
Post Alpha Bits
Sunbeam Electric Tootbrush
Post Grape Nuts
Sunbeam Electric Knife
Kraft English Toffee
Pepto Bismol
Johnson's Klear Floor Wax (VERY LOW EMOTION)

Again, contrary to the belief cited earlier, the use of color did not increase favorability of attitudes toward demonstration commercials (and, in fact, decreased

it, when compared with black-and-white). For the only animated commercial (Kleenex Facial Tissue), there were no significant differences in attitudes between black-and-white and color groups. Likewise, as can be seen above, attitudes toward commercials with a high emotional appeal were not affected by the addition of color.

Interest Change

No significant differences in interest change were found between black-and-white and color comercials. That is, the change between the Semantic Differential interest rating (INTERESTING/DULL) made halfway through each commercial, and the one made immediately after the commercial was over, were not significantly different between black-and-white and color groups, for any of the ten commercials. See Figure 2.

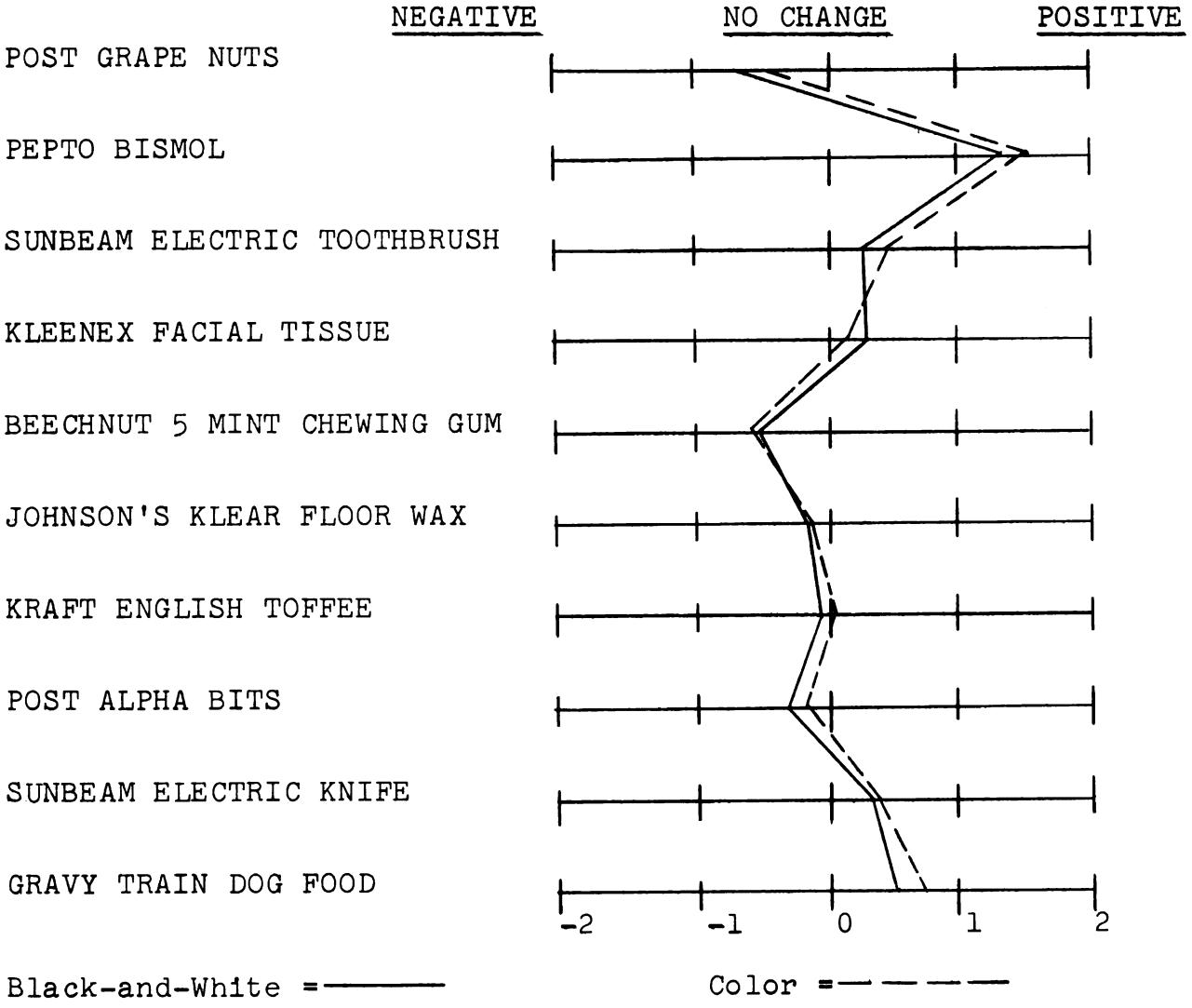
It appears, however, that color has at least a limited effect on the extent of interest change during commercial viewing; for eight of the ten commercials studied, the change between thirty-seconds and sixty-seconds was a more favorable change for the color commercial than it was for the black-and-white counterpart.

On the one hand, for the Post Grape Nuts, Johnson's Klear Floor Wax, and Post Alpha Bits commercials, the change was negative (from interesting to dull) for both groups, but less negative for color. On the other hand, for Pepto Bismol, Sunbeam Electric Toothbrush, Sunbeam

FIGURE 2

COMPARISON OF SEMANTIC DIFFERENTIAL MEANS FOR INTEREST CHANGE DURING BLACK-AND-WHITE AND COLOR COMMERCIALS

COMMERCIAL	B/W	COLOR	T	ALPHA
Post Grape Nuts	-0.71	-0.70	-0.04	NS
Pepto Bismol	1.39	1.55	-0.92	NS
Sunbeam Electric Toothbrush	0.27	0.55	-1.22	NS
Kleenex Facial Tissue	0.27	0.20	0.42	NS
Beechnut 5 Mint Chewing Gum	-0.46	-0.52	0.29	NS
Johnson's Klear Floor Wax	-0.16	-0.14	-0.08	NS
Kraft English Toffee	-0.08	0.06	-0.77	NS
Post Alpha Bits	-0.24	-0.14	-0.47	NS
Sunbeam Electric Knife	0.24	0.39	-0.99	NS
Gravy Train Dog Food	0.53	0.72	-0.79	NS



Electric Knife, and Gravy Train Dog Food, the change was positive (from dull to interesting) in both cases, but more positive for color.

Finally, for Kraft English Toffee, the change was actually negative for black-and-white, and positive for color. The only two cases which deviated from this pattern were the Kleenex Facial Tissue and Beechnut 5 Mint Chewing Gum commercials (for which interest change was more positive and less negative respectively, for black-and-white).

The notion that food comercials benefit from color while headache-neuritis-neuralgia commercials do not is here again thrown open to question. Pepto Bismol, as well as the three food commercials (Post Grape Nuts, Post Alpha Bits, and Kraft English Toffee) had a more favorable interest change when viewed in color.

It is interesting to note that the five commercials which claimed an increase in interest (positive score) between the thirty-second and sixty-second points, regardless of the black-and-white or color medium employed, were the five rated highest on demonstration. "Interest" seems to be more closely related to demonstration comercials than does "attitude."

If interest ratings are considered separately (instead of in combination, as an indication of change), it can clearly be seen that all commercials do not have a

higher interest in color than they do in black-and-white. Though they were not computed as part of this study, there do appear to be significant differences:

1. Color produced higher interest ratings for the Post Grape Nuts, Pepto Bismol, Johnson's Klear Floor Wax, and Post Alpha Bits commercials.
2. Black-and-white produced higher interest ratings for the Sunbeam Electric Knife and Kraft English Toffee commercials.

See Table 1.

These findings give further support to the idea that actual commercial presentations must be examined in detail. It is not sufficient to consider merely the products themselves; Post Grape Nuts and Post Alpha Bits--both "food" commercials--scored higher interest ratings in color, while Kraft English Toffee--another "food" commercial--scored higher in black-and-white.

Immediate and Delayed Recall

Color does enhance memorability--though not greatly. Immediate recall color scores were higher than black-and-white scores for eight of the ten commercials tested (Sign Test: $p>.06$). Only two of the black-and-white/color pair differences, however, were significant in favor of color: Post Alpha Bits ($p>.01$), and Sunbeam Electric Knife ($p>.02$). See Figure 3.

TABLE 1

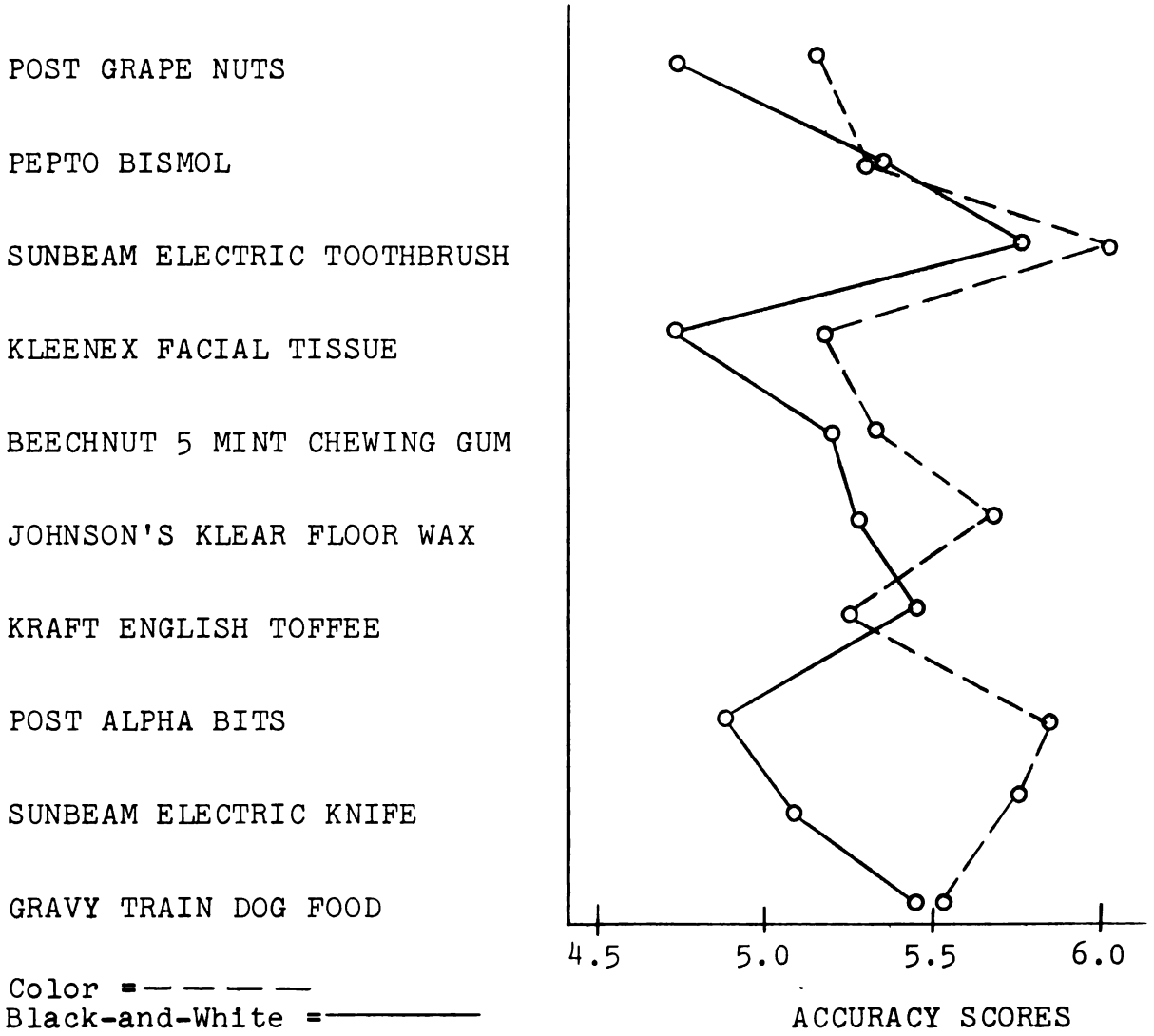
SEMANTIC DIFFERENTIAL MEANS FOR INTEREST DURING COMMERCIALS

COMMERCIAL		30 SECONDS	60 SECONDS
Post Grape Nuts	B/W	3.24	3.44
	COLOR	2.47	2.38
Pepto Bismol	B/W	5.05	4.88
	COLOR	4.25	3.95
Sunbeam Electric Toothbrush	B/W	2.88	3.00
	COLOR	2.97	3.33
Kleenex Facial Tissue	B/W	1.54	1.71
	COLOR	1.40	1.63
Beechnut 5 Mint Chewing Gum	B/W	2.46	2.37
	Color	1.83	1.83
Johnson's Klear Floor Wax	B/W	2.68	2.71
	COLOR	2.06	2.19
Kraft English Toffee	B/W	3.39	3.16
	COLOR	4.00	3.25
Post Alpha Bits	B/W	3.45	3.42
	COLOR	2.86	2.33
Sunbeam Electric Knife	B/W	2.00	1.89
	COLOR	2.81	2.42
Gravy Train Dog Food	B/W	1.63	1.42
	COLOR	1.50	1.25

FIGURE 3

COMPARISON OF MEAN ACCURACY SCORES FOR IMMEDIATE RECALL OF COMMERCIAL SALES POINTS

COMMERCIAL	B/W	COLOR	T	ALPHA
Post Grape Nuts	4.78	5.12	-1.29	NS
Pepto Bismol	5.36	5.32	0.12	NS
Sunbeam Electric Toothbrush	5.66	5.98	-0.93	NS
Kleenex Facial Tissue	4.73	5.20	-1.50	NS
Beechnut 5 Mint Chewing Gum	5.20	5.32	-0.33	NS
Johnson's Klear Floor Wax	5.26	5.67	-1.54	NS
Kraft English Toffee	5.47	5.22	0.63	NS
Post Alpha Bits	4.84	5.86	-2.98	.01
Sunbeam Electric Knife	5.10	5.72	-2.50	.02
Gravy Train Dog Food	5.47	5.56	-0.22	NS



Delayed recall color scores were higher than black-and-white in nine of the ten cases (Sign Test: $p>.02$). This time, however, only one pair difference was significant in favor of color: Post Alpha Bits ($p>.02$). See Figure 4.

There is an indication, therefore, that color does make a more lasting impression than black-and-white, and hence, that color viewers are able to recall more commercial sales points than black-and-white viewers. Significant differences, however, were found in only two cases immediately following viewing, and in only one case a week later; it is questionable, therefore, that any significant findings would have been made if the test had been administered a third time.

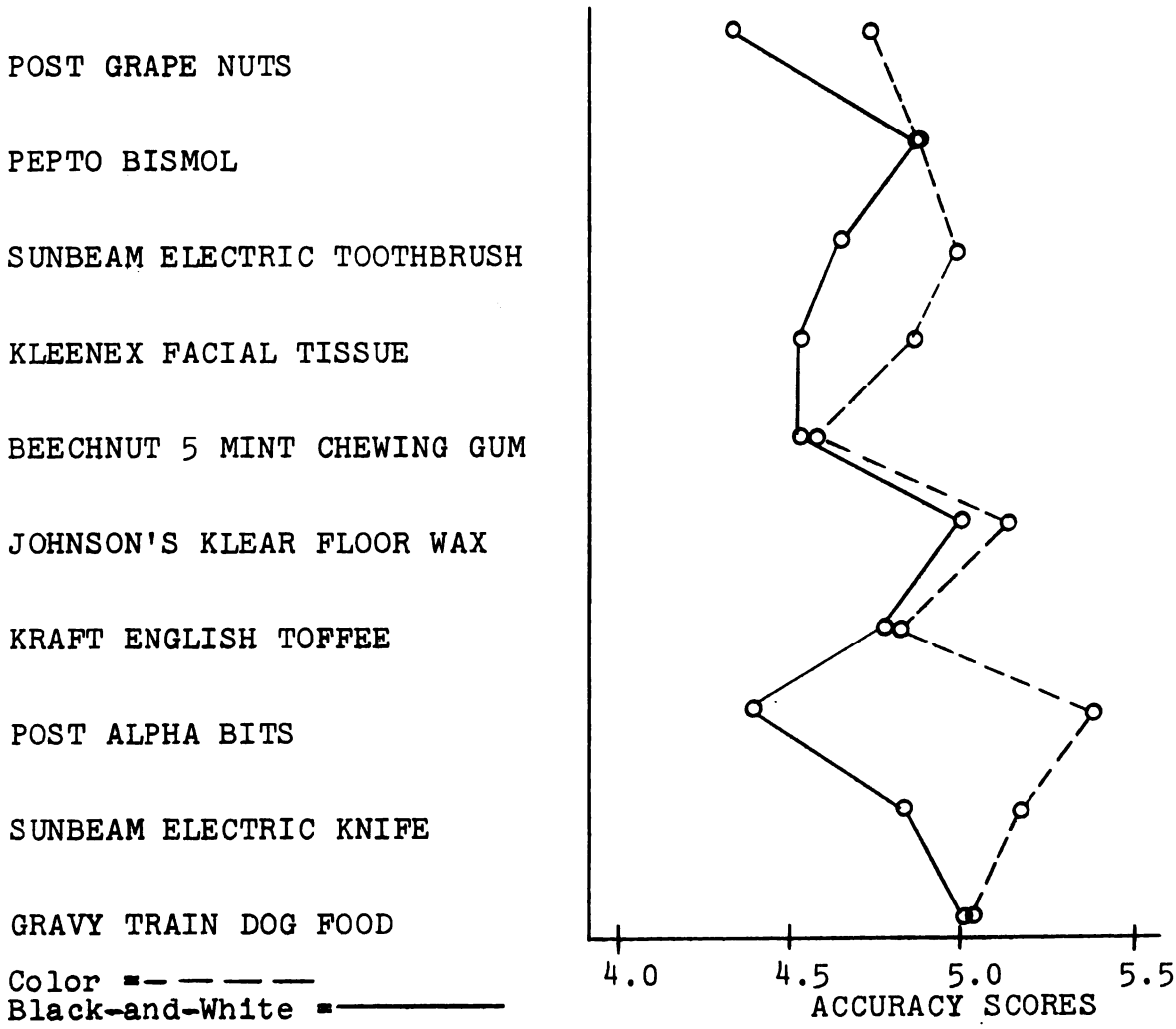
A total of eighty different recall questions were asked (eight for each of the ten commercials). Because of the variety of products represented, however, only one type of question recurred with any frequency--that related to cost. There were a total of eight cost questions.

At the immediate recall stage, a comparison was made between the percentage of color and black-and-white viewers who answered the cost questions correctly. The difference favored the color group on only four of the eight questions. At the delayed recall stage, however, the same comparison was made; and here there was an interesting finding. All eight cost questions were remembered by a greater percentage of color viewers than black-and-white viewers.

FIGURE 4

COMPARISON OF MEAN ACCURACY SCORES FOR DELAYED RECALL OF COMMERCIAL SALES POINTS

COMMERCIAL	B/W	COLOR	T	ALPHA
Post Grape Nuts	4.36	4.72	-1.00	NS
Pepto Bismol	4.88	4.88	0.00	NS
Sunbeam Electric Toothbrush	4.63	5.02	-1.09	NS
Kleenex Facial Tissue	4.58	4.80	-0.61	NS
Beechnut 5 Mint Chewing Gum	4.58	4.60	-0.04	NS
Johnson's Klear Floor Wax	5.00	5.28	-0.09	NS
Kraft English Toffee	4.71	4.75	-0.11	NS
Post Alpha Bits	4.45	5.42	-2.58	.02
Sunbeam Electric Knife	4.79	5.30	-1.81	NS
Gravy Train Dog Food	5.03	5.05	-1.26	NS



For each of the ten commercials, in both black-and-white and color groups, fewer sales points were remembered after a week's time than had been true immediately following commercial viewing. The extent of "forgetting" differed slightly between groups, but the differences were not significant. See Table 2.

Perceived Product Value

Products did not have a higher perceived value when shown in color than they did when shown in black-and-white. No difference was found between black-and-white and color cost estimates of the "expensive" product tested (Sunbeam Electric Toothbrush). See Figure 5.

For the "inexpensive" product tested (Johnson's Klear Floor Wax), color estimates were significantly lower than black-and-white estimates (Chi Square: $p>.03$). See Figure 6. Color apparently did not appear as a "quality" factor affecting viewers' judgments of product value.

Seven cost estimates were provided for each product; respondents selected one. The dichotomy made for purposes of the Chi Square Test (three lowest estimates in one cell, and four highest in the other) was arbitrary; a Kolmogorov-Smirnov test, however, which treated each price category individually, produced results similar to the above, though the significance found was not quite at the .03 level.

TABLE 2

MEAN SCORES FOR DIFFERENCE BETWEEN IMMEDIATE AND DELAYED RECALL OF COMMERCIAL SALES POINTS

COMMERCIAL	B/W	COLOR	T	ALPHA
Post Grape Nuts	-0.41	-0.40	-0.04	NS
Pepto Bismol	-0.49	-0.45	-0.12	NS
Sunbeam Electric Toothbrush	-1.02	-0.95	-0.24	NS
Kleenex Facial Tissue	-0.15	-0.40	0.85	NS
Beechnut 5 Mint Chewing Gum	-0.61	-0.72	0.35	NS
Johnson's Klear Floor Wax	-0.26	-0.39	0.51	NS
Kraft English Toffee	-0.76	-0.47	-0.90	NS
Post Alpha Bits	-0.39	-0.44	0.15	NS
Sunbeam Electric Knife	-0.32	-0.42	0.34	NS
Gravy Train Dog Food	-0.45	-0.06	-1.10	NS

FIGURE 5

COMPARISON OF FREQUENCY OF COST ESTIMATES
OF SUNBEAM ELECTRIC TOOTHBRUSH
AFTER VIEWING OF COMMERCIAL

	$9.95	$11.95	$13.95	$15.95	$17.95	$19.95	$21.95
B/W	7	9	6	10	3	5	1
COLOR	2	9	9	11	4	5	0

CHI SQUARE	ALPHA
0.109	NS

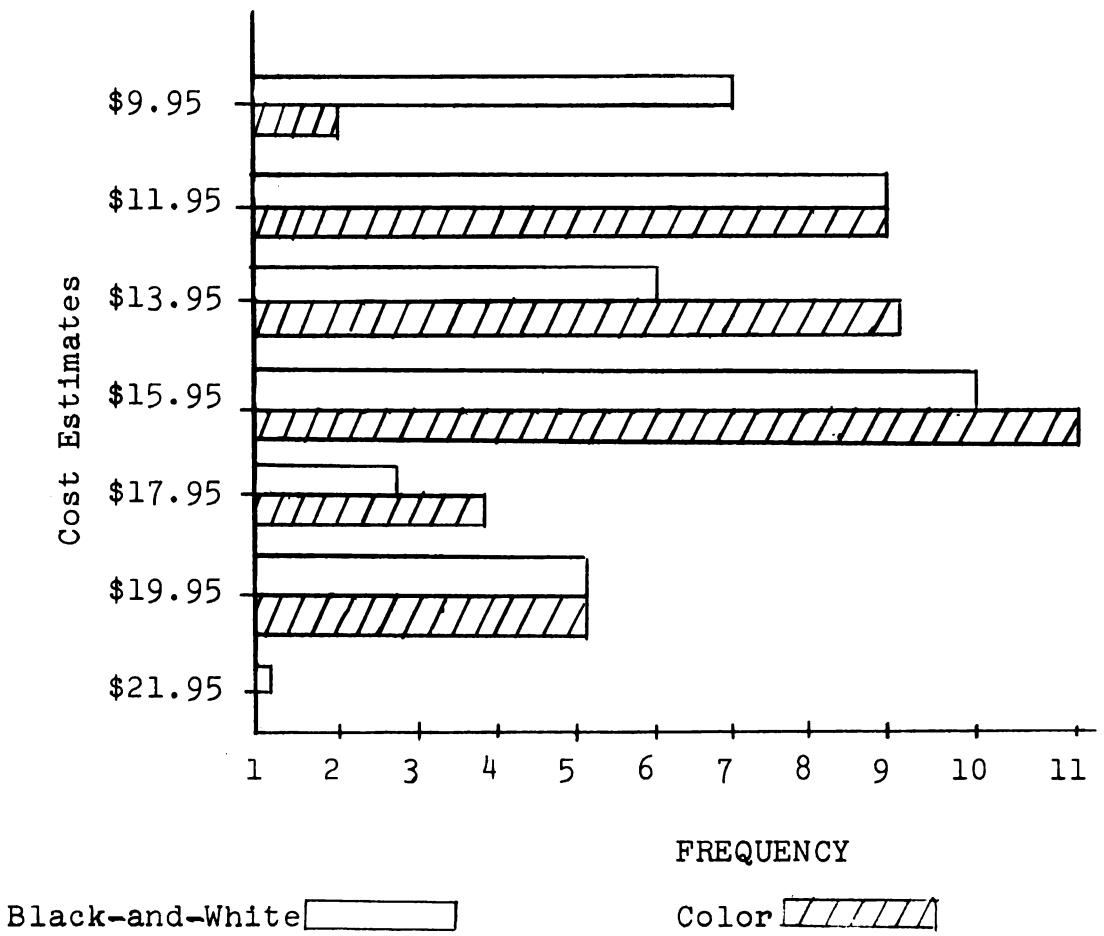
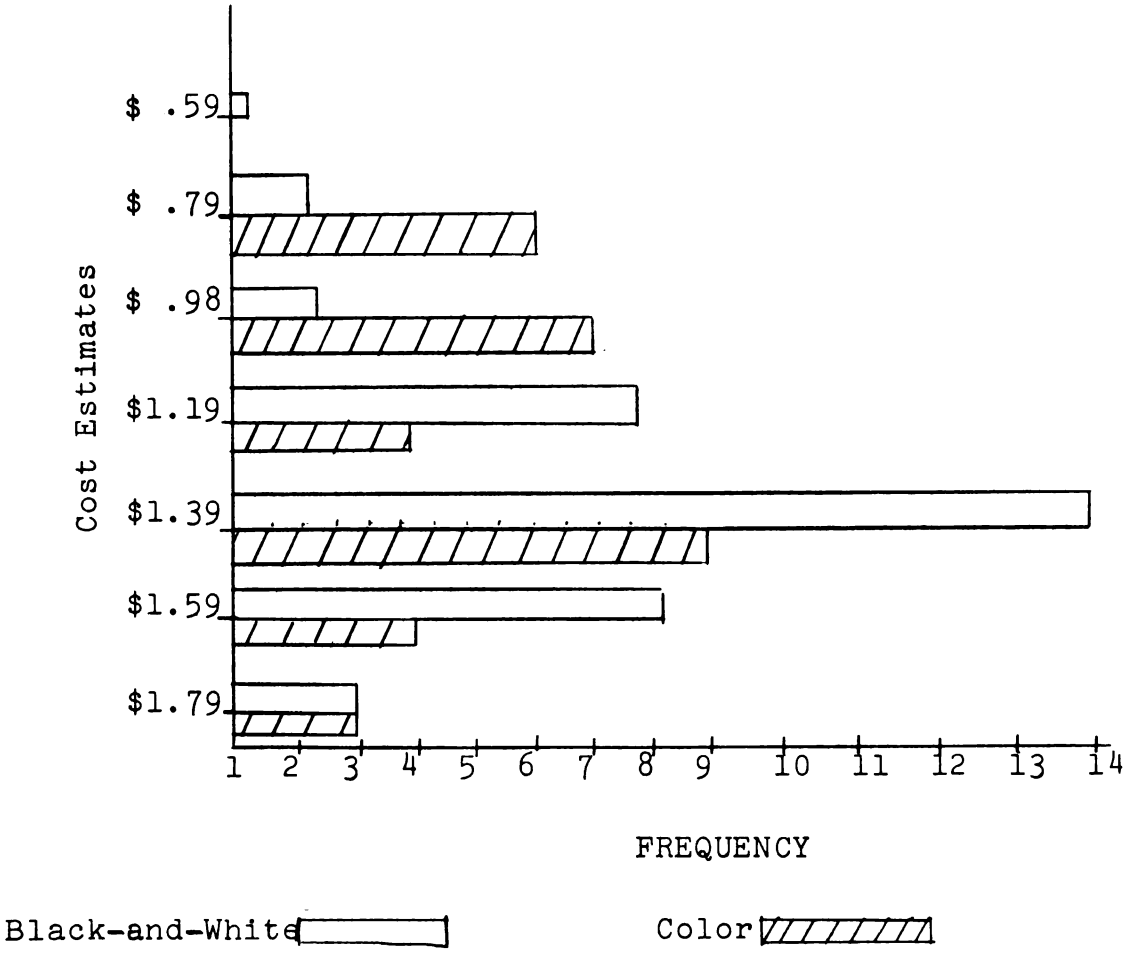


FIGURE 6

COMPARISON OF FREQUENCY OF COST ESTIMATES
OF JOHNSON'S KLEAR FLOOR WAX
AFTER VIEWING OF COMMERCIAL

	$.59	$.79	$.98	$1.19	$1.39	$1.59	$1.79
B/W	1	2	2	8	14	8	3
COLOR	0	6	7	4	9	4	3

CHI SQUARE	ALPHA
5.291	.03



VI. CONCLUSIONS AND RECOMMENDATIONS

There is little evidence from this experiment to support the belief that color commercials are more effective than black-and-white. Few significant differences were found in any of the four areas studied: attitudes, interest, recall, and perceived value. Furthermore, no commercial benefited from color in more than two areas.

In one case, attitudes were more favorable toward color, and interest was greater, but recall was not affected. In another, interest ratings were higher for color, but neither attitudes nor recall were affected; and in still another, color improved recall, but did nothing for attitudes or interest.

Finally, neither the nature of the product (such as "food"), nor the type of commercial presentation (such as "animation") did much to insure added commercial effectiveness through use of color.

Attitudes Toward Commercials

Significant attitudinal differences between color and black-and-white were found for only four of the ten commercials tested; two favored color, and two favored black-and-white. Hypothesis #1 was not supported.

Apparently, color did not make enough of an impression on viewers to influence their attitudes.

One of the products which was more responsive to color in this case was Pepto Bismol--a drug--popularly believed to stand no chance of gaining anything from color. Obviously, product class has little to do with color's effect on attitudes.

The two commercials favored by the black-and-white medium were both rated high in demonstration. Advertisers currently using black-and-white demonstration commercials might think twice before rushing into color in hopes of increasing commercial effectiveness. Similarly, attitudes appear no more favorable toward color than toward black-and-white, where an animated commercial or one with a high emotional appeal is involved.

Attitudes toward color commercials were found to fall within a more "restricted range" than was true for black-and-white. That is, the groups viewing in color did not need as many categories to describe their attitudes as did those viewing in black-and-white. If color helps viewers to pinpoint the intensity of their attitudes, perhaps it enhances understanding of the commercial message.

Interest

Interest change during commercial viewing was not affected by use of color. Hypothesis #2 was not supported.

The added visual variety of color was apparently not a plus factor in this instance.

The familiar expression in advertising corners: "You've got to interest people right off the bat," seems to hold true across both black-and-white and color media. Respondents who indicated a change in interest (a slight change, if any) did so about equally across black-and-white and color groups. If they were interested at thirty-seconds, they tended to remain so at sixty-seconds. Likewise, if they had not become interested by the halfway point of a commercial, they did not develop much interest by the time it was over.

When a change in interest did occur, in eight out of ten instances, however, it was a more favorable change in the case of color than it was in the case of black-and-white (though not a significant one). If the commercial became interesting for both groups, it became more interesting for color viewers; if it became dull, it became less dull for color viewers. Since all other factors were held constant, it appears that color held enough interest within itself to keep color viewers at least somewhat more interested than black-and-white viewers.

One of the major questions currently debated in both advertising and television circles is: "When will the 'novelty' of color wear off? How long will it be before people accept color just the way they accept

black-and-white today?" When such a time arrives, an added "interest" in color itself may no longer by noticeable.

Interest and demonstration seemed more positively related than attitude and demonstration; the five commercials which claimed an increase in interest during viewing were the five rated highest in demonstration. Thus, respondents were able to distinguish between their "liking" for a commercial and their interest during its presentation. (Sometimes it is not too important to an advertiser whether or not his commercial is considered "good" by his audience; if interest, believability, memorability, or other factors are present in high degree, he may very well be satisfied that the commercial is "effective" enough to lead ultimately to an increase in sales).

Interest ratings taken individually appeared to be significant for color in four cases, and for black-and-white in two. Here, the notion that color is beneficial to all food commercials breaks down; Post Grape Nuts and Post Alpha Bits were more effective in color, and Kraft English Toffee in black-and-white. Again, something other than the product or product type is at work. Perhaps the family scenes (Post Grape Nuts commercial) and the children (Post Alpha Bits commercial) served to create more interest than did the single male presenter (Kraft English Toffee commercial).

Recall

Color did enhance memorability. Both immediate and delayed recall scores were higher for color than for black-and-white in almost every case, though the difference was rarely significant. Thus, Hypothesis #3 was supported, though not strongly.

The realism of color does seem to be to the advertiser's advantage. If people can remember what was said and shown in a commercial when they are later presented with a questionnaire, it is reasonable to assume that when they are in a supermarket, they will remember the product if they see it on the shelf. Nearly every advertiser who participated in the survey mentioned previously (conducted in the fall of 1965) stressed the importance of color in "fixing the product more firmly in the consumer's mind, so that she will recognize it more quickly at the store."

Recall questions concerning cost were, without exception, remembered by a larger number of color viewers than black-and-white viewers, a week after the commercials were shown. Consciously or subconsciously, the question of cost seemed to remain with color viewers more than it did with black-and-white viewers.

Perceived Value

Products did not have a higher perceived value when shown in color than when shown in black-and-white. Hypothesis

#4 was not supported. The "quality" of color was not found to bias perception of value at all, in the case of the "expensive" product (Sunbeam Electric Toothbrush) tested; and strangely enough, in the case of the "inexpensive" product (Johnson's Klear Floor Wax), color appeared to bias cost estimates in the direction opposite to the one hypothesized! Here, however, in checking through findings in the other three areas studied, it appears that color viewers had more favorable attitudes toward the commercial, a higher rate of interest during viewing, and a higher degree of recall of sales points than black-and-white viewers. Perhaps since color viewers responded so favorably to the commercial, they rationalized that cost would not be high (and, thus, they would be more willing to buy the product).

Summary

With very few exceptions, the commercials used in this experiment were not found to be more effective in color than they were in black-and-white. Hypothesis #3 was the only one supported--and even here, evidence was weak. Perhaps some of the 'novelty' of color has already worn off; for no color commercial tested were attitudes, interest, and recall more favorable than for the black-and-white counterpart.

Even in the case of memorability--where color had its greatest effect--time proved detrimental. Color

viewers may have a greater amount of immediate recall than black-and-white viewers; but if they lose this advantage a week or ten days later, when they happen to come in contact with the product, where is the benefit to the advertiser?

When media costs are added over a thirteen-week period, production costs of color commercials may not be much higher than black-and-white. Whether this is true in all cases is still open to speculation; many advertisers insist that factors other than media costs sometimes contribute to an overall increase in color costs.

At present, there is no question but that color commercials take longer to process than black-and-white commercials--and for campaign purposes, this can be critical. It does not seem, therefore, that color commercials are a "necessity" at this time. When color set penetration passes the fifty-per cent mark (by which time color programing will undoubtedly by 100%), the black-and-white advertiser may indeed look as if he "can't afford" color (and may, therefore, lose favor with his audience).

Until such time, however, or until research reveals a more definite advantage for color, the extra time and cost involved do not, in many cases, appear justified.

Future Research

A factor analysis of the ten commercials tested would shed more light on the message elements contributing to the findings presented here. Similarly, studies of possible correlations between attitudes, interest, and recall--and, perhaps, use of product demonstration and emotional appeal--might indicate more effective ways in which to present color commercials.

Correlations between the findings in this study and attitudes toward the actual products shown in commercials might reveal other explanations for the differences found; then, too, product usage (and frequency of usage) could easily affect attitudes toward commercials.

Finally, it would prove valuable to note whether or not attitudes toward the products changed as a result of viewing the commercials in color or in black-and-white.

Data regarding frequency of product usage, as well as attitudes toward the products in question--both before and after commercial viewing--has already been obtained. The twenty-five minutes allotted for each part of the experiment was ample for inclusion of the above categories as part of the questionnaires.

FOOTNOTES

[1]Letters from advertisers and advertising agencies listed on pages 49-50 of the bibliography.

[2]"Color Television--Today," Report prepared by Foote, Cone & Belding, Chicago, June, 1965, Cited hereafter as FC&B Report.

[3]"Color Television 1965," Report prepared by D'Arcy Advertising Company, New York, March 20, 1965.

[4]FC&B Report, June, 1965.

[5]"Color Advertiser List Growing, Growing," Sponsor, XX, No. 4 (February 21, 1966), pp. 72-73.

[6]"Happiness and Headaches," Sponsor, XX, No. 4 (February 21, 1966), pp. 50-51.

[7]"A Review of Color Television," Report prepared by Ketchum, MacLeod & Grove, New York, July 21, 1965.

[8]Darrell B. Lucas and Steuart H. Britt, Advertising Psychology and Research (New York: McGraw-Hill, 1950), p. 304.

[9]"Relative Effectiveness of Color and Black-and-White in Instructional Films," Human Engineering Report SDC 269-7-28 prepared by A.W. VanderMeer, June, 1952 (in the files of the Audio-Visual Department, Michigan State University). Cited hereafter as VanderMeer Report.

[10]"Color Television," Report prepared by Ted Bates & Company, New York, May, 1965.

[11]National Broadcasting Company, Close-Up on Color Television (New York: National Broadcasting Company, 1965), p. 50.

[12]Edith R. Brandt, "The Memory Value of Advertisements," New York, June, 1925, p. 8. (Appeared in Archives of Psychology, No. 79). Cited hereafter as Brandt Report.

[13]Schwerin Research Corporation, Schwerin Research Bulletin (New York: Schwerin Research Corporation, April, 1965), p. 4.

[14]VanderMeer Report, June, 1952.

[15]Lucas and Britt, p. 316.

[16]Gerald R. Miller, "On Defining Communication: Another Stab," Paper used in Communication Theory 920, Michigan State University, winter, 1966. (Mimeographed).

[17]Russell H. Colley, Defining Advertising Goals for Measured Advertising Results (New York: Association of National Advertisers, 1961), pp. 35-36.

[18]Darrell B. Lucas and Steuart H. Britt, Measuring Advertising Effectiveness (New York: McGraw-Hill, 1963), p. 17.

[19]Carl I. Hovland, Irving L. Janis, and Harold H. Kelley, Communication and Persuasion (New Haven: Yale University Press, 1953), p. 250.

[20]Brandt Report, June, 1925, p. 10.

[21]David K. Berlo, The Process of Communication (New York: Holt, Rinehart & Winston, 1960), p. 231.

[22]"Agencies Work Overtime to Meet Color Demands," Sponsor, XX, No. 4 (February 21, 1966), p. 82.

[23]Hovland, Janis, and Kelley, p. 245.

[24]Letter from W. F. Greene, Vice President of Gallop & Robinson, Inc., New York, January 13, 1966.

BIBLIOGRAPHY

BIBLIOGRAPHY

Books

Berlo, David K. The Process of Communication. New York: Holt, Rinehart & Winston, 1960.

Colley, Russell H. Defining Advertising Goals for Measured Advertising Results. New York: Association of National Advertisers, 1961.

Hovland, Carl I., Janis, Irving L., and Kelley, Harold H. Communication and Persuasion. New Haven: Yale University Press, 1953.

Lucas, Darrell B., and Britt, Steuart H. Advertising Psychology and Research. New York: McGraw-Hill, 1950.

_____. Measuring Advertising Effectiveness. New York; McGraw-Hill, 1963.

Periodicals

"A Long Look at Color by 4A's" Broadcasting, LXIX, No. 18 (November 1, 1965), 34-36.

"Agencies Work Overtime to Meet Color Demand," Sponsor, XX, No. 4 (February 21, 1966), 81-82.

"All-Color TV," Broadcasting, LXVIII, No. 25 (June 21, 1965), 27-29.

"The Big Switch to Color Television," Broadcasting, LXIX, No. 6 (August 9, 1965), 54-56.

"Boom Times for Color Backlog," Broadcasting, LXIX, No. 12 (September 20, 1965), 27-30.

"Color Advertiser List Growing, Growing," Sponsor, XX, No. 4 (February 21, 1966), 72-73.

"Color Television: A Special Report," Broadcasting, LXX, No. 1 (January 3, 1966), 29-107.

"Color TV: The Billion Dollar Market in '65," Sponsor, XIX, No. 4 (January 25, 1965), 31-65.

"Commercials Blossom into Color," Broadcasting, LXIX, No. 2 (July 12, 1965), 35-40.

"Happiness and Headaches," Sponsor, XX, No. 4 (February 21, 1966), 50-51.

"How Not to Shoot a Color Commercial," Sponsor, XIX, No. 4 (August 9, 1965), 49.

"How Soon Will Color Dominate TV?" Broadcasting, LXVIII, No. 3 (July 18, 1965), 31-38.

"Special Color Section," Advertising Age, XXXVI, No. 48 (November 29, 1965), 109-184.

"Special Report: Television," Broadcasting, LXVII, No. 20 (November 16, 1964), 76-87.

"Spotlight on Color Cast," Television Age, XIII, No. 10 (December 6, 1965), 31-60.

Reports

Brandt, Edith R. "The Memory Value of Advertisements." New York: June, 1925.

Gallup & Robinson. Are Color TV Commercials Worth the Extra Cost? New York: Association of National Advertisers, December, 1965.

Grey Advertising. Grey Matter. Newsletter. New York: March, 1965.

National Broadcasting Company. Close-Up on Color Television. New York: National Broadcasting Company, 1965.

_____. Color Makes the Difference for TV Audience. Report from TV Sales Planning. New York: National Broadcasting Company, June, 1965.

_____. NBC Research Bulletin #264. New York: National Broadcasting Company, March 26, 1964.

_____. NBC Research Bulletin #272. New York: National Broadcasting Company, March 4, 1965.

_____. NBC Research Bulletin #278. New York: National Broadcasting Company, May 21, 1965.

_____. NBC Research Bulletin #285. New York: National Broadcasting Company, August 10, 1965.

_____. NBC Research Bulletin #287. New York: National Broadcasting Company, September 1, 1965.

_____. NBC Research Bulletin #288. New York: National Broadcasting Company, November 1, 1965.

_____. Research Highlights. New York: National Broadcasting Company, March 2, 1965.

_____. Research Highlights. New York: National Broadcasting Company, May 11, 1965

_____. Research Highlights. New York: National Broadcasting Company, September 3, 1965.

Schwerin Research Corporation. Schwerin Research Bulletin. New York: Schwerin Research Corporation, April, 1965.

TV Film Trends. Newsletter. New York: Eastman Kodak Company, November, 1964.

TV Film Trends. Newsletter, New York: Eastman Kodak Company, August, 1965.

TV Film Trends. Newsletter. New York: Eastman Kodak Company, September, 1965.

TV Film Trends. Newsletter. New York: Eastman Kodak Company, October, 1965

VanderMeer, A. W. "Relative Effectiveness of Color and Black-and-White in Instructional Films." Human Engineering Report SDC 269-7-28. June, 1952.

Unpublished Material

Bates, Ted & Company. "Color Television." Agency report, New York, May, 1965.

Batten, Barton, Durstine & Osborn. "Color Television." Agency report, New York, April 26, 1965.

Burnett, Leo Company. "Color Television--1965." Agency report, Chicago, April, 1965.

D'Arcy Advertising Company. "Color Television 1965." Agency report, New York, March 20, 1965.

Doyle Dane Bernbach. "Color in Television-A Review." Agency report, Los Angeles, June 25, 1965.

Foote, Cone & Belding. "Color Television--Today." Agency report, Chicago, June, 1965.

Greene, W. F. Letter from Vice President of Gallup & Robinson, Inc., New York, January 13, 1966.

Kenyon & Eckhardt. "Color Television Status Report." Agency report, New York, July 21, 1965.

Ketchum, MacLeod & Grove. "A Review of Color Television." Agency report, New York, July 21, 1965.

Miller, Gerald R. "On Defining Communication: Another Stab." Paper used in Communication Theory 920, Michigan State University, winter, 1966. (Mimeographed).

Sarnoff, Thomas W. "Color the Peacock Gold." Text of speech made to San Francisco Advertising Club, October 27, 1965.

Sullivan, Stauffer, Colwell & Bayles. "Color Television." Agency report, New York, May 17, 1965.

Young & Rubicam. "Color Television Today." Agency report, New York, July 6, 1965.

Letters: Responses to Survey Conducted Fall, 1965

Advertisers

American Motors Corporation.
Armour and Company.
Avon Products, Inc.
Campbell Soup Company.
Canada Dry Corporation.
Falstaff Brewing Corporation.
Ford Motor Company.
R. T. French Company.
Frito-Lay, Inc.

General Mills, Inc.
Green Giant Company.
Theo. Hamm Brewing Company.
Kellogg Company.
Liggett & Myers Tobacco Company.
Max Factor & Company.
Maybelline Company.
Miller Brewing Company.
National Biscuit Company.
Pabst Brewing Company.
Quaker Oats Company.
R. J. Reynolds Tobacco Company.
Royal Crown Cola Company.
Standard Oil Company.
Texaco, Inc.

Advertising Agencies

N. W. Ayer & Son, Inc.
Ted Bates & Company, Inc.
Batten, Barton, Durstine & Osborn, Inc.
Benton & Bowles, Inc.
D. P. Brother & Company
Leo Burnett Company, Inc.
Campbell-Ewald Company.
Campbell-Mithun, Inc.
Compton Advertising, Inc.
Dancer-Fitzgerald-Sample, Inc.
D'Arcy Advertising Company
Doyle Dane Bernbach, Inc.
Draper Daniels, Inc.
Erwin Wasey, Inc.
Foote, Cone & Belding, Inc.
Fuller & Smith & Ross, Inc.
Grey Advertising, Inc.
Kenyon & Eckhardt, Inc.
Ketchum, MacLeod & Grove, Inc.
MacManus, John & Adams, Inc.
McCann-Erickson, Inc.
Needham, Harper & Steers, Inc.
Norman, Craig & Kummel, Inc.
Ogilvy, Benson & Mather, Inc.
Sullivan, Stauffer, Colwell & Bayles, Inc.
J. Walter Thompson Company.
Young & Rubicam, Inc.

APPENDIX A

QUESTIONNAIRES

DO NOT WRITE IN THIS COLUMN

First Questionnaire
May 9, 1966

TV MESSAGE STUDY
Department of Advertising, MSU
May, 1966

4 4 0 2 (1-4)

NAME: _____

LOCAL ADDRESS: _____

(5-7)

___ (8)

___ (9)

___ (10)

INSTRUCTIONS

The purpose of the test below is to measure the meanings of certain things by having you judge them against a series of descriptive scales. Please make your judgments on the basis of what each concept means to you.

Here is how to use the scales.

Each scale has seven intervals, to give you an opportunity to show the intensity of your judgment. For example, if you judge FORD to be a Very Good car, place an "X" in the space next to Good. If you judge FORD to be Quite Good, put your "X" in the second space. If only Slightly Good, place it in the third space. If you feel FORD is neither Good nor Bad, or if you have no judgment one way or the other, place your "X" in the center space. Likewise, if you feel FORD is Very Bad, put your "X" next to Bad; Quite Bad, second space; Slightly Bad, the third space from Bad.

FORD CAR

BAD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :GOOD
3 2 1 0 1 2 3

Got the idea? Please rate each of the products below. Work fast, but do not skip any scales.

___ (1[illegible])

POST GRAPE NUTS

___(11) GOOD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :BAD
___(12) UNPLEASANT TASTE: ___ : ___ : ___ : ___ : ___ : ___ : ___ :PLEASANT TASTE
___(13) HIGH NUTRITION: ___ : ___ : ___ : ___ : ___ : ___ : ___ :LOW NUTRITION
___(14) HIGH IN CALORIES: ___ : ___ : ___ : ___ : ___ : ___ : ___ :LOW IN CALORIES
___(15) WOULD BUY IT: ___ : ___ : ___ : ___ : ___ : ___ : ___ :WOULD NOT BUY IT

PEPTO BISMOL

___(16) BAD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :GOOD
___(17) PLEASANT TASTE: ___ : ___ : ___ : ___ : ___ : ___ : ___ :UNPLEASANT TASTE
___(18) NOT SOOTHING: ___ : ___ : ___ : ___ : ___ : ___ : ___ :SOOTHING
___(19) FAST-ACTING: ___ : ___ : ___ : ___ : ___ : ___ : ___ :SLOW-ACTING
___(20) WOULD NOT BUY IT: ___ : ___ : ___ : ___ : ___ : ___ : ___ :WOULD BUY IT

SUNBEAM ELECTRIC TOOTHBRUSH

___(21) GOOD: ___:___:___:___:___:___:___:BAD
___(22) LOW QUALITY: ___:___:___:___:___:___:___:HIGH QUALITY
___(23) DEPENDABLE: ___:___:___:___:___:___:___:UNDEPENDABLE
___(24) LOW PERFORMANCE: ___:___:___:___:___:___:___:HIGH PERFORMANCE
___(25) WOULD BUY IT: ___:___:___:___:___:___:___:WOULD NOT BUY IT

KLEENEX FACIAL TISSUE

___(26) BAD: ___:___:___:___:___:___:___:GOOD
___(27) SMOOTH: ___:___:___:___:___:___:___:ROUGH
___(28) WEAK: ___:___:___:___:___:___:___:STRONG
___(29) CONVENIENT: ___:___:___:___:___:___:___:INCONVENIENT
___(30) WOULD NOT BUY IT: ___:___:___:___:___:___:___:WOULD BUY IT

BEECHNUT 5 MINT CHEWING GUM

___(31) GOOD: ___:___:___:___:___:___:___:BAD
___(32) UNREFRESHING: ___:___:___:___:___:___:___:REFRESHING
___(33) PLEASANT TASTE: ___:___:___:___:___:___:___:UNPLEASANT TASTE
___(34) WEAK FLAVOR: ___:___:___:___:___:___:___:STRONG FLAVOR
___(35) WOULD BUY IT: ___:___:___:___:___:___:___:WOULD NOT BUY IT

	How Often Do You Use:	Always	Sometimes	Never
___(36)	POST GRAPE NUTS	( )	( )	( )
___(37)	PEPTO BISMOL	( )	( )	( )
___(38)	SUNBEAM ELECTRIC TOOTHBRUSH	( )	( )	( )
___(39)	KLEENEX FACIAL TISSUE	( )	( )	( )
___(40)	BEECHNUT 5 MINT CHEWING GUM	( )	( )	( )

S T O P! AND WAIT FOR FURTHER INSTRUCTIONS.

You will now see a commercial for each of these products. We are interested in your reactions to each commercial at two different times -- once during the commercial, and once after it is over. Again, the space next to Interesting is for Very Interesting, and the space next to Dull for Very Dull.

POST GRAPE NUTS COMMERCIAL

___(41) Interesting: ___:___:___:___:___:___:___:Dull
___(42) Interesting: ___:___:___:___:___:___:___:Dull

PEPTO BISMOL COMMERCIAL

___(43) Interesting: ___:___:___:___:___:___:___:Dull
___(44) Interesting: ___:___:___:___:___:___:___:Dull

SUNBEAM ELECTRIC TOOTHBRUSH COMMERCIAL

___(45) Interesting: ___:___:___:___:___:___:___:Dull
___(46) Interesting: ___:___:___:___:___:___:___:Dull

KLEENEX FACIAL TISSUE COMMERCIAL

___(47) Interesting: ___:___:___:___:___:___:___:Dull
___(48) Interesting: ___:___:___:___:___:___:___:Dull

BEECHNUT 5 MINT CHEWING GUM COMMERCIAL

___(49) Interesting: ___:___:___:___:___:___:___:Dull
___(50) Interesting: ___:___:___:___:___:___:___:Dull

DO NOT WRITE IN THIS COLUMN

We are also interested in your evaluations of each commercial. Please indicate your opinions below, in the same manner as before.

POST GRAPE NUTS COMMERCIAL

____(51)	GOOD:	___	___	___	___	___	___	___	BAD
____(52)	WEAK:	___	___	___	___	___	___	___	STRONG
____(53)	HONEST:	___	___	___	___	___	___	___	DISHONEST
____(54)	UNPLEASANT:	___	___	___	___	___	___	___	PLEASANT
____(55)	FAST:	___	___	___	___	___	___	___	SLOW

PEPTO BISMOL COMMERCIAL

____(56)	BAD:	___	___	___	___	___	___	___	GOOD
____(57)	STRONG:	___	___	___	___	___	___	___	WEAK
____(58)	DISHONEST:	___	___	___	___	___	___	___	HONEST
____(59)	PLEASANT:	___	___	___	___	___	___	___	UNPLEASANT
____(60)	SLOW:	___	___	___	___	___	___	___	FAST

SUNBEAM ELECTRIC TOOTHBRUSH COMMERCIAL

____(61)	GOOD:	___	___	___	___	___	___	___	BAD
____(62)	WEAK:	___	___	___	___	___	___	___	STRONG
____(63)	HONEST:	___	___	___	___	___	___	___	DISHONEST
____(64)	UNPLEASANT:	___	___	___	___	___	___	___	PLEASANT
____(65)	FAST:	___	___	___	___	___	___	___	SLOW

Estimate the cost of the Sunbeam Electric Toothbrush:

____(66)

$9.95 $11.95 $13.95 $15.95 $17.95 $19.95 $21.95

KLEENEX FACIAL TISSUE COMMERCIAL

____(67)	BAD:	___	___	___	___	___	___	___	GOOD
____(68)	STRONG:	___	___	___	___	___	___	___	WEAK
____(69)	DISHONEST:	___	___	___	___	___	___	___	HONEST
____(70)	PLEASANT:	___	___	___	___	___	___	___	UNPLEASANT
____(71)	SLOW:	___	___	___	___	___	___	___	FAST

BEECHNUT 5 MINT CHEWING GUM COMMERCIAL

____(72)	GOOD:	___	___	___	___	___	___	___	BAD
____(73)	WEAK:	___	___	___	___	___	___	___	STRONG
____(74)	HONEST:	___	___	___	___	___	___	___	DISHONEST
____(75)	UNPLEASANT:	___	___	___	___	___	___	___	PLEASANT
____(76)	FAST:	___	___	___	___	___	___	___	SLOW

DO NOT WRITE IN THIS COLUMN

Below are lists of sales points -- some of which were in the commercials you just saw, and some of which were not. Indicate in the spaces provided, the sales points which you are SURE were in the commercials, those which you think MIGHT HAVE BEEN in the commercials, and those which you are quite certain were NOT in the commercials. Don't think back to similar commercials which you may have seen elsewhere; think only of the commercials you just saw. Please do not omit any items.

POST GRAPE NUTS COMMERCIAL

			YES	MAYBE	NO
____(41)	1.	This cereal is high in protein.	( )	( )	( )
____(42)	2.	This cereal is available in the Regular or new Family Size.	( )	( )	( )
____(43)	3.	Grape Nuts are crunchy, toasted nuggets.	( )	( )	( )
____(44)	4.	This cereal provides active people with lots of energy.	( )	( )	( )
____(45)	5.	This cereal is high in vitamins and minerals.	( )	( )	( )
____(46)	6.	This cereal is priced the same as other Post cereals.	( )	( )	( )
____(47)	7.	Grape Nuts cost less if you buy two boxes.	( )	( )	( )
____(48)	8.	This cereal is lower in calories than other dry cereals.	( )	( )	( )

PEPTO BISMOL COMMERCIAL

			YES	MAYBE	NO
____(49)	1.	Pepto Bismol gives fast, long-lasting relief.	( )	( )	( )
____(50)	2.	Pepto Bismol is available in the Small or Regular size bottles.	( )	( )	( )
____(51)	3.	Pepto Bismol now has a new cherry flavor.	( )	( )	( )
____(52)	4.	Pepto Bismol is available in the regular or new children's formulas.	( )	( )	( )
____(53)	5.	Pepto Bismol is used by many leading hospitals.	( )	( )	( )
____(54)	6.	Pepto Bismol is available in liquid or tablet form.	( )	( )	( )
____(55)	7.	Pepto Bismol costs a little more than other upset stomach remedies.	( )	( )	( )
____(56)	8.	Pepto Bismol has coatability, for smooth and gentle action.	( )	( )	( )

SUNBEAM ELECTRIC TOOTHBRUSH COMMERCIAL

			YES	MAYBE	NO
____(57)	1.	This toothbrush cuts brushing time in half.	( )	( )	( )
____(58)	2.	This toothbrush comes with a two-year guarantee.	( )	( )	( )
____(59)	3.	This toothbrush weighs only four ounces.	( )	( )	( )
____(60)	4.	This toothbrush is safe and easy to use.	( )	( )	( )
____(61)	5.	This toothbrush contains a rechargeable battery.	( )	( )	( )
____(62)	6.	This toothbrush, though electric, is cordless.	( )	( )	( )
____(63)	7.	This toothbrush is available in a variety of models.	( )	( )	( )
____(64)	8.	This toothbrush brushes in an up-and-down pattern.	( )	( )	( )

KLEENEX FACIAL TISSUE COMMERCIAL

			YES	MAYBE	NO
____(65)	1.	This facial tissue is available in different textures.	( )	( )	( )
____(66)	2.	Kleenex Juniors are less expensive than the other sizes.	( )	( )	( )
____(67)	3.	These facial tissues are soft, yet durable.	( )	( )	( )
____(68)	4.	Kleenex Regulars come in convenient space-saver boxes.	( )	( )	( )
____(69)	5.	Man-Size tissues are three layers thick.	( )	( )	( )
____(70)	6.	These facial tissues are available in a variety of colors.	( )	( )	( )
____(71)	7.	These tissues are available in single or double-quantity boxes.	( )	( )	( )
____(72)	8.	Man-Size tissues are twelve inches square.	( )	( )	( )

BEECHNUT 5 MINT CHEWING GUM COMMERCIAL

			YES	MAYBE	NO
____(73)	1.	This gum is as sweet as candy.	( )	( )	( )
____(74)	2.	This gum comes in five different flavors.	( )	( )	( )
____(75)	3.	This gum stays moist -- never dries out.	( )	( )	( )
____(76)	4.	This gum is brand new from Beechnut.	( )	( )	( )
____(77)	5.	This gum is available in the regular or sugarless varieties.	( )	( )	( )
____(78)	6.	This gum helps keep teeth white.	( )	( )	( )
____(79)	7.	This gum has a refreshing and long-lasting flavor.	( )	( )	( )
____(80)	8.	This gum has a fresh fruit flavor.	( )	( )	( )

DO NOT WRITE IN THIS COLUMN

Second Questionnaire
May 9, 1966

TV MESSAGE STUDY
Department of Advertising, MSU
May, 1966

4 4 0 2 (1-4)

NAME: _____

LOCAL ADDRESS: _____

(5-7)

___ (8)

___ (9)

___ (10)

INSTRUCTIONS

The purpose of the test below is to measure the meanings of certain things by having you judge them against a series of descriptive scales. Please make your judgments on the basis of what each concept means to you.

Here is how to use the scales.

Each scale has seven intervals, to give you an opportunity to show the intensity of your judgment. For example, if you judge FORD to be a Very Good car, place an "X" in the space next to Good. If you judge FORD to be Quite Good, put your "X" in the second space. If only Slightly Good, place it in the third space. If you feel FORD is neither Good nor Bad, or if you have no judgment one way or the other, place your "X" in the center space. Likewise, if you feel FORD is Very Bad, put your "X" next to Bad; Quite Bad, second space; Slightly Bad, the third space from Bad.

FORD CAR

BAD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :GOOD
3 2 1 0 1 2 3

Got the idea? Please rate each of the products below. Work fast, but do not skip any scales.

JOHNSON'S KLEAR FLOOR WAX

___ (11) GOOD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :BAD
___ (12) LOW QUALITY: ___ : ___ : ___ : ___ : ___ : ___ : ___ :HIGH QUALITY
___ (13) EASY TO USE: ___ : ___ : ___ : ___ : ___ : ___ : ___ :DIFFICULT TO USE
___ (14) LASTS SHORT TIME: ___ : ___ : ___ : ___ : ___ : ___ : ___ :LASTS LONG TIME
___ (15) WOULD BUY IT: ___ : ___ : ___ : ___ : ___ : ___ : ___ :WOULD NOT BUY IT

KRAFT ENGLISH TOFFEE

___ (16) BAD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :GOOD
___ (17) PLEASANT TASTE: ___ : ___ : ___ : ___ : ___ : ___ : ___ :UNPLEASANT TASTE
___ (18) UNREFRESHING: ___ : ___ : ___ : ___ : ___ : ___ : ___ :REFRESHING
___ (19) LOW IN CALORIES: ___ : ___ : ___ : ___ : ___ : ___ : ___ :HIGH IN CALORIES
___ (20) WOULD NOT BUY IT: ___ : ___ : ___ : ___ : ___ : ___ : ___ :WOULD BUY IT

POST ALPHA BITS

____(21)	GOOD:	___	___	___	___	___	___	___	BAD
____(22)	UNPLEASANT TASTE:	___	___	___	___	___	___	___	PLEASANT TASTE
____(23)	HIGH NUTRITION:	___	___	___	___	___	___	___	LOW NUTRITION
____(24)	HIGH IN CALORIES:	___	___	___	___	___	___	___	LOW IN CALORIES
____(25)	WOULD BUY IT:	___	___	___	___	___	___	___	WOULD NOT BUY IT

SUNBEAM ELECTRIC KNIFE

____(26)	BAD:	___	___	___	___	___	___	___	GOOD
____(27)	HIGH QUALITY:	___	___	___	___	___	___	___	LOW QUALITY
____(28)	UNDEPENDABLE:	___	___	___	___	___	___	___	DEPENDABLE
____(29)	HIGH PERFORMANCE:	___	___	___	___	___	___	___	LOW PERFORMANCE
____(30)	WOULD NOT BUY IT:	___	___	___	___	___	___	___	WOULD BUY IT

GRAVY TRAIN DOG FOOD

____(31)	GOOD:	___	___	___	___	___	___	___	BAD
____(32)	UNPLEASANT TASTE:	___	___	___	___	___	___	___	PLEASANT TASTE
____(33)	HIGH NUTRITION:	___	___	___	___	___	___	___	LOW NUTRITION
____(34)	GIVES LOW ENERGY:	___	___	___	___	___	___	___	GIVES HIGH ENERGY
____(35)	WOULD BUY IT:	___	___	___	___	___	___	___	WOULD NOT BUY IT

	How Often Do You Use:	Always	Sometimes	Never
____(36)	JOHNSON'S KLEAR FLOOR WAX	( )	( )	( )
____(37)	KRAFT ENGLISH TOFFEE	( )	( )	( )
____(38)	POST ALPHA BITS	( )	( )	( )
____(39)	SUNBEAM ELECTRIC KNIFE	( )	( )	( )
____(40)	GRAVY TRAIN DOG FOOD	( )	( )	( )

S T O P! AND WAIT FOR FURTHER INSTRUCTIONS.

You will now see a commercial for each of these products. We are interested in your reactions to each commercial at two different times -- once during the commercial, and once after it is over. Again, the space next to Interesting is for Very Interesting, and the space next to Dull is for Very Dull.

JOHNSON'S KLEAR FLOOR WAX COMMERCIAL

____(41)	Interesting:	___	___	___	___	___	___	___	Dull
____(42)	Interesting:	___	___	___	___	___	___	___	Dull

KRAFT ENGLISH TOFFEE COMMERCIAL

____(43)	Interesting:	___	___	___	___	___	___	___	Dull
____(44)	Interesting:	___	___	___	___	___	___	___	Dull

POST ALPHA BITS COMMERCIAL

____(45)	Interesting:	___	___	___	___	___	___	___	Dull
____(46)	Interesting:	___	___	___	___	___	___	___	Dull

SUNBEAM ELECTRIC KNIFE COMMERCIAL

____(47)	Interesting:	___	___	___	___	___	___	___	Dull
____(48)	Interesting:	___	___	___	___	___	___	___	Dull

GRAVY TRAIN DOG FOOD COMMERCIAL

____(49)	Interesting:	___	___	___	___	___	___	___	Dull
____(50)	Interesting:	___	___	___	___	___	___	___	Dull

DO NOT WRITE IN THIS COLUMN

We are also interested in your evaluations of each commercial. Please indicate your opinions below, in the same manner as before.

JOHNSON'S KLEAR FLOOR WAX COMMERCIAL

____(51)	GOOD:	___	: ___	: ___	: ___	: ___	: ___	: ___	:BAD
____(52)	WEAK:	___	: ___	: ___	: ___	: ___	: ___	: ___	:STRONG
____(53)	HONEST:	___	: ___	: ___	: ___	: ___	: ___	: ___	:DISHONEST
____(54)	UNPLEASANT:	___	: ___	: ___	: ___	: ___	: ___	: ___	:PLEASANT
____(55)	FAST:	___	: ___	: ___	: ___	: ___	: ___	: ___	:SLOW

Estimate the cost of Johnson's Klear Floor Wax:

____(56)

$.59 $.79 $.98 $1.19 $1.39 $1.59 $1.79

KRAFT ENGLISH TOFFEE COMMERCIAL

____(57)	BAD:	___	: ___	: ___	: ___	: ___	: ___	: ___	:GOOD
____(58)	STRONG:	___	: ___	: ___	: ___	: ___	: ___	: ___	:WEAK
____(59)	DISHONEST:	___	: ___	: ___	: ___	: ___	: ___	: ___	:HONEST
____(60)	PLEASANT:	___	: ___	: ___	: ___	: ___	: ___	: ___	:UNPLEASANT
____(61)	SLOW:	___	: ___	: ___	: ___	: ___	: ___	: ___	:FAST

POST ALPHA BITS COMMERCIAL

____(62)	GOOD:	___	: ___	: ___	: ___	: ___	: ___	: ___	:BAD
____(63)	WEAK:	___	: ___	: ___	: ___	: ___	: ___	: ___	:STRONG
____(64)	HONEST:	___	: ___	: ___	: ___	: ___	: ___	: ___	:DISHONEST
____(65)	UNPLEASANT:	___	: ___	: ___	: ___	: ___	: ___	: ___	:PLEASANT
____(66)	FAST:	___	: ___	: ___	: ___	: ___	: ___	: ___	:SLOW

SUNBEAM ELECTRIC KNIFE COMMERCIAL

____(67)	BAD:	___	: ___	: ___	: ___	: ___	: ___	: ___	:GOOD
____(68)	STRONG:	___	: ___	: ___	: ___	: ___	: ___	: ___	:WEAK
____(69)	DISHONEST:	___	: ___	: ___	: ___	: ___	: ___	: ___	:HONEST
____(70)	PLEASANT:	___	: ___	: ___	: ___	: ___	: ___	: ___	:UNPLEASANT
____(71)	SLOW:	___	: ___	: ___	: ___	: ___	: ___	: ___	:FAST

GRAVY TRAIN DOG FOOD COMMERCIAL

____(72)	GOOD:	___	: ___	: ___	: ___	: ___	: ___	: ___	:BAD
____(73)	WEAK:	___	: ___	: ___	: ___	: ___	: ___	: ___	:STRONG
____(74)	HONEST:	___	: ___	: ___	: ___	: ___	: ___	: ___	:DISHONEST
____(75)	UNPLEASANT:	___	: ___	: ___	: ___	: ___	: ___	: ___	:PLEASANT
____(76)	FAST:	___	: ___	: ___	: ___	: ___	: ___	: ___	:SLOW

DO NOT WRITE IN THIS COLUMN

Below are lists of sales points -- some of which were in the commercials you just saw, and some of which were not. Indicate in the spaces provided, the sales points which you are SURE were in the commercials, those which you think MIGHT HAVE BEEN in the commercials, and those which you are quite certain were NOT in the commercials. Don't think back to similar commercials which you may have seen elsewhere; think only of the commercials you just saw. Please do not omit any items.

JOHNSON'S KLEAR FLOOR WAX COMMERCIAL

			YES	MAYBE	NO
___(41)	1.	This floor wax never yellows asphalt tile.	( )	( )	( )
___(42)	2.	This floor wax adds depth to floors.	( )	( )	( )
___(43)	3.	This floor wax is made with an old, but reliable formula.	( )	( )	( )
___(44)	4.	Re-waxing is easy, thanks to a new applicator.	( )	( )	( )
___(45)	5.	This floor wax gives a long-lasting shine with just one coat.	( )	( )	( )
___(46)	6.	This floor wax is especially good for vinyl tile.	( )	( )	( )
___(47)	7.	This floor wax is scuff-resistant.	( )	( )	( )
___(48)	8.	This floor wax dries as clear as glass.	( )	( )	( )

KRAFT ENGLISH TOFFEE COMMERCIAL

			YES	MAYBE	NO
___(49)	1.	This toffee is made with pure sweet cream.	( )	( )	( )
___(50)	2.	This toffee has the original English flavor.	( )	( )	( )
___(51)	3.	This toffee comes in five distinct flavors.	( )	( )	( )
___(52)	4.	This toffee is extra chewy.	( )	( )	( )
___(53)	5.	This toffee sells for just 39¢ a box.	( )	( )	( )
___(54)	6.	This toffee comes in new party boxes.	( )	( )	( )
___(55)	7.	This toffee comes in different-sized pieces.	( )	( )	( )
___(56)	8.	This toffee is made in England.	( )	( )	( )

POST ALPHA BITS COMMERCIAL

			YES	MAYBE	NO
___(57)	1.	This cereal provides as much energy as a full meal.	( )	( )	( )
___(58)	2.	This cereal is priced the same as other Post cereals.	( )	( )	( )
___(59)	3.	Alpha Bits cost less if you buy two boxes.	( )	( )	( )
___(60)	4.	Alpha Bits are shaped in letters from A to Z.	( )	( )	( )
___(61)	5.	This cereal is available in the Regular or new Family Size.	( )	( )	( )
___(62)	6.	This cereal has more vitamins and minerals than other dry cereals.	( )	( )	( )
___(63)	7.	Alpha Bits are sugar-frosted.	( )	( )	( )
___(64)	8.	Alpha Bits are crispy.	( )	( )	( )

SUNBEAM ELECTRIC KNIFE COMMERCIAL

			YES	MAYBE	NO
___(65)	1.	This knife can be used indoors or outdoors.	( )	( )	( )
___(66)	2.	This knife slices, cuts, and peels, equally well.	( )	( )	( )
___(67)	3.	This knife automatically recharges in its storage rack.	( )	( )	( )
___(68)	4.	The tungsten tip of this knife stays sharp for years.	( )	( )	( )
___(69)	5.	This knife comes with a two-year guarantee.	( )	( )	( )
___(70)	6.	This knife is lightweight and easy to use.	( )	( )	( )
___(71)	7.	The blade of this knife is sharp to the very tip.	( )	( )	( )
___(72)	8.	This knife comes in both cord and cordless models.	( )	( )	( )

GRAVY TRAIN DOG FOOD COMMERCIAL

			YES	MAYBE	NO
___(73)	1.	This dog food is now available at a new low price.	( )	( )	( )
___(74)	2.	This dog food consists of crunchy bite-sized chunks.	( )	( )	( )
___(75)	3.	This dog food comes in three different flavors.	( )	( )	( )
___(76)	4.	This dog food has high nutritive value.	( )	( )	( )
___(77)	5.	This dog food makes its own gravy.	( )	( )	( )
___(78)	6.	This dog food gives coats a new gloss.	( )	( )	( )
___(79)	7.	This dog food gives eyes a new shine.	( )	( )	( )
___(80)	8.	This dog food is available in 5-pound or 25-pound bags.	( )	( )	( )

DO NOT WRITE IN THIS COLUMN

First Questionnaire
May 16, 1966

TV MESSAGE STUDY
Department of Advertising, MSU
May, 1966

4 4 0 2
(1-4)

NAME: _____

LOCAL ADDRESS: _____

(5-7)

(8)

(9)

(10)

INSTRUCTIONS

The purpose of the test below is to measure the meanings of certain things by having you judge them against a series of descriptive scales. Please make your judgments on the basis of what each concept means to you.

Here is how to use the scales.

Each scale has seven intervals, to give you an opportunity to show the intensity of your judgment. For example, if you judge FORD to be a Very Good car, place an "X" in the space next to Good. If you judge FORD to be Quite Good, put your "X" in the second space. If only Slightly Good, place it in the third space. If you feel FORD is neither Good nor Bad, or if you have no judgment one way or the other, place your "X" in the center space. Likewise, if you feel FORD is Very Bad, put your "X" next to Bad; Quite Bad, second space; Slightly Bad, the third space from Bad.

FORD CAR

BAD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :GOOD
3 2 1 0 1 2 3

Got the idea? Please rate each of the products below. Work fast, but do not skip any scales.

(11)

POST GRAPE NUTS

(11) GOOD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :BAD
(12) UNPLEASANT TASTE: ___ : ___ : ___ : ___ : ___ : ___ : ___ :PLEASANT TASTE
(13) HIGH NUTRITION: ___ : ___ : ___ : ___ : ___ : ___ : ___ :LOW NUTRITION
(14) HIGH IN CALORIES: ___ : ___ : ___ : ___ : ___ : ___ : ___ :LOW IN CALORIES
(15) WOULD BUY IT: ___ : ___ : ___ : ___ : ___ : ___ : ___ :WOULD NOT BUY IT

PEPTO BISMOL

(16) BAD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :GOOD
(17) PLEASANT TASTE: ___ : ___ : ___ : ___ : ___ : ___ : ___ :UNPLEASANT TASTE
(18) NOT SOOTHING: ___ : ___ : ___ : ___ : ___ : ___ : ___ :SOOTHING
(19) FAST-ACTING: ___ : ___ : ___ : ___ : ___ : ___ : ___ :SLOW-ACTING
(20) WOULD NOT BUY IT: ___ : ___ : ___ : ___ : ___ : ___ : ___ :WOULD BUY IT

SUNBEAM ELECTRIC TOOTHBRUSH

___(21) GOOD: ___:___:___:___:___:___:___:BAD
___(22) LOW QUALITY: ___:___:___:___:___:___:___:HIGH QUALITY
___(23) DEPENDABLE: ___:___:___:___:___:___:___:UNDEPENDABLE
___(24) LOW PERFORMANCE: ___:___:___:___:___:___:___:HIGH PERFORMANCE
___(25) WOULD BUY IT: ___:___:___:___:___:___:___:WOULD NOT BUY IT

KLEENEX FACIAL TISSUE

___(26) BAD: ___:___:___:___:___:___:___:GOOD
___(27) SMOOTH: ___:___:___:___:___:___:___:ROUGH
___(28) WEAK: ___:___:___:___:___:___:___:STRONG
___(29) CONVENIENT: ___:___:___:___:___:___:___:INCONVENIENT
___(30) WOULD NOT BUY IT: ___:___:___:___:___:___:___:WOULD BUY IT

BEECHNUT 5 MINT CHEWING GUM

___(31) GOOD: ___:___:___:___:___:___:___:BAD
___(32) UNREFRESHING: ___:___:___:___:___:___:___:REFRESHING
___(33) PLEASANT TASTE: ___:___:___:___:___:___:___:UNPLEASANT TASTE
___(34) WEAK FLAVOR: ___:___:___:___:___:___:___:STRONG FLAVOR
___(35) WOULD BUY IT: ___:___:___:___:___:___:___:WOULD NOT BUY IT

	How Often Do You Use:	Always	Sometimes	Never
___(36)	POST GRAPE NUTS	( )	( )	( )
___(37)	PEPTO BISMOL	( )	( )	( )
___(38)	SUNBEAM ELECTRIC TOOTHBRUSH	( )	( )	( )
___(39)	KLEENEX FACIAL TISSUE	( )	( )	( )
___(40)	BEECHNUT 5 MINT CHEWING GUM	( )	( )	( )

S T O P! AND WAIT FOR FURTHER INSTRUCTIONS.

You will now see a commercial for each of these products. We are interested in your reactions to each commercial at two different times -- once during the commercial, and once after it is over. Again, the space next to Interesting is for Very Interesting, and the space next to Dull for Very Dull.

POST GRAPE NUTS COMMERCIAL

___(41) Interesting: ___:___:___:___:___:___:___:Dull
___(42) Interesting: ___:___:___:___:___:___:___:Dull

PEPTO BISMOL COMMERCIAL

___(43) Interesting: ___:___:___:___:___:___:___:Dull
___(44) Interesting: ___:___:___:___:___:___:___:Dull

SUNBEAM ELECTRIC TOOTHBRUSH COMMERCIAL

___(45) Interesting: ___:___:___:___:___:___:___:Dull
___(46) Interesting: ___:___:___:___:___:___:___:Dull

KLEENEX FACIAL TISSUE COMMERCIAL

___(47) Interesting: ___:___:___:___:___:___:___:Dull
___(48) Interesting: ___:___:___:___:___:___:___:Dull

BEECHNUT 5 MINT CHEWING GUM COMMERCIAL

___(49) Interesting: ___:___:___:___:___:___:___:Dull
___(50) Interesting: ___:___:___:___:___:___:___:Dull

DO NOT WRITE IN THIS COLUMN

Below are lists of sales points -- some of which were in the commercials you just saw, and some of which were not. Indicate in the spaces provided, the sales points which you are SURE were in the commercials, those which you think MIGHT HAVE BEEN in the commercials, and those which you are quite certain were NOT in the commercials. Don't think back to similar commercials which you may have seen elsewhere; think only of the commercials you just saw. Please do not omit any items.

POST GRAPE NUTS COMMERCIAL

			YES	MAYBE	NO
____(41)	1.	This cereal is high in protein.	( )	( )	( )
____(42)	2.	This cereal is available in the Regular or new Family Size.	( )	( )	( )
____(43)	3.	Grape Nuts are crunchy, toasted nuggets.	( )	( )	( )
____(44)	4.	This cereal provides active people with lots of energy.	( )	( )	( )
____(45)	5.	This cereal is high in vitamins and minerals.	( )	( )	( )
____(46)	6.	This cereal is priced the same as other Post cereals.	( )	( )	( )
____(47)	7.	Grape Nuts cost less if you buy two boxes.	( )	( )	( )
____(48)	8.	This cereal is lower in calories than other dry cereals.	( )	( )	( )

PEPTO BISMOL COMMERCIAL

			YES	MAYBE	NO
____(49)	1.	Pepto Bismol gives fast, long-lasting relief.	( )	( )	( )
____(50)	2.	Pepto Bismol is available in the Small or Regular size bottles.	( )	( )	( )
____(51)	3.	Pepto Bismol now has a new cherry flavor.	( )	( )	( )
____(52)	4.	Pepto Bismol is available in the regular or new children's formulas.	( )	( )	( )
____(53)	5.	Pepto Bismol is used by many leading hospitals.	( )	( )	( )
____(54)	6.	Pepto Bismol is available in liquid or tablet form.	( )	( )	( )
____(55)	7.	Pepto Bismol costs a little more than other upset stomach remedies.	( )	( )	( )
____(56)	8.	Pepto Bismol has coatability, for smooth and gentle action.	( )	( )	( )

SUNBEAM ELECTRIC TOOTHBRUSH COMMERCIAL

			YES	MAYBE	NO
___(57)	1.	This toothbrush cuts brushing time in half.	( )	( )	( )
___(58)	2.	This toothbrush comes with a two-year guarantee.	( )	( )	( )
___(59)	3.	This toothbrush weighs only four ounces.	( )	( )	( )
___(60)	4.	This toothbrush is safe and easy to use.	( )	( )	( )
___(61)	5.	This toothbrush contains a rechargeable battery.	( )	( )	( )
___(62)	6.	This toothbrush, though electric, is cordless.	( )	( )	( )
___(63)	7.	This toothbrush is available in a variety of models.	( )	( )	( )
___(64)	8.	This toothbrush brushes in an up-and-down pattern.	( )	( )	( )

KLEENEX FACIAL TISSUE COMMERCIAL

			YES	MAYBE	NO
___(65)	1.	This facial tissue is available in different textures.	( )	( )	( )
___(66)	2.	Kleenex Juniors are less expensive than the other sizes.	( )	( )	( )
___(67)	3.	These facial tissues are soft, yet durable.	( )	( )	( )
___(68)	4.	Kleenex Regulars come in convenient space-saver boxes.	( )	( )	( )
___(69)	5.	Man-Size tissues are three layers thick.	( )	( )	( )
___(70)	6.	These facial tissues are available in a variety of colors.	( )	( )	( )
___(71)	7.	These tissues are available in single or double-quantity boxes.	( )	( )	( )
___(72)	8.	Man-Size tissues are twelve inches square.	( )	( )	( )

BEECHNUT 5 MINT CHEWING GUM COMMERCIAL

			YES	MAYBE	NO
___(73)	1.	This gum is as sweet as candy.	( )	( )	( )
___(74)	2.	This gum comes in five different flavors.	( )	( )	( )
___(75)	3.	This gum stays moist -- never dries out.	( )	( )	( )
___(76)	4.	This gum is brand new from Beechnut.	( )	( )	( )
___(77)	5.	This gum is available in the regular or sugarless varieties.	( )	( )	( )
___(78)	6.	This gum helps keep teeth white.	( )	( )	( )
___(79)	7.	This gum has a refreshing and long-lasting flavor.	( )	( )	( )
___(80)	8.	This gum has a fresh fruit flavor.	( )	( )	( )

DO NOT WRITE IN THIS COLUMN

Second Questionnaire
May 16, 1966

TV MESSAGE STUDY
Department of Advertising, MSU
May, 1966

4 4 0 2 (1-4)

NAME: _____

LOCAL ADDRESS: _____

(5-7)

____ (8)

____ (9)

____ (10)

INSTRUCTIONS

The purpose of the test below is to measure the meanings of certain things by having you judge them against a series of descriptive scales. Please make your judgments on the basis of what each concept means to you.

Here is how to use the scales.

Each scale has seven intervals, to give you an opportunity to show the intensity of your judgment. For example, if you judge FORD to be a Very Good car, place an "X" in the space next to Good. If you judge FORD to be Quite Good, put your "X" in the second space. If only Slightly Good, place it in the third space. If you feel FORD is neither Good nor Bad, or if you have no judgment one way or the other, place your "X" in the center space. Likewise, if you feel FORD is Very Bad, put your "X" next to Bad; Quite Bad, second space; Slightly Bad, the third space from Bad.

FORD CAR

BAD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :GOOD
3 2 1 0 1 2 3

Got the idea? Please rate each of the products below. Work fast, but do not skip any scales.

JOHNSON'S KLEAR FLOOR WAX

____(11) GOOD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :BAD
____(12) LOW QUALITY: ___ : ___ : ___ : ___ : ___ : ___ : ___ :HIGH QUALITY
____(13) EASY TO USE: ___ : ___ : ___ : ___ : ___ : ___ : ___ :DIFFICULT TO USE
____(14) LASTS SHORT TIME: ___ : ___ : ___ : ___ : ___ : ___ : ___ :LASTS LONG TIME
____(15) WOULD BUY IT: ___ : ___ : ___ : ___ : ___ : ___ : ___ :WOULD NOT BUY IT

KRAFT ENGLISH TOFFEE

____(16) BAD: ___ : ___ : ___ : ___ : ___ : ___ : ___ :GOOD
____(17) PLEASANT TASTE: ___ : ___ : ___ : ___ : ___ : ___ : ___ :UNPLEASANT TASTE
____(18) UNREFRESHING: ___ : ___ : ___ : ___ : ___ : ___ : ___ :REFRESHING
____(19) LOW IN CALORIES: ___ : ___ : ___ : ___ : ___ : ___ : ___ :HIGH IN CALORIES
____(20) WOULD NOT BUY IT: ___ : ___ : ___ : ___ : ___ : ___ : ___ :WOULD BUY IT

POST ALPHA BITS

____(21)	GOOD:	___	___	___	___	___	___	___	BAD
____(22)	UNPLEASANT TASTE:	___	___	___	___	___	___	___	PLEASANT TASTE
____(23)	HIGH NUTRITION:	___	___	___	___	___	___	___	LOW NUTRITION
____(24)	HIGH IN CALORIES:	___	___	___	___	___	___	___	LOW IN CALORIES
____(25)	WOULD BUY IT:	___	___	___	___	___	___	___	WOULD NOT BUY IT

SUNBEAM ELECTRIC KNIFE

____(26)	BAD:	___	___	___	___	___	___	___	GOOD
____(27)	HIGH QUALITY:	___	___	___	___	___	___	___	LOW QUALITY
____(28)	UNDEPENDABLE:	___	___	___	___	___	___	___	DEPENDABLE
____(29)	HIGH PERFORMANCE:	___	___	___	___	___	___	___	LOW PERFORMANCE
____(30)	WOULD NOT BUY IT:	___	___	___	___	___	___	___	WOULD BUY IT

GRAVY TRAIN DOG FOOD

____(31)	GOOD:	___	___	___	___	___	___	___	BAD
____(32)	UNPLEASANT TASTE:	___	___	___	___	___	___	___	PLEASANT TASTE
____(33)	HIGH NUTRITION:	___	___	___	___	___	___	___	LOW NUTRITION
____(34)	GIVES LOW ENERGY:	___	___	___	___	___	___	___	GIVES HIGH ENERGY
____(35)	WOULD BUY IT:	___	___	___	___	___	___	___	WOULD NOT BUY IT

	How Often Do You Use:	Always	Sometimes	Never
____(36)	JOHNSON'S KLEAR FLOOR WAX	( )	( )	( )
____(37)	KRAFT ENGLISH TOFFEE	( )	( )	( )
____(38)	POST ALPHA BITS	( )	( )	( )
____(39)	SUNBEAM ELECTRIC KNIFE	( )	( )	( )
____(40)	GRAVY TRAIN DOG FOOD	( )	( )	( )

S T O P! AND WAIT FOR FURTHER INSTRUCTIONS.

You will now see a commercial for each of these products. We are interested in your reactions to each commercial at two different times -- once during the commercial, and once after it is over. Again, the space next to Interesting is for Very Interesting, and the space next to Dull is for Very Dull.

JOHNSON'S KLEAR FLOOR WAX COMMERCIAL

____(41)	Interesting:	___	___	___	___	___	___	___	Dull
____(42)	Interesting:	___	___	___	___	___	___	___	Dull

KRAFT ENGLISH TOFFEE COMMERCIAL

____(43)	Interesting:	___	___	___	___	___	___	___	Dull
____(44)	Interesting:	___	___	___	___	___	___	___	Dull

POST ALPHA BITS COMMERCIAL

____(45)	Interesting:	___	___	___	___	___	___	___	Dull
____(46)	Interesting:	___	___	___	___	___	___	___	Dull

SUNBEAM ELECTRIC KNIFE COMMERCIAL

____(47)	Interesting:	___	___	___	___	___	___	___	Dull
____(48)	Interesting:	___	___	___	___	___	___	___	Dull

GRAVY TRAIN DOG FOOD COMMERCIAL

____(49)	Interesting:	___	___	___	___	___	___	___	Dull
____(50)	Interesting:	___	___	___	___	___	___	___	Dull

DO NOT WRITE IN THIS COLUMN

Below are lists of sales points -- some of which were in the commercials you just saw, and some of which were not. Indicate in the spaces provided, the sales points which you are SURE were in the commercials, those which you think MIGHT HAVE BEEN in the commercials, and those which you are quite certain were NOT in the commercials. Don't think back to similar commercials which you may have seen elsewhere; think only of the commercials you just saw. Please do not omit any items.

JOHNSON'S KLEAR FLOOR WAX COMMERCIAL

		YES	MAYBE	NO
___(41)	1. This floor wax never yellows asphalt tile.	( )	( )	( )
___(42)	2. This floor wax adds depth to floors.	( )	( )	( )
___(43)	3. This floor wax is made with an old, but reliable formula.	( )	( )	( )
___(44)	4. Re-waxing is easy, thanks to a new applicator.	( )	( )	( )
___(45)	5. This floor wax gives a long-lasting shine with just one coat.	( )	( )	( )
___(46)	6. This floor wax is especially good for vinyl tile.	( )	( )	( )
___(47)	7. This floor wax is scuff-resistant.	( )	( )	( )
___(48)	8. This floor wax dries as clear as glass.	( )	( )	( )

KRAFT ENGLISH TOFFEE COMMERCIAL

		YES	MAYBE	NO
___(49)	1. This toffee is made with pure sweet cream.	( )	( )	( )
___(50)	2. This toffee has the original English flavor.	( )	( )	( )
___(51)	3. This toffee comes in five distinct flavors.	( )	( )	( )
___(52)	4. This toffee is extra chewy.	( )	( )	( )
___(53)	5. This toffee sells for just 39¢ a box.	( )	( )	( )
___(54)	6. This toffee comes in new party boxes.	( )	( )	( )
___(55)	7. This toffee comes in different-sized pieces.	( )	( )	( )
___(56)	8. This toffee is made in England.	( )	( )	( )

POST ALPHA BITS COMMERCIAL

			YES	MAYBE	NO
____(57)	1.	This cereal provides as much energy as a full meal.	( )	( )	( )
____(58)	2.	This cereal is priced the same as other Post cereals.	( )	( )	( )
____(59)	3.	Alpha Bits cost less if you buy two boxes.	( )	( )	( )
____(60)	4.	Alpha Bits are shaped in letters from A to Z.	( )	( )	( )
____(61)	5.	This cereal is available in the Regular or new Family Size.	( )	( )	( )
____(62)	6.	This cereal has more vitamins and minerals than other dry cereals.	( )	( )	( )
____(63)	7.	Alpha Bits are sugar-frosted.	( )	( )	( )
____(64)	8.	Alpha Bits are crispy.	( )	( )	( )

SUNBEAM ELECTRIC KNIFE COMMERCIAL

			YES	MAYBE	NO
____(65)	1.	This knife can be used indoors or outdoors.	( )	( )	( )
____(66)	2.	This knife slices, cuts, and peels, equally well.	( )	( )	( )
____(67)	3.	This knife automatically recharges in its storage rack.	( )	( )	( )
____(68)	4.	The tungsten tip of this knife stays sharp for years.	( )	( )	( )
____(69)	5.	This knife comes with a two-year guarantee.	( )	( )	( )
____(70)	6.	This knife is lightweight and easy to use.	( )	( )	( )
____(71)	7.	The blade of this knife is sharp to the very tip.	( )	( )	( )
____(72)	8.	This knife comes in both cord and cordless models.	( )	( )	( )

GRAVY TRAIN DOG FOOD COMMERCIAL

			YES	MAYBE	NO
____(73)	1.	This dog food is now available at a new low price.	( )	( )	( )
____(74)	2.	This dog food consists of crunchy bite-sized chunks.	( )	( )	( )
____(75)	3.	This dog food comes in three different flavors.	( )	( )	( )
____(76)	4.	This dog food has high nutritive value.	( )	( )	( )
____(77)	5.	This dog food makes its own gravy.	( )	( )	( )
____(78)	6.	This dog food gives coats a new gloss.	( )	( )	( )
____(79)	7.	This dog food gives eyes a new shine.	( )	( )	( )
____(80)	8.	This dog food is available in 5-pound or 25-pound bags.	( )	( )	( )

APPENDIX B

COLOR COMMERCIAL COSTS, PROGRAM AND COMMERCIAL EFFECTIVENESS

LIST OF ADVERTISERS

COST OF COLOR TELEVISION COMMERCIALS

Cost Factor	B/W	Color
Crew	$1500	$1500
Studio Rental	350	350
Sets and Props	500	500
Color Corrections	200	400
Designer (Settings)	200	200
Stylist (Costumes)	200	200
Raw Stock, Lab Work	350	700
Equipment	250	250
Subsistance	75	75
Shipping and Trucking	75	75
Film Editing	700	700
Transfer	150	150
Fine Grains	100	500
Titles and Preliminary	200	200
Mattes	250	350
Animation Segment	2160	2700
Optical Negative	400	600
Contact Prints, Masters	50	100
Miscellaneous	50	50
Overhead and Profit	3360	4110
Total	$11,120	$13,660

Source: "How Not to Shoot a Color Commercial," Sponsor, XIX, No. 4 (August 9, 1965), p. 49.

WITH MEDIA COSTS

	1 Daytime Minute-- 13 Weeks $6,000 Per Minute	1 Evening Minute-- 13 Weeks $39,000 Per Minute	25 Spot Markets 13 Weeks (6-Plan)
Media Cost	$78,000	$507,000	$700,000
B/W Production Cost	15,000	15,000	25,000
Color Production Cost	20,000	20,000	33,000
B/W Prints	215	215	667
Color Prints	618	618	2,677
Total B/W	$93,215	$522,215	$725,667
Total Color	$98,618	$527,618	$735,677
Color Plus	6%	1%	1%

Source: "Color Television--Today," Report prepared by Foote, Cone & Belding, Chicago, June, 1965.

COLOR TELEVISION AUDIENCE STUDY: Trendex Five-City Study
May, 1959

AVERAGE NUMBER OF VIEWERS PER 100 TV HOMES

Program	B/W	Color	Color Advantage
Steve Allen	26	49	88%
Dinah Shore	45	108	140%
Arthur Murray	48	82	71%
Perry Como	51	100	96%
Average	42	85	102%

AVERAGE NUMBER OF VIEWERS PER 100 TV HOMES BY MARKET SIZE

City	B/W	Color	Color Advantage
Boston	37	84	127%
Chicago	37	72	95%
Omaha	40	86	115%
Milwaukee	54	115	113%
Philadelphia	53	103	94%

Source: "Color Television Today." Report prepared by Young and Rubicam, New York, July 6, 1965.

IMPACT STUDY FOR CROSLEY BROADCASTING CORPORATION
BURKE MARKETING RESEARCH, May, 1960

RATINGS

Program	B/W	Color	Color Advantage
Perry Como	31	49	58%
Dinah Shore	24	52	117%
Hall of Fame	16	32	100%
Average	24	44	83%

An average of 2.9 viewers per color set, as compared to 2.6 per black-and-white set, resulted in a further color advantage of 12% in viewers.

VIEWER RECALL OF DETAILS OF COMMERCIALS

Commercial	B/W	Color	Color Advantage
Kraft			
Unaided	3%	7%	133%
Aided	41%	55%	34%
Total	44%	62%	41%
Chevrolet			
Unaided	6%	11%	83%
Aided	38%	44%	16%
Total	44%	55%	25%
Hallmark			
Unaided	7%	11%	55%
Aided	36%	49%	36%
Total	43%	60%	40%
Average Number of Viewers Correctly Recalling each Commercial	44%	59%	34%

The following is a breakdown of unaided and aided recall for color and black-and-white commercials for Kraft:

Commercial	Black-and-White			Color		
	Unaided	Aided	Total	Unaided	Aided	Total
Caramels	2%	29%	31%	9%	34%	43%
Mayonnaise	8%	41%	49%	17%	48%	65%
Cracker Barrel Cheese	6%	38%	45%	11%	60%	71%
Parkay Margarine	1%	38%	38%	5%	53%	58%
Miracle Spread	1%	41%	41%	2%	59%	60%
Spaghetti Dinner	2%	42%	43%	4%	58%	61%
Cheese Slices	1%	44%	44%	2%	57%	58%

NUMBER OF DETAILS RECALLED PER 100 VIEWERS

Commercial	B/W	Color
Parkay Margarine	44	127
Spaghetti Dinner	106	198

In the case of the Chevrolet program, color again showed superiority in the number of viewers who recalled seeing the commercials, and in the number who said that the Corvair commercial made them want to buy a Corvair.

NUMBER OF DETAILS RECALLED PER 100 VIEWERS

Commercial	B/W	Color
OK Used Cars	87	142
Corvair	71	125
Impala	19	36

For the Hall of Fame, sixty per cent of color viewers recalled seeing the commercials; black-and-white recollection was forty-four per cent. Again, more color viewers said the commercials made them want to buy Hallmark cards.

NUMBER OF DETAILS RECALLED PER 100 VIEWERS

Commercials	B/W	Color
Average: children's and adults' Easter cards and cards for different occasions	147	280

Below is a further breakdown of commercial recall.

Definitions

Commercial Recall = average percentage of respondents who correctly recalled each commercial;

Persuasiveness = average percentage of respondents who said that the commercial made them want to buy the product advertised;

Recall of Commercial Details = average percentage of respondents who remembered one or more details of the commercial.

Commercial Recall	Kraft B/W	Kraft Color
Commercial Recall		
Unaided	3%	7%
Aided	41%	55%
Total	44%	62%
Persuasiveness	16%	28%
Recall of Commercial Details	28%	49%
Pictorial Comments Other than Color	24%	42%
Color Comments	2%	22%
All Other Comments	19%	34%
Average Number of Specific Details Recalled per 100 Viewers	75	163

	Chevrolet B/W	Chevrolet Color
Commercial Recall		
Unaided	6%	11%
Aided	38%	44%
Total	44%	55%
Persuasiveness	8%	10%
Recall of Commercial Details	28%	38%
Pictorial Comments Other than Color	23%	29%
Color Comments	--	10%
All Other Comments	18%	26%
Average Number of Specific Details Recalled per 100 Viewers	59	101

Commercial Recall	Hallmark B/W	Hallmark Color
Commercial Recall		
Unaided	7%	11%
Aided	36%	49%
Total	43%	60%
Persuasiveness	15%	27%
Recall of Commercial Details	24%	41%
Pictorial Comments Other than Color	19%	35%
Color Comments	--	12%
All Other Comments	15%	21%
Average Number of Specific Details Recalled per 100 Viewers	43	94

Average Over Three Programs	Average B/W	Average Color
Commercial Recall		
Unaided	5%	10%
Aided	39%	49%
Total	44%	59%
Persuasiveness	13%	22%
Recall of Commercial Details	27%	43%
Pictorial Comments Other than Color	22%	35%
Color Comments	--	15%
All Other Comments	17%	27%
Average Number of Specific Details Recalled per 100 Viewers	61	119

PORTION OF PROGRAMS WATCHED

Portion Watched	Perry Como B/W	Perry Como Color
Watched Entire Program	32%	49%
Watched More Than Half	21%	32%
Watched Less Than Half	45%	21%
	Dinah Shore B/W	Dinah Shore Color
Watched Entire Program	36%	64%
Watched More Than Half	18%	13%
Watched Less Than Half	46%	23%
	Hall of Fame B/W	Hall of Fame Color
Watched Entire Program	57%	67%
Watched More Than Half	18%	13%
Watched Less Than Half	24%	21%
	Average B/W	Average Color
Watched Entire Program	42%	60%
Watched More Than Half	19%	19%
Watched Less Than Half	39%	21%

Source: "Color Television." Report prepared by Ted Bates & Company, New York, May, 1965.

NBC IMPACT STUDY
(January, 1961)

After the 1960 Crosley study examined recall for color commercials in color programs, NBC looked at color commercials in a black-and-white program: WAGON TRAIN.

COLOR COMMERCIALS IN BLACK-AND-WHITE PROGRAM

	B/W Sets	Color Sets	Color Advantage
Program Rating	25	33	32%
Viewers Who Reported Seeing Commercials	52%	60%	15%
Viewers Who Thought that Salem Commercials were Better than Average Cigarette Commercials	64%	70%	9%

Source: Report on color television prepared by NBC, New York.

NETWORK COLOR ADVERTISERS*

Appliance Manufacturers

Admiral
Corning
DuPont
General Electric
Hotpoint (G.E.)
Kodak
Motorola
Polaroid
RCA
Revere Camera
Singer
Sunbeam
Timex
Westclox
Zenith

Automobile Manufacturers and Products

American Motors
Buick (General Motors)
Chevrolet (G.M.)
Chrysler Corporation
Firestone
Ford Motor Company
Goodyear Tire
Hertz
Kaiser Jeep
Pontiac (G.M.)
Prestone
Simoniz
Volkswagen
Zerex

Clothing Manufacturers

Disney
Jaymar
Speidel
Wolverine Shoes

Diversified Major Corporations

AT&T
Borg-Warner
International Harvester
Kaiser Aluminum
Kimberly-Clark
3M
Reynolds Metals
Textron
Xerox

Drugs and Cosmetics

Abbot Labs (Sucaryl)
Alka Seltzer
Avon
Bayer
British Sterling
Bufferin
Chap-Ans
Clairol
Curad
Currier & Ives
Doan's Pills
Dristan
F&F (Throat Lozenges)
4-Way Tablets
Geritol
Gillette
Glenbrook Labs
Hazel Bishop
Jergen's
Kleenex
Lavoris
Lehn & Fink
Listerine
Lustre Cream
Lysol
Max Factor
Mennen
Miles Labs

---

*Source: "Color Advertiser List Growing, Growing," Sponsor, XX, No. 4 (February 21, 1966), pp. 72-73.

Drugs and Cosmetics (continued)

New Dawn (Clairol)
Nytol
Respond
Revlon
Roi Tan
Romilar CF
Shulton
Toni
Tussy (L&F)
Upjohn
Vicks

Food, Beverages, and Household Products

Alcoa
Alpo-Allen Products
American Dairy
Awake
Borax
Borden's
Brach's
Breast O'Chicken
Bruce Wax
Budweiser
Calgon
Campbell Soup
Capn Crunch
Carnation
Chef Boy-Ar-Dee
Chiffon
Chun-King
Coca Cola
Colgate
Columbian Coffee
Continental Baking
Crisco
Del Monte
Dial
Dove
Florida Citrus
Frito-Lay
Gaines
General Foods
General Mills
Gold Seal
Green Giant
Handi-Wrap
Hawaiian Punch
Heinz

Food, Beverages, and Household Products (continued)

Hunts
Imperial Margarine
Jell-O
Jiffy
K2R
Kraft
Lever Brothers
Libby's
Lux
Maxwell House
Mazola
Metrecal
Miller Brewing
Motts
Mr. Bubble
Nabisco
Ocean Spray
Pepsi Cola
Peter Pan
Pillsbury
Pine Sol
Purex
Purina
Quaker Oats
Score (Colgate)
Scott Paper
Sego
Sargeant's Spray
7-Up
Smucker's
Snowy Bleach
Sperry & Hutchinson
Standard Brands
Star Kist
Sunkist
Sunsweet
Top Job
Vermont Main
Welch
Wesson

Gasoline Companies

Citgo
Gulf
Humble Oil--Esso
Shell
Sunoco
Texaco

Home Furnishing Products

Armstrong Cork
Celanese
Chemstrand
Georgia Pacific
Homelite
Marlite
Marsch Wall
Masonite
Mohawk Carpet
Ozite
Scotts Seed

Insurance Companies

Aetna
Inst. Life Insurance
Insurance Company of North America
Kemper
Mutual of Omaha
Savings and Loan
Union Central Life Insurance

Tobacco Products

Camels
Carlton
Consolidated Cigar
Continental Cigar
Half & Half Filters
Kent
Kools
Lark
L&M
Lucky Strike
Montclair
Newport
Old Gold
Pall Mall
Salem
Tareyton
Tempo
Winston
White Owl

Toy Manufacturers

American Character
Hasbro Toys
Mattel

Miscellaneous

Encyclopedia Britannica
FTD Florists
Formica
Hallmark
Holliday Inn
National Observer
Oster
United Airlines
United States Plywood
United States Steel
Voice of Music
Vu-Master

APPENDIX C

TIME INVOLVED IN COLOR COMMERCIAL PRODUCTION

COMMERCIAL PRODUCTION TIMETABLE

	B/W	Simple Color	Complex Color
Selection of Negative	1 day	1 day	1 day
Printing and Processing	1 day	1 day	1 day
Layout for Shooting	1 day	1 day	1 day
Cinex Tests	none	1 day	1 day
Shooting of Optical	1-3 days	1 day	4 days
Development of Negative and Making of Fast Print	1 day	1 day	1 day
Answer Print	1 day	5 days	5 days
One Corrected Print	1 day	3-5 days	3-5 days
Total Working Days	7-10 days	14-16 days	17-19 days

Source: "Agencies Work Overtime to Meet Color Demands," Sponsor, XX, No. 4 (February 21, 1966), p. 81.

APPENDIX D

COLOR SET PENETRATION, MARKETS, FACILITIES, PROGRAMING, AUDIENCE DEMOGRAPHICS

BLACK-AND-WHITE AND COLOR TELEVISION SETS IN USE BY YEAR

Year	B/W Sets in Use	Color Sets in Use	Color Penetration
1946	10,000		
1947	16,000		
1948	190,000		
1949	1,000,000		
1950	4,000,000		
1951	10,600,000		
1952	15,800,000		
1953	21,200,000		
1954	27,300,000	10,000	
1955	32,500,000	50,000	
1956		130,000	
1957		220,000	
1958		300,000	
1959		400,000	
1960		520,000	
1961		700,000	
1962		1,000,000	
1963		1,600,000	
1964		2,800,000	
1965		5,500,000	
1966*		7,670,000	14.1%
1967*		10,970,000	19.9%
1968*		14,770,000	26.3%
1969*		18,850,000	32.9%
1970*		23,330,000	40.0%

*Estimate

Source: "Color Television Today," Report prepared by Young & Rubicam, New York, July 6, 1965; "Happiness and Headaches," Sponsor, XX, No. 4 (February 21, 1966), p. 50; "Color Television," Report prepared by Ted Bates & Company, New York, May, 1965.

TOP FIFTY COLOR TELEVISION MARKETS IN 1965

1. New York-Newark
2. Los Angeles
3. Chicago
4. Philadelphia
5. Cincinnati
6. San Francisco
7. Detroit
8. Milwaukee
9. Minneapolis-St. Paul
10. Washington
11. Cleveland
12. Boston
13. Indianapolis
14. Baltimore
15. Pittsburgh
16. Dallas-Fort Worth
17. St. Louis
18. Miami
19. Columbus
20. Lancaster-Harrisburg-York
21. Atlanta
22. Dayton
23. Omaha
24. Hartford-New Haven
25. Portland, Oregon
26. Kansas City
27. New Orleans
28. Houston
29. San Diego
30. Seattle-Tacoma
31. Kalamazoo-Grand Rapids
32. Buffalo
33. Albany-Schenectady-Troy
34. Oklahoma City
35. Providence
36. Syracuse
37. Flint-Saginaw-Bay City
38. Denver
39. Sacramento
40. Louisville
41. Wilkes-Barre-Scranton
42. Davenport-Rock Island
43. Greenville-Asheville-Spartanburg
44. Charlotte
45. San Antonio
46. Salt Lake City
47. Huntington-Charleston
48. Johnstown-Altoona
49. Greensboro-Winston Salem
50. Tampa-St. Petersburg

Source: "Color Television Today," Report prepared by Young & Rubicam, New York, July 6, 1965.

COLOR TELEVISION PROGRAMING AND TRANSMISSION FACILITIES

Capacity	Percentage of Stations
Rebroadcast of Network Color	88%
Color Film Transmission	55%*
Local Live Color Transmission	11%**
Color Tape Facilities	26%***
Color Slides	53%

*Another 5% is promised shortly.
**Another 6% is in the making.
***Another 8% is planned.

HOURS OF NETWORK COLOR CASTING

Year	NBC	CBS & ABC	Total
1954-55	68	46*	114
1955-56	216	48*	268
1956-57	486	74*	560
1957-58	647	53*	700
1958-59	668	24*	692
1959-60	724	10*	734
1960-61	1034	5*	1039
1961-62	1650	0	1650
1962-63	1910	29**	1939
1963-64	2000	124**	2124
1964-65	2300	204**	2404
1965-66	5400	850***	6250

*Entirely CBS.
**Almost entirely ABC.
***About evenly divided between CBS and ABC.

Source: "Color Television Today," Report prepared by Young and Rubicam, New York, July 6, 1965.

R. H. BRUSKIN STUDIES: DEMOGRAPHIC CHARACTERISTICS OF COLOR TV SET OWNERS VS NON-COLOR OWNERS
(November, 1962--January, 1964)

Characteristic	Non-Color Owners	Recent Plus Veteran Owners	Recent Owners	Veteran Owners
Average Age	42.3	43.3	41.3	45.6
Per cent of families with five or more members	26.6	28.3	34.2	21.1
Per cent of families with annual income of $10,000 or more	14.7	29.6	27.4	30.7
Average income	$6,468	$8,308	$8,162	$8,467
Per cent with at least some college education	25.4	29.6	28.7	30.6
Per cent of household heads in professional, technical, or managerial positions	24.5	37.2	36.5	38.0
Number of minutes per day spent with TV	139	139	159	160

PRODUCT USAGE AMONG COLOR TV SET OWNERS AND GENERAL POPULATION (1962, 1963, 1964)

	Non-Color Owners	Color TV Owners	Color Advantage
Product Usage Among Total Sample			
Car Ownership*	83.6	92.3	10%
Number of Cars per Family*	1.03	1.26	22%
Cigarette Smoking*	47.6	51.2	8%
Product Usage Among Female Respondents			
Laundry Soap**	91.4	94.6	4%
Frozen Orange Juice**	62.4	69.1	11%
Regular Coffee**	72.2	76.4	6%
Lipstick**	87.0	92.7	7%
Room Spray Deodorant***	57.6	71.4	24%
Facial Tissues***	90.1	92.9	3%
Cake Mix***	74.0	82.1	11%
Dry Soup Mix***	39.5	42.9	9%
Paper Towels***	73.4	85.7	17%

*Products listed on 6 AIM surveys.
**Products listed on 2 AIM surveys.
***Products listed on 1 AIM survey.

HYPOTHETICAL SAVINGS OR INVESTMENT PLANS OF COLOR OWNERS VS NON-COLOR OWNERS (May, 1963)

Savings/Investment Plan	Non-Color Owners	Color TV Owners	Per Cent Difference
Stock Market	9.7%	14.7%	+52%
Savings Bank	36.5%	34.6%	- 5%
Government Bonds	32.3%	30.1%	- 7%
Mutual Funds	17.2%	16.7%	- 3%
Not Specified	4.3%	3.9%	- 9%

FUTURE TRAVEL PLANS OF COLOR OWNERS VS NON-COLOR OWNERS (1963,1964)

Travel Plan	Non-Color Owners	Color TV Owners	Per Cent Difference
Definitely plan to go to Europe in next two years*	2.7%	7.4%	+174%
Very likely to visit New York World's Fair in 1964-65**	20.9%	27.7%	+ 33%

*Question appeared on 1 AIM survey.
**Question appeared on 3 AIM surveys.

Source: "A New Look at the Color TV Set Owner," NBC Research Bulletin #264 (G-R TV), March 26, 1964.

COLOR TELEVISION AUDIENCE CHARACTERISTICS
(W. R. Simmons and Associates Research Inc., 1963)

Appliances in the Home Piano and Television Sets	All U.S. House-hold	Piano	Color TV Set	Portable TV Set
All U. S. Households	100%	100%	100%	100%
Household Income				
$25,000 and over	2	5	13	4
$15,000 - $24,999	3	7	11	6
$10,000 - $14,999	10	19	19	15
$ 8,000 - $ 9,999	12	16	21*	13
$ 5,000 - $ 7,999	31	30	21**	30
Less than $ 5,000	42	23	15**	32
Education of Household Head				
College graduate	10	21	24	16
1-3 years college	10	17	21	12
High school graduate	26	29	23	31
1-3 years high school	18	9	11**	19
No high school	36	24	21*	22
Occupation of Household Head				
Professional, technical	10	16	9	13
Managers, officials	10	19	31	16
Clerical, sales	12	12	17*	18
Other employed	45	33	27*	37
Not employed	23	20	16	16
Age of Household Head				
18 - 34	22	9	16*	24
35 - 49	33	42	37	37
50 or older	45	49	47	39
Size of Household				
One or two	45	36	56	39
Three or four	35	41	31	42
Five or more	20	23	13	19

*Projection relatively unstable because of small sample base.

**Number of cases too small for reliability; shown for consistency only.

Color Television Audience Characteristics (continued)

Appliances in the Home Piano and Television Sets--Characteristics	All U.S. House-hold	Piano	Color TV Set	Portable TV Set
Age of Children				
Under 3	15	7	5*	15
3 - 5	16	12	7*	18
6 - 9	22	23	18	25
10 - 12	16	26	18	18
13 - 17	23	34	19	24
None under 18	50	44	60	44
Home Ownership and Value				
$50,000 and over	1	4	8	3
$40,000 - $49,999	2	4	8	3
$30,000 - $39,999	3	8	14	6
$20,000 - $29,999	8	15	20	9
$15,000 - $19,999	14	20	20*	13
$10,000 - $14,999	16	18	13**	16
Less than $10,000	24	18	14**	18
Do not own home	32	13	3**	32
Locality				
City: 500,000 and over	16	11	26	17
City: 50,000 - 499,999	16	16	14	19
Surburban	32	37	44	31
Urban Non-Metropolitan	15	14	16**	10
Rural	21	22	--	23
Geographic Region				
Northeast	26	26	25	29
Central	28	29	27	24
South	29	27	24	32
West	17	18	24	15

Source: "Color Television Today," Report prepared by Young and Rubicam, New York, July 6, 1965.

AMERICAN RESEARCH BUREAU NATIONAL COLOR STUDY, NOVEMBER, 1964

Color Program Ratings by Length of Ownership of Color TV Set

38.5 Hours of NBC Prime Time Color Programing During Period of November 5-25, 1964

	Average Color TV Home Rating	% Color Advantage Over B/W
All NBC Prime Time Color Programs	40.0	80%
Recent Owners (1-7 months)	43.9	98%
Middle Owners (8-19 months)	39.9	80%
Older Owners (20 or more months)	36.5	64%
Average Color Program Rating in B/W Homes	22.2	

Source: "Color Television," Report prepared by Ted Bates & Company, New York, May, 1965.

PROFILE OF COLOR TV OWNERS
BRAND RATING INDEX REPORT, MARCH, 1965

Item	All Women	Color Owners
Number of Adult Women	63,488,000 100%	3,256,000 100%
Household Income		
Under $5,000	41.1	20.7
$5,000 - $7,999	28.9	22.8
$8,000 - $9,999	12.6	19.1
$10,000 and over	17.5	37.5
Education		
Grade school	27.5	13.4
High school	50.7	57.0
College	21.9	29.6
Employment Status		
Full or part-time	35.6	40.8
Not employed	64.4	59.2
Race		
Negro	10.0	6.2
White and other	90.0	93.8
Age		
Under 25	15.8	16.7
25 - 34	18.4	18.2
35 - 49	28.7	35.4
50 - 64	21.6	21.9
65 and over	15.5	7.7
Number in Household		
One or two	33.4	25.6
Three or four	38.4	42.5
Five or more	28.2	31.9
Household Size by Income		
One or Two in Household		
Under $5,000	21.0	8.3
$5,000 - $7,999	6.6	6.0
$8,000 or more	5.8	11.4
Three or Four in Household		
Under $5,000	12.0	4.2
$5,000 - $7,999	12.8	12.0
$8,000 or more	13.6	26.2
Five or More in Household		
Under $5,000	8.2	8.1
$5,000 - $7,999	9.4	4.8
$8,000 or more	10.6	19.0

Profile of Color TV Owners (continued)

Item	All Women	Color Owners
Children in Household by Income		
No Children Under 18		
Under $5,000	24.6	11.3
$5,000 - $7,999	10.6	11.1
$8,000 or more	11.7	26.3
Youngest Child 6-17		
Under $5,000	8.6	3.3
$5,000 - $7,999	8.1	7.6
$8,000 or more	10.0	16.1
Youngest Child under 6		
Under $5,000	8.0	6.1
$5,000 - $7,999	10.2	4.0
$8,000 or more	8.3	14.2
Marital Status		
Married	68.1	70.8
Non married	31.9	29.2
Region		
Northeast	25.2	24.0
North Central	28.0	32.5
South	29.6	22.2
West	17.2	21.4
County Size		
A (850,000 population)	38.5	52.7
B (120,000 population)	27.4	29.6
C and D (32,000 population and other)	34.1	17.7

PROFILE OF POTENTIAL BUYERS OF COLOR TV

Item	All Homemakers	Potential Purchasers
Number of Homemakers	52,496,000 100%	4,986,000 100%
Household Income		
Under %,000	41.9	19.8
$5,000 - $7,999	28.6	29.1
$8,000 - $9,999	12.1	15.8
$10,000 and over	17.4	35.3
Education		
Grade school	27.7	16.8
High school	51.2	52.5
College	21.1	30.7
Employment Status		
Full or part-time	31.9	36.7
Not employed	68.1	63.3
Race		
Negro	9.7	8.4
White and other	90.3	91.6
Age		
Under 25	9.9	7.6
25 - 34	20.0	21.0
35 - 49	32.8	41.3
50 - 64	23.7	22.6
65 and over	13.6	7.5
Number in Household		
One or two	37.8	32.9
Three or four	36.3	41.4
Five or more	26.0	25.7
Household Size by Income		
One or Two in Household		
Under $5,000	23.8	13.0
$5,000 - $7,999	7.3	7.6

Profile of Potential Buyers of Color TV (continued)

Item	All Homemakers	Potential Purchasers
Children in Household by Income		
No Children Under 18		
Under $5,000	26.2	13.4
$5,000 - $7,999	9.8	9.0
$8,000 or more	10.6	19.7
Youngest Child 6-17		
Under $5,000	7.1	2.0
$5,000 - $7,999	8.1	9.4
$8,000 or more	10.0	18.5
Youngest Child Under 6		
Under $5,000	8.6	4.4
$5,000 - $7,999	10.7	10.7
$8,000 or more	8.9	12.9
Marital Status		
Married	80.3	87.4
Not married	19.7	12.6
Region		
Northeast	25.1	24.0
North Central	28.1	28.1
South	29.5	23.9
West	17.2	24.0
County Size		
A (850,000 population)	38.4	46.8
B (120,000 population)	27.5	29.8
C and D (32,000 population and other)	34.1	23.4

Source: "A Profile of Color TV Set Owners and Prospective Buyers," NBC Research Bulletin #278 (G-R-TV), May 21, 1965.