

THE NEW YORK PUBLIC LIBRARY

ABSTRACT

AN EXPERIMENT USING ROKEACH'S BELIEFS THEORY TO DETERMINE THE EFFECTIVENESS OF ADVERTISEMENTS IN ATTRACTING ATTENTION AND CHANGING BRAND PREFERENCE

By

Jane Marleen Simmons

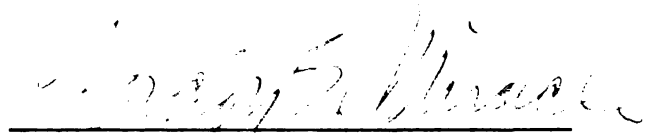
The purpose of the study was to determine the effectiveness of magazine advertisements which contained or violated one of four types of beliefs as defined by Milton Rokeach. The effectiveness of the magazine advertisements was tested on the basis of attention and brand preference.

The research design for the study was a 'one group pretest-posttest with control.' The types of beliefs contained in the advertisements were the independent variables, and the dependent variables were attention and brand preference. The experimental and the control groups of 64 females were selected from students enrolled in undergraduate advertising courses at Michigan State University. The types of questionnaires used for the experiment were disguised and structured. The questionnaire for the pretest and the posttest used a seven point Likert scale to determine brand preference, and the questionnaire administered only to the experimental group asked the subjects to rank the advertisements

from one to four on the basis of attention. The data were processed and analyzed by using a routine CISSR computer program at Michigan State University. The rankings of the advertisements on the basis of attention were analyzed by Chi square. The ratings of the brands for both the experimental and control groups were compared by a t-test between two correlated means to determine if there was a significant difference in the ratings of the experimental group after seeing the advertisements.

The results indicated that the centrality of a belief used in an advertising appeal, does affect whether or not the advertisement attracts the attention of the subjects exposed to it. But exposure to advertisements utilizing one of the four types of beliefs has no effect on the brand preference of the subjects.

Accepted by the faculty of the Department of Advertising, College of Communication Arts, Michigan State University, in partial fulfillment of the requirements for the degree of Master of Arts.

A handwritten signature in cursive script, appearing to read "Mary E. Hines", is written over a horizontal line.

Director of Thesis

AN EXPERIMENT USING ROKEACH'S BELIEFS THEORY TO DETERMINE
THE EFFECTIVENESS OF ADVERTISEMENTS IN ATTRACTING
ATTENTION AND CHANGING BRAND PREFERENCE

By

Jane Marleen Simmons

A THESIS

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

MASTERS OF ARTS

College of Communication Arts
Department of Advertising

1974

6 117798

ACKNOWLEDGMENTS

My sincerest appreciation goes to Dr. Gordon E. Miracle for his many contributions in both time and ideas, and without whose professional guidance, this thesis would not have been possible. I would also like to thank Dr. John D. Simpkins for his help with the statistical analysis and for providing an opportunity to select subjects for the test. A special thanks is directed to all the females in Advertising classes who took the time to participate in the test, and to the Michigan State University Computer Consulting Service without whose help, a computer analysis of the data would have been impossible. I would also like to thank my roommates for their moral support while this thesis was being written.

TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
LIST OF APPENDICES	vii
LIST OF ILLUSTRATIONS	viii
Chapter	
I. INTRODUCTION	1
The Problem	1
Purpose of the Study	11
General Hypotheses	12
II. METHODOLOGY	22
Research Design	22
Sample	26
Questionnaire	27
Analysis of the Data	29
Literature Search	31
III. RESULTS	32
Attention	32
Brand Preference	55
IV. SUMMARY OF CONCLUSIONS	69
Attention	69
Brand Preference	75
APPENDICES	78
BIBLIOGRAPHY	112

LIST OF TABLES

Table	Page
1. Continuum of Authority	10
2. Diagram of the Research Design	22
3. Frequency of Rankings for Watch Advertisements .	33
4. Chi Square Values for the Watch Advertisements .	34
5. Frequency of Rankings for Panty Hose Advertisements	35
6. Chi Square Values for the Panty Hose Advertisements	35
7. Frequency of Rankings for Liquor Advertisements	36
8. Chi Square Values for the Liquor Advertisements	37
9. Frequency of Rankings for Cigarette Advertisements (A)	37
10. Chi Square Values for Cigarette Advertisements (A)	38
11. Frequency of Rankings for Automobile Advertisements	38
12. Chi Square Values for Automobile Advertisements	39
13. Frequency of Rankings for Cigarette Advertisements (B)	40
14. Chi Square Values for Cigarette Advertisements (B)	40
15. Compilation of Chi Square Values for the 24 Advertisements Tested	42
16. Ranking of Watch Advertisements and Hierarchy of Beliefs	44

Table	Page
17. Central Tendency Measurements for Watch Advertisements	44
18. Ranking of Panty Hose Advertisements and Hierarchy of Beliefs	45
19. Central Tendency Measurements for Panty Hose Advertisements	46
20. Ranking of Liquor Advertisements and Hierarchy of Beliefs	47
21. Central Tendency Measurements for Liquor Advertisements	47
22. Ranking of Cigarette Advertisements (A) and Hierarchy of Beliefs	49
23. Central Tendency Measurements for Cigarette Advertisements (A)	49
24. Ranking of Automobile Advertisements and Hierarchy of Beliefs	50
25. Central Tendency Measurements for Automobile Advertisements	50
26. Ranking of Cigarette Advertisements (B) and Hierarchy of Beliefs	52
27. Central Tendency Measurement for Cigarette Advertisements (B)	52
28. Compilation of Hierarchy of Beliefs Analysis .	53
29. Six Type A Advertisements and Reason for First Ranking	54
30. t Values for Watch Brands	57
31. Frequency of Ratings for Watch Brands	58
32. Frequency of Ratings for Panty Hose Brands	59
33. t Values for Panty Hose Brands	60
34. Frequency of Ratings for Liquor Brands	61
35. t Values for Liquor Brands	62
36. Frequency of Ratings for Cigarette Brands (A) .	63

Table	Page
37. t Values for Cigarette Brands (A)	64
38. Frequency of Ratings for Automobile Brands . .	65
39. t Values for Automobile Brands	66
40. Frequency of Ratings for Cigarette Brands (B) .	67
41. t Values for Cigarette Brands (B)	68
42. Advertisements for which Null Hypothesis was Accepted	70
43. Advertisements that did not Conform to Hierarchy of Beliefs	73

LIST OF APPENDICES

Appendix	Page
A. Advertisements Tested	79
B. Questionnaires	104

LIST OF ILLUSTRATIONS

Illustration	Page
1. Poor Girl's Rich Watch	80
2. Are You Paying for Your Watch's Mistakes	81
3. Rolex	82
4. Waltham	83
5. Mojud	84
6. Hanes	85
7. Supphose	86
8. Sears	87
9. Early Times	88
10. Chivas Regal	89
11. Dewars	90
12. Seagrams	91
13. Virginia Slims	92
14. Winchester	93
15. Tareyton	94
16. Salem	95
17. Volkswagen	96
18. MG	97
19. Fiat	98
20. Honda	99
21. Benson & Hedges	100

Illustration	Page
22. Camel	101
23. Old Gold	102
24. Raleigh	103

CHAPTER I

INTRODUCTION

The Problem

Many advertisers have attempted to measure the effectiveness of advertising in order to justify its expense. This thesis contains a possible means of measuring advertising's effectiveness with particular reference to advertising's ability to attract attention and change brand preference. It was the purpose of this study to explore and investigate the effectiveness of specific appeals which contain the types of beliefs in Milton Rokeach's hierarchy of beliefs, and to determine whether or not there is a relationship between the centrality of the belief utilized in the advertisement and the effectiveness of the advertisement.

Theory

Milton Rokeach defines beliefs as, "inferences made by an observer about underlying states of expectancy. . . . Beliefs cannot be directly observed but must be inferred as best as one can with whatever psychological devices available from all things the believer says or does."¹ A belief system,

¹Milton Rokeach, Beliefs, Attitudes, and Values: A Theory of Organization and Change (San Francisco: Jossey-Bass, Inc., 1968), p. 2.

as defined by Rokeach, is as "having represented within it in some organized psychological but not necessarily logical form, each and every one of a person's countless beliefs about physical and social reality."²

Rokeach provides a summary of the organization of beliefs along a central-peripheral dimension in Appendix A of his book, Beliefs, Attitudes, and Values: A Theory of Organization and Change, which are:

Type A Beliefs--called primitive beliefs--are supported by 100 percent social consensus. Such primitive beliefs are fundamental, taken-for-granted axioms that are not subject to controversy because we believe, and we believe everyone else believes.

Type B Beliefs--which are also extremely resistant to change. Such beliefs do not depend on social support or consensus but instead arise from deep personal experience. Type B beliefs are incontrovertible, and we believe them regardless of whether anyone else believes them. Many of these unshakable conceptions are positive ones--Type B+ and some are negative ones--Type B-. The positive ones represent beliefs about what we are capable of, and the negative ones represent beliefs about what we are afraid of.

Type C Beliefs--are authority beliefs, beliefs we all have about which authorities to trust and not to trust. Many facts of physical and social reality have alternative interpretations, are socially controversial, or are not capable of being personally verified or experienced. . . . For these reasons, all men need to identify with specific authorities . . . to help them to decide what to believe and what not to believe.

Type D Beliefs--are the beliefs we derive from the authorities we identify with. Such beliefs can be changed providing the suggestion for change emanates from one's authority.

²Ibid.

Type E Beliefs--are inconsequential. If they are changed, the total system of beliefs is not altered in any significant way.³

The types of beliefs will be discussed in further detail later, but it is necessary to elaborate upon the formulation of Rokeach's theory for clarification.

Rokeach makes three assumptions in the formulation of his research into the development of the five types of beliefs which are:

1. Not all beliefs are equally important to the individual; beliefs vary along a central-peripheral dimension.
2. The more central a belief, the more it will resist change.
3. The more central a belief changed, the more widespread the repercussions in the rest of the belief system.⁴

From these assumptions, the following hypotheses were formulated, tested and accepted by Rokeach:

1. Types of beliefs located along a central-peripheral dimension are functionally distinct.
2. The more central a belief, the more it will resist change.
3. Changes in central beliefs will produce greater changes in the rest of the belief system than changes in less central beliefs.⁵

Rokeach believes that the importance of a belief to an individual is the result of connectedness: "the more a given belief is functionally connected or in communication

³Ibid., pp. 180-181.

⁴Ibid., p. 3.

⁵Ibid., p. 23.

with other beliefs, the more implications and consequences it has for other beliefs and, therefore, the more central the belief."⁶ Rokeach relates four defining assumptions concerning the criteria of connectedness. They are:

1. Existential versus nonexistential beliefs
Beliefs directly concerning one's own existence and identity in the physical and social world are assumed to have more functional connections and consequences for other beliefs than those which less directly concern one's existence and identity.
2. Shared versus unshared beliefs about existence and self-identity
Beliefs concerning existence and self-identity may be shared or not shared with others. Those shared with others are assumed to have more functional connections and consequences for other beliefs than those not shared with others.
3. Derived versus underived beliefs
Many beliefs are learned not by direct encounter with the object of the belief but; indirectly, from reference persons and groups. Derived beliefs are assumed to have fewer functional connections and consequences for other beliefs from which they are derived.
4. Beliefs concerning and not concerning matters of taste
Many beliefs represent more or less arbitrary matters of taste and are often so perceived by the individual holding them. Such beliefs are assumed to have relatively fewer functional connections and consequences for other beliefs than beliefs that do not represent arbitrary matters of taste.⁷

There are three components of a belief according to Rokeach. They are cognitive, affective, and behavioral, and he explains these components as "a cognitive component because it represents a person's knowledge, held with varying degrees,

⁶Ibid., p. 5.

⁷Ibid., pp. 5-6.

about what is true or false, good or bad, desirable or undesirable; and affective component because under suitable conditions, the belief is capable of arousing affect of varying intensity around the object of the belief, around other objects (individuals or groups), taking a positive or negative position with respect to the object of the belief, or around the belief itself when its validity is seriously questioned, as in an argument, and a behavioral component because the belief being a response predisposition of varying threshold must lead to some action when it is suitably activated."⁸

Rokeach mentions other means for organizing beliefs besides in a central-peripheral dimension such as intensity and verifiability. Intensity of belief, Rokeach believes, is important in consideration only within each type of belief rather than as on a whole, and it is considered dubious by Rokeach to assume that a belief which could be verified is more important to an individual as opposed to a belief which cannot.⁹

It is Rokeach's contention that all beliefs of an individual except possibly those of taste "are formed and developed very early in childhood, and undoubtedly the child first learns them in the context of dealings with his

⁸ Ibid., pp. 113-114.

⁹ Ibid., pp. 12-13.

parents."¹⁰ Rokeach further extends his concept of beliefs in that it "is broader than ideology, containing pre-ideological as well as ideological beliefs"¹¹ in a system with an ideology being derived from external authorities and more or less shared with others and institutionalized.

The types of beliefs are divided into primitive and non-primitive or authority beliefs. As Rokeach states: "A person's primitive beliefs represent his 'basic truths' about physical reality, social reality, and the nature of the self; they represent a subsystem within the total system in which the person has the heaviest commitments."¹² Primitive beliefs are those which are learned by direct encounter with the object or situation of the belief; moreover, "like all beliefs, conscious or unconscious, they have a personal aspect: they are rooted in the individual's experience and in the evidence of his senses. Like all beliefs, they also have a social aspect with regard to every belief a person forms, he also forms some notion of how many other people have the experience and the knowledge necessary to share it with him and of how close the agreement is among the group."¹³

Type A beliefs, a person's conception of the self, are reinforced by unanimous social consensus. They are

¹⁰Milton Rokeach, The Three Christs of Ypsilanti: A Psychological Study (New York: Vintage Books, 1964), p. 26.

¹¹Rokeach, Beliefs, Attitudes, and Values, p. 123.

¹²Ibid., p. 6.

¹³Rokeach, Three Christs, p. 20.

"psychologically incontrovertible because they are rarely, if ever, experienced as subjects of controversy and therefore have an axiomatic, taken-for-granted character."¹⁴ If the validity of this type of belief is challenged, no matter how impersonal it may be, the effect upon the person is rather emotional and traumatic since the questioning suggests that the person is incapable of observing and defining reality correctly which could result in a shakedown of all beliefs connected to this very central belief.

Type B beliefs are also primitive beliefs like Type A. Type B beliefs do not depend upon universal social consensus like Type A beliefs. Type B beliefs are similar to Type A beliefs in that they are incontrovertible, learned by direct encounter with the belief, and involve existence and self-identity. The Type B beliefs are not shared with others, and "there are no reference persons or groups outside the self who could controvert such a belief"¹⁵ since "beliefs that are not shared with others are therefore impervious to persuasion or argument by others."¹⁶ As was indicated before, Type B beliefs can be positive to the extent that the person is capable of viewing himself at one with the world, and negative to the extent that the person views himself, real or imagined, not in tune with the things around him.

¹⁴Rokeach, Beliefs, Attitudes, and Values, p. 6.

¹⁵Ibid., p. 8.

¹⁶Ibid.

Non-primitive beliefs deal mainly with a person's authority; it is possible for these beliefs to be converted because it is possible for the authority to change. These types of beliefs are generally resistant to change; however, they are less important and easier to change than Type A and Type B beliefs. The main difference between primitive and non-primitive beliefs is that in dealing with primitive beliefs, the main interest lies in the specific content of these beliefs. With authority beliefs, it is the formal content of the belief which is of more interest to the person in the examination of the beliefs. Rokeach further explains: "Non-primitive beliefs are conceived to develop out of Type A beliefs and to be in a functional relationship with them. They seem to serve the purpose of helping the person to round out his picture of the world realistically and rationally to the extent possible, defensively and irrationally to the extent necessary."¹⁷

Type C beliefs are labelled authority beliefs by Rokeach and are capable of being changed "because the believer has learned that some of his reference persons and groups do and some do not share his belief."¹⁸ Type C beliefs are concerned with "not only which authorities could know but also which authorities would know. . . . The particular authorities relied on for information differ from one

¹⁷Ibid., p. 9.

¹⁸Ibid., p. 10.

person to the next and would depend on learning experiences within the context of the person's social structure--family, class, peer group, religious and political groups, and country."¹⁹ Edward J. Lessin, in his thesis, "An Investigation of Primitive and Authority Beliefs," points out that authorities can be either positive or negative. "One accepts the belief of a positive authority while one rejects the belief of a negative authority or accepts the contrary belief."²⁰ He further points out that "an authority must have some influence on the person's beliefs or behavior."²¹ If the person remains indifferent to a second person's opinions or desires for some kind of response, then that second person is neither a positive nor a negative authority. Lessin also presents a continuum of authority shown in Table 1, "from positive or accepting, to indifferent, and to negative or rejecting."²²

Type D beliefs are labelled derived authority beliefs by Rokeach and result from the fact that "if we know that a person believes in a particular authority, we should be able to deduce many of his other beliefs, those which emanate or

¹⁹Ibid.

²⁰Edward J. Lessin, "An Investigation of Primitive and Authority Beliefs" (unpublished M.A. Thesis, Michigan State University, 1965), p. 10.

²¹Ibid., p. 11.

²²Ibid.

TABLE 1.--Continuum of authority.

Negative Authority				Positive Authority		
-3	-2	-1	0	+1	+2	+3
Very Reject- ing	Moder- ately Reject- ing	Slight- ly Reject- ing	Indif- ferent	Slight- ly Accept- ing	Moder- ately Accept- ing	Very Accept- ing

derive from the authority he identifies with."²³ These types of beliefs are controvertible and tend to be "derived second hand through processes of identification with authority rather than by direct encounter with the object of the belief."²⁴

Type E beliefs are inconsequential beliefs, and they are considered to be "arbitrary matters of taste."²⁵ These types of beliefs are considered inconsequential since they have few if any ties with other beliefs and a change in them would not result in an uprooting of other beliefs in the system.

Rokeach's other books, The Open and Closed Mind, The Three Christs of Ypsilanti, and his most recently published book, The Nature of Human Values, all deal with the concept of his belief system; however, they are not as closely

²³ Rokeach, Beliefs, Attitudes, and Values, pp. 10-11.

²⁴ Ibid., p. 10.

²⁵ Ibid., p. 11.

related to the definition of the different types of beliefs so that they will not be discussed in this study.

Purpose of the Study

Rokeach states that advertisements appeal to Type E or inconsequential beliefs.²⁶ However, the appeals of most advertisements contain elements of other types of beliefs. The purpose of this study is to attempt to determine whether or not the utilization of a Type A belief in the creative appeal in the advertisement has a greater effect upon the reader of the advertisement than a Type B+ or B- appeal in the advertisement has a greater effect than Type C, and so on, conforming to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs. It is believed that the more central the belief utilized in the copy platform of the advertisement, the more impact the advertisement has upon the reader of the advertisement because it is dealing with beliefs that are a part of or closer to the self no matter how illogical that the beliefs might be.

Rokeach suggested that, "it is possible to associate the inconsequential beliefs (Type E) with Type D, or C, or B+, or B-, or A beliefs."²⁷ Rokeach points out that advertisers have not employed all of the appeals equally and have concentrated on associating Type E with Type C and B-

²⁶Ibid., p. 183.

²⁷Ibid., p. 184.

beliefs. This was as far as he took the relation of his theory to the field of advertising.

General Hypotheses

Perception and Attention

The major purpose of advertising is to communicate a desired message to the potential target audience so as to induce a behavioral response. To do this, the target audience must first notice the advertisement.

There have been numerous theories and writings published concerning perception and its relation to attention. The subject is vast, and the psychological literature cannot, within the scope of this study, be reviewed completely. However, a discussion of generally accepted knowledge about perception is necessary in order to utilize the concept in this study. This is done by presenting a concise meaning of what is to be measured and why that measurement is considered most useful for this study.

William H. Ittelson and Hadley Cantril offer a simplistic definition of perception: "the process by which a particular person from his particular behavioral center attributes significances to his immediate environmental situation."²⁸ Significances can be things, sequences,

²⁸William H. Ittelson and Hadley Cantril, Perception: A Transactional Approach (Garden City, N.Y.: Doubleday & Company, Inc., 1954), p. 26.

actions, and evaluations.²⁹ Ittelson and Cantril also point out that, "We are constantly perceiving simply because it is an inseparable and necessary part of everything we do."³⁰ Because perception cannot be separated from activity, researchers in perception have acknowledged that in order to study perception, one must perceive which poses an interesting paradox.

Ittelson and Cantril present three characteristics of perception which may be helpful in the definition. The first characteristic is that perception is a transaction. "Perceiving never occurs independent of some other activity";³¹ the second is that perception is unique in that "perception is always an activity by a unique participant from his own unique position, providing him with his own unique world of experience."³² The third characteristic of perception is that it is an externalization, or "the things we see and hear and taste and touch are experienced as existing outside ourselves and as possessing for themselves the characteristics which we see in them."³³

S. Howard Bartley, in his book, Principles of Perception, offers this concept of perception: "The overall

²⁹ Ibid., p. 20.

³⁰ Ibid., p. 1.

³¹ Ibid., p. 2.

³² Ibid., p. 4.

³³ Ibid.

activity of the organism that immediately follows or accompanies energistic impingements upon the sense organs,"³⁴ and he presents six relational properties of perception which are:

1. Symbolism
Perception is symbolic. This is to say that it is a kind of behavior manifesting an abstract relation between the organism and its surrounds.
. . . The literal energies convey to the person something that is not literally inherent in them.
2. Classification
. . . The reaction to the immediate situation is not as if to a totally isolated and unique one, but essentially to an example of a class of situations.
. . . This process by which the organism develops classification is called concept formation.
3. Evaluation
. . . Everything is reacted to in terms of a broad spectrum at one pole of which is harmful, and at the other the beneficial and acceptable. In the middle is the region of indifference.
4. Prognosis and interpretation
In as much as the observer is confronted with alternatives, the perception may be said to be prognostic. It is as though it were a bet on the nature of externality with reference to possible consequences of action.
5. Internal Self-consistency
Self consistency applies only within perception and not to the sequence from one perception to another.
6. Field determinism
Perception is a phenomenon that emerges from a system of interrelated events, first in the individual's surrounds and then within³⁵ the neuromuscular system of the individual himself.

³⁴S. Howard Bartley, Principles of Perception (New York: Harper & Brothers, 1958), p. 22.

³⁵Ibid., pp. 33-36.

The fourth and fifth relational properties of perception are especially noteworthy for this study. Prognosis and interpretation deal with selectivity. The focus of this study was to determine which advertisement, containing one of the types of beliefs, the subjects selected to attend. The fifth relational property, internal self-consistency, is concerned with object constancy and self constancy which Rokeach maintains are essentials of primitive beliefs since they provide a person with the means to define his environment and his self. Rokeach adds, "Object constancy, moreover, is not merely a sensory phenomenon as many perception psychologists have believed. It is a social phenomenon as well, developed in childhood side by side with person constancy. The child learns that objects maintain their identity, and also that other people experience physical objects as he does."³⁶

From this discussion of perception, it becomes clear that the measurement desired for this study is not the perception of the advertisements since it is assumed that by their existence within the subjects' fields of vision, the advertisements are capable of being perceived. The measurement wanted is the designation of which advertisement draws the attention of the subjects or which advertisement the subjects selectively perceive. Magdalen D. Vernon, in an article entitled, "Perception, Attention, and Consciousness,"

³⁶Rokeach, Three Christs, p. 21.

discusses this selectivity and its application to perception and relation to attention: "It appears that there are many degrees or levels of clarity and detail with which we are aware of our surroundings, varying from a precise and accurate perception of the environment upon which attention is concentrated and focused to a vague marginal awareness of its less important aspects."³⁷ It is Vernon's contention that, "if the eyes are fixated upon a single point in the field of vision in order that this area may be perceived in detail, then comparatively little of the surrounding area is perceived."³⁸ It is believed that this statement can be directly applied to the purpose of this study which is to determine what advertisements the subjects attended to first with the contention that it was the advertisements containing elements of Type A beliefs.

The direction and extent of conscious awareness or attention is affected by certain factors as Vernon indicates such as: "the general state of alertness or 'vigilance' as it is sometimes called; by factors of motivation and interest, by learning and experience, and by features in the environment itself."³⁹ This statement relates to Rokeach's contention that the beliefs which are closest to the individual are the

³⁷Magdalen D. Vernon, "Perception, Attention, and Consciousness," in Attention, ed. by Paul Bakan (Princeton, N.J.: D. Van Nostrand Company, Inc., 1966), p. 38.

³⁸Ibid.

³⁹Ibid.

beliefs to which the individual will attend. J. Anthony Deutsch and D. Deutsch, in an article entitled, "Attention: Some Theoretical Considerations," discuss an experiment in which the subject is exposed to two auditory messages, one for each ear, where "if a subject is listening selectively to one channel and ignoring the other, calling his name on the rejected channel will on a certain proportion of instances cause him to switch his attention to this channel. This was explained by assuming that the subject's name had a higher priority for the filter than to the message to which he has been attending."⁴⁰ An individual's name is part of identity which is a very central belief and further supports Rokeach's theory of a central-peripheral dimension of beliefs and also suggests that attention will be drawn to more primitive beliefs.

Attention has been defined as a perceptual set that is "a process which makes one thing seen more readily than another."⁴¹ It is from this definition and the concept of perception and its relation to attention as described above that the following general hypotheses have been formulated for testing:

⁴⁰J. Anthony Deutsch and D. Deutsch, "Attention: Some Theoretical Considerations," in Attention, ed. by Paul Bakan (Princeton, N.J.: D. Van Nostrand Company, Inc., 1966), p. 211.

⁴¹U. S. Department of Health Education and Welfare, Office of Education Contract Number 3-20-003, Research and Theory Related to Audio-Visual Transmission, by Robert Travers (Washington D.C.: Government Printing Office, 1967), p. 228.

Hypotheses

Null Hypothesis

The centrality of a belief used in an advertising appeal, does not affect whether or not the advertisement attracts the attention of subjects exposed to it.

Alternate Hypothesis

The centrality of a belief used in an advertising appeal, does affect whether or not the advertisement attracts the attention of subjects exposed to it.

Effectiveness as it is used in the hypotheses is defined as, "adequate to accomplish a purpose; producing the intended or expected results."⁴²

Opinion Change and Brand Preference

This study was concerned also with the degree to which the opinions of the subjects towards brand preference might change after being exposed to the advertisements containing the different types of beliefs. Rokeach discusses attitude and opinion change in great detail in his book, Beliefs, Attitudes, and Values: A Theory of Organization and Change, and defines attitudes as being, "a relatively enduring organization of interrelated beliefs that describe, evaluate, and advocate action with respect to an object or situation, with each belief having cognitive, affective, and behavioral components."⁴³ Opinion is defined by Rokeach as,

⁴²The Random House Dictionary of the English Language, Rev. ed. (1968), s.v. "effectiveness."

⁴³Rokeach, Beliefs, Attitudes, and Values, p. 132.

"a verbal expression of some belief, attitude, or value."⁴⁴ Rokeach deals with the concept of attitude and behavioral change and contends that, "whenever a person encounters an attitude object within a situation, two attitudes, A_o and A_s , are activated; further, a comparison of the relative importance of these two attitudes is also activated. The two attitudes are assumed to affect behavior in direct proportion to their perceived importance with respect to one another."⁴⁵

In discussion of research designs, Rokeach states that, "the classical paradigm employed in the experimental studies of opinion change--pretest, treatment, posttest--is not capable of telling us whether an expression of opinion has changed as a result of a particular treatment,"⁴⁶ Rokeach advocates several posttests to be taken and an analysis of behavior which is far beyond the means of this study. The research design to test opinion change is discussed later; however, it was considered necessary to indicate the type of change which is measured in the study according to Rokeach's definition of opinion. The following general hypotheses have been formulated:

⁴⁴Ibid., pp. 125.

⁴⁵Ibid., pp. 136-137.

⁴⁶Ibid., p. 140.

Hypotheses

Null Hypothesis

Exposure to advertisements utilizing one of the four types of beliefs has no effect on the brand preference of the subjects.

Alternate Hypothesis

Exposure to advertisements utilizing one of the four types of beliefs has an effect on the brand preference of the subjects (as expressed by opinion), especially those advertisements with elements of higher beliefs, particularly Type A beliefs.

The independent variables were the types of beliefs contained in the magazine advertisements. Each advertisement in the study contained or violated one of the Types of beliefs, Type A, B+, B-, C, and D, as defined by Rokeach. Type E beliefs were not used since the study was concerned with beliefs used in the copy platform, and few copy platforms utilize Type E, inconsequential beliefs.

The advertisements used for the testing were 'selective demand' advertisements which concentrate on increasing market share by promoting a brand name. As Rokeach indicated:

. . . it could be suggested from a psychological standpoint that the advertising man has concentrated mainly on forming and changing Type E beliefs--inconsequential beliefs--to the extent that his purpose is to meet the competition, and that he has concentrated mainly on Type D--derived beliefs--to the extent that his purpose is to give information. Furthermore, the more competitive the advertising, the more it seems to address itself to changing psychologically inconsequential beliefs about the relative merits of one brand over another.⁴⁷

⁴⁷Ibid., p. 183.

The dependent variables were the measurements of attention and brand preference for the magazine advertisements. The two dependent variables were discussed in the formulation of the general hypotheses.

CHAPTER II

METHODOLOGY

Research Design

The research design for the study was a 'one group pretest-posttest with control.' The types of beliefs utilized in magazine advertisements were the independent variables, and the dependent variables were attention and brand preference. A diagram of the research design is presented in Table 2.

TABLE 2.--Diagram of the research design.

Group	Pretest	Treatment	Posttest
Experimental	O_1	X	O_2
Control	O_1		O_2

The subjects in both the experimental and control groups were interviewed at the same time on their brand preference for the pretest. A few days later during scheduled interview times, the experimental group received the treatment--exposure to the advertisements--and were asked to rank the advertisements according to which attracted their attention first, second, third and last. The control group, during

the scheduled interview, received the posttest. A few days later, the experimental group received the posttest.

The subjects were assigned to either the control or experimental group by flipping a coin. Thus, the volunteers for the experiment became members of either group by chance. An equal sample size (N=32) for both the experimental and control group was achieved.

Donald T. Campbell and Julian C. Stanley, in their book, Experimental and Quasi-Experimental Designs for Research, consider the 'pretest-posttest with control' to be one of the three true experimental designs.⁴⁸ Testing, maturation, and history are accounted for by the control group.⁴⁹ Instrumentation is controlled since there is no difference between the questionnaire for the pretest and the questionnaire for the posttest. Regression is assumed to occur in both the experimental and control groups equally, and mortality is the greatest factor to overcome; however, with repeated efforts, to ensure that the volunteers for the test took the posttest, this factor is reduced.

The experiment was conducted by first asking the subjects in the experimental and control groups to rate their brand preference for the brands featured in the advertisements containing or violating the types of beliefs.

⁴⁸Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally and Company, 1963), p. 13.

⁴⁹Ibid., pp. 13-14.

The subjects in the experimental group were asked to rank on the basis of attention six groups of four advertisements which were in the same or at least similar product categories. For example, automobile advertisements were compared with each other and not with cigarette advertisements. This method was used to prevent ranking on the basis of product interest or attention qualities instead of on the basis of the attention qualities of the advertisements to be tested.

Six different product categories were necessary because of the inherent limitations of the magazine advertisements available. One of the limitations is that many advertisers choose to be strong in one medium so that the kinds of products were limited. For example, cigarette and liquor products are restricted by law to certain media. Another limitation was that few advertisers have chosen to use Type A beliefs in their advertisements. The advertisements used in the test appear in Appendix A.

The rank of 'one' for Type A advertisements was considered important since the ranking would conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs. Because of the importance of the first ranking, it was necessary to determine from the subjects the reason for the rankings for the Type A advertisements. Direct question probes were used to obtain this information.

All of the six Type A advertisements chosen for the test violate Type A beliefs in some way. The Poor Girl's Rich Watch violates a Type A belief by illustrating a foot with wrist watches on it. If the subjects mentioned this point, it was concluded that they chose the advertisement first because of the violation of the Type A belief that it contains. The Mojud Panty Hose advertisement illustrates legs growing out of the ground, which is not possible, thus, if this was mentioned, it was assumed that the subjects selected the advertisement because of the Type A belief that it violates. The Early Times advertisement illustrates a golf club that is bent around a bottle of Early Times so that any reference to the golf club as the attention getter would indicate that the subjects had chosen the advertisement because of Type A beliefs. The Virginia Slims advertisement illustrates Mount Rushmore with a woman included among the presidents. Any reference to her inclusion indicated that the subjects had chosen the advertisement for its Type A beliefs. The Volkswagen advertisement has a headline stating: "Today it's bigger than a Cadillac." The "it" refers to an illustration of a used Volkswagen. The Type A belief that it violates is that a Volkswagen is obviously smaller than a Cadillac. If this was mentioned, it was assumed that the subjects chose the advertisement because of the Type A belief. The last advertisement is Benson & Hedges 100's which illustrates a green moon man smoking a

cigarette and encountering and astronaut. The existence of the moon man would have to be the object mentioned that attracted the subjects' attention in order for it to be attributed to Type A beliefs.

Both the experimental and control group were asked again to rate their brand preference for the brands featured in the advertisements containing or violating the types of beliefs.

Sample

The experimental and the control group of 64 females were selected from students enrolled in undergraduate advertising courses at Michigan State University. Since sex was not one of the independent variables of interest, the hypotheses could be tested with either males or females as subjects. It was decided to use females because of one of the products, panty hose, was appropriate only for females. Two males were included in the pretest of the questionnaire to determine if the exclusion of males from the sample was justified. Both of the males when questioned why they had given a rank of 'one' to the advertisement that they had indicated in the 'panty hose' group, reported sexual reasons for attracting their attention. Both the experimental and control group were recruited voluntarily, and appointments for the administration of the questionnaire were set up individually.

Using undergraduate advertising classes as a universe limits the generalizability of the findings; however, because the test is an opinion study, the basic requirement is that the subjects are human beings capable of having opinions about magazine advertisements.⁵⁰

It is realized that results from a small sample of students taking undergraduate advertising classes cannot be projected to make inference about the major consuming public. However, if evidence from this study suggests that the two general alternate hypothesis should be accepted, that is if there seems to be a relationship between the centrality of beliefs utilized in the advertisements and their ability to attract attention and change brand preference, further research should be done with other appropriate consumer samples.

Questionnaire

The type of questionnaire used for the experiment was disguised in that the respondents did not know what was being measured; and therefore, were not biased in their answers. The questionnaire was structured so as to facilitate measurement. (See Appendix B for a copy of the questionnaire.)

⁵⁰Rokeach also utilizes Michigan State University students in his studies concerning beliefs. Students were used in his preliminary study into the organization of beliefs, in his experimental analysis of belief systems, and in his race and shared belief experiment performed on campus.

The questionnaire for the pretest and the posttest consisted of two parts, the introduction and the body. The introduction explained how to complete the questionnaire, and the body consisted of a seven point Likert scale from 'dislike completely' to 'like completely.' Nine product categories with eight brands within each were included in the questionnaire to measure brand preference. Four of the product categories were used as dummies to keep the purpose of the study disguised.

The pretest questionnaire was administered during class sessions to females in the undergraduate classes. The posttest questionnaire was administered to the control group during the time of the interview. The posttest questionnaire was administered to the experimental group during a class session.

The questionnaire for the ranking of the advertisements was administered personally and on individual basis to the 32 subjects in the experimental group during the scheduled interview times. The questionnaire consisted of two parts, an introduction and a body. The introduction which was read to the subjects explained what was going to be asked of the subjects, and the body of the questionnaire consisted of a ranking from 'one' to 'four' on the basis of attention for the six groups of advertisements. The questionnaire also included a probing question after each group of rankings which asked the subjects why they chose

the advertisements in the order in which they indicated. The answer was recorded only if the Type A advertisements were chosen first. The purpose of the questions was to determine if the subjects chose the advertisements because of the Type A beliefs they violated or for some other reason.

The pretest of the questionnaire consisted of a sample of ten females and two males. The only alterations made to the questionnaire as a result of the pretest were to replace two advertisements because they were ranked on the basis of graphic considerations rather than on their types of appeals. The two advertisements replaced were a Johnnie Walker advertisement replaced by a Chivas Regal advertisement, and a Datsun advertisement replaced by a MG advertisement. The Johnnie Walker graphics were a black starry night dominating the entire advertisement, and the Datsun graphics were four color while the three advertisements the advertisement was to be compared with were black and white.

Analysis of the Data

The data were processed and analyzed by using a routine CISSR computer program at Michigan State University. The analysis provided the frequencies, means, and standard deviations for the ranking of the advertisements by attention and for the ratings of the brands. Chi squares, t-tests, and medians were calculated by hand from the computer data.

Attention

The subjects were asked to rank six groups of four advertisements on the basis of attention. It is assumed that the frequency of the ranking for each advertisement would be equal if there was no difference in the attention-attracting powers of the advertisements. The rankings of the advertisements were analyzed by Chi square with the level of significance for the test at .05 or less.

If the null hypothesis for the Chi square analysis is rejected, it is still unknown whether or not the ranking of the advertisements was in accordance with the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs. A presentation of the rankings in the position where they are expected to be the highest if they conform to the hierarchy of beliefs, i.e. a rank of 'one' for Type A beliefs, is given in tables. The median score, median, and mean of the ranks were also calculated to determine if the results conform to the hierarchy of beliefs contained in Rokeach's central-peripheral dimension of beliefs. The conformance was determined by inspection.

The probing questions of why the subjects gave a rank of 'one' to the advertisements which they indicated were examined to determine if the rankings were because of Type A beliefs or for some other reason.

Brand Preference

The subjects, during the pretest and the posttest, were asked to rate brands on the basis of how much they liked or disliked them. The ratings of the brands for both the experimental and control groups were compared by a t-test to determine if there was a significant difference in the ratings of the experimental group after seeing the advertisements.

Literature Search

The literature on advertising's effects on attention and brand preference is vast. However, a search of the literature yielded no studies in which Rokeach's beliefs theory was used as a basis for assessing the effects of advertising appeals on attention or brand preference.

CHAPTER III

RESULTS

Attention

General Hypotheses

Null Hypothesis

The centrality of a belief used in an advertising appeal, does not affect whether or not the advertisement attracts the attention of the subjects exposed to it.

Alternate Hypothesis

The centrality of a belief used in an advertising appeal, does affect whether or not the advertisement attracts the attention of the subjects exposed to it.

Attention-Attraction Analysis

A single sample Chi square analysis was performed on the six groups of four advertisements.

The formula used to compute the Chi square analysis was:

$$\chi^2 = \frac{(O - E)^2}{E}$$

O is the observed frequency, and the expected frequency (E) was determined by dividing the sample size, 32, by the number of advertisements, four, since it was assumed that the frequency of the ranking for each advertisement would be

equal if there was no difference in the attention-attracting power of the advertisements. The degrees of freedom for the test are three since there are four columns of advertisements, and it is a single sample Chi square which has only one row. The level of significance for the test was set at .05, so that there is a probability of .05 or less of rejecting the null hypothesis if it is in fact correct. The sample size for all the tables is 32.

Table 3 presents the frequency of the rankings on the basis of attention for the 'watch' advertisements which were tested.

TABLE 3.--Frequency of rankings for watch advertisements.

Advertisements *	Type of Belief	Frequency of Ranking For Each Advertisement				
		Rank of:	One	Two	Three	Four
Poor Girl's . . .	Type A		25	6	0	1
Are you . . .	Type B		1	13	11	7
Rolex	Type C		1	5	8	17
Waltham	Type D		5	7	13	7

* See Appendix A for advertisements identified in this column.

Table 4 presents the Chi square values calculated from the observed frequencies in Table 3 for the 'watch' advertisements.

TABLE 4.--Chi square values for the watch advertisements.

Advertisements	Chi Square Value
Poor Girl's . . .	50.625*
Are you . . .	10.50*
Rolex	22.375*
Waltham	4.5

*An asterisk indicates the values for the advertisements which were significant at the .05 level of probability.

The null hypothesis is rejected for the three advertisements with asterisks, and the alternate hypothesis is accepted that the centrality of the belief used made a difference in the attention-attracting power of each advertisement. The null hypothesis is accepted for the one advertisement without an asterisk that the type of belief used made no difference in the attention-attracting power of the advertisement.

Table 5 presents the frequency of the rankings on the basis of attention for the 'panty hose' advertisements which were tested.

Table 6 presents the Chi square values calculated from the observed frequencies in Table 5 for the 'panty hose' advertisements. The null hypothesis is rejected for the three advertisements with asterisks, and the alternate hypothesis is accepted that the centrality of the belief used made a difference in the attention-attracting power of each advertisement. The null hypothesis is accepted

TABLE 5.--Frequency of rankings for panty hose advertisements.

Advertisements *	Type of Belief	Frequency of Ranking For Each Advertisement				
		Rank of:	One	Two	Three	Four
Mojud	Type A		22	7	2	1
Hanes	Type B		8	9	11	4
Supphose	Type C		1	4	9	18
Sears	Type D		1	12	10	9

* See Appendix A for advertisements identified in this column.

TABLE 6.--Chi square values for the panty hose advertisements.

Advertisements	Chi Square Value
Mojud	35.25 *
Hanes	3.25
Supphose	20.75 *
Sears	8.75 *

* An asterisk indicates the values for the advertisements which were significant at the .05 level of probability.

for the one advertisement without an asterisk that the type of belief used made no difference in the attention-attracting power of the advertisement.

Table 7 presents the frequency of the rankings on the basis of attention for the 'liquor' advertisements which were tested.

TABLE 7.--Frequency of rankings for liquor advertisements.

Advertisements *	Type of Belief	Frequency of Ranking For Each Advertisement				
		Rank of:	One	Two	Three	Four
Early Times	Type A		14	13	4	1
Chivas Regal	Type B		16	12	4	0
Dewars	Type C		2	4	7	19
Seagrams	Type D		0	3	17	12

* See Appendix A for advertisements identified in this column.

Table 8 presents the Chi square values calculated from the observed frequencies in Table 7 for the 'liquor' advertisements. The null hypothesis is rejected for all four of the advertisements, and the alternate hypothesis is accepted that the centrality of the belief used made a difference in the attention-attracting power of each advertisement.

TABLE 8.--Chi square values for the liquor advertisements.

Advertisements	Chi Square Value
Early Times	15.75*
Chivas Regal	20.0*
Dewars	21.75*
Seagrams	23.25*

*An asterisk indicates the values for the advertisements which were significant at the .05 level of probability.

Table 9 presents the frequency of the rankings on the basis of attention for the 'cigarette' advertisements which were tested.

TABLE 9.--Frequency of rankings for cigarette advertisements (A).

Advertisements *	Type of Belief	Frequency of Ranking For Each Advertisement				
		Rank of:	One	Two	Three	Four
Virginia Slims	Type A		7	12	9	4
Winchester	Type B		8	8	4	12
Tareyton	Type C		8	5	6	12
Salem	Type D		9	6	13	4

*See Appendix A for advertisements identified in this column.

Table 10 presents the Chi square values calculated from the observed frequencies in Table 9 for the 'cigarette' advertisements.

TABLE 10.--Chi square values for cigarette advertisements (A).

Advertisements	Chi Square Value
Virginia Slims	4.25
Winchester	4.0
Tareyton	3.625
Salem	5.75

The null hypothesis is accepted for all four of the advertisements that the type of belief used made no difference in the attention-attracting power of the advertisements.

Table 11 presents the frequency of the rankings on the basis of attention for the 'automobile' advertisements which were tested.

TABLE 11.--Frequency of rankings for automobile advertisements.

Advertisements *	Type of Belief	Frequency of Ranking For Each Advertisement				
		Rank of:	One	Two	Three	Four
Volkswagen	Type A		12	15	4	1
MG	Type B		20	10	2	0
Fiat	Type C		0	4	20	8
Honda	Type D		0	3	6	23

* See Appendix A for advertisements identified in this column.

Table 12 presents the Chi square values calculated from the observed frequencies in Table 11 for the 'automobile' advertisements.

TABLE 12.--Chi square values for automobile advertisements.

Advertisements	Chi Square Value
Volkswagen	16.25 [*]
MG	31.0 [*]
Fiat	28.0 [*]
Honda	39.75 [*]

*An asterisk indicates the values for the advertisements which were significant at the .05 level of probability.

The null hypothesis is rejected for all four of the advertisements, and the alternate hypothesis is accepted that the centrality of the belief used made a difference in the attention-attracting power of the advertisements.

Table 13 presents the frequency of the rankings on the basis of attention for the 'cigarette' advertisements which were tested.

Table 14 presents the Chi square values calculated from the observed frequencies in Table 13 for 'cigarette' advertisements. The null hypothesis is rejected for all four of the advertisements, and the alternate hypothesis is accepted that the centrality of the belief used made a difference in the attention-attracting power of the advertisements.

TABLE 13.--Frequency of rankings for cigarette advertisements (B).

Advertisements *	Type of Belief	Frequency of Ranking For Each Advertisement				
		Rank of:	One	Two	Three	Four
Benson & Hedges	Type A		22	5	5	0
Camel	Type B		7	21	2	2
Old Gold	Type C		2	4	18	8
Raleigh	Type D		1	2	7	22

* See Appendix A for advertisements identified in this column.

TABLE 14.--Chi square values for cigarette advertisements (B).

Advertisements	Chi Square Value
Benson & Hedges	34.75*
Camel	30.25*
Old Gold	19.0*
Raleigh	24.5*

* An asterisk indicates the values for the advertisements which were significant at the .05 level of probability.

A compilation of the Chi square values and an indication of whether or not the null hypothesis for the Chi square test was accepted appears in Table 15 on page 42. Out of the 24 advertisements which were ranked on the basis of attention, 18 had Chi square values which indicated that the type of belief used made a difference in each advertisement's attention-attracting power. Therefore, it can be concluded that the type of belief used made a difference in the attention-attracting power of the advertisements tested.

Hierarchy of Beliefs Analysis

The difference in the rankings on the basis of attention as demonstrated by the Chi square analysis could be the result of other elements in the advertisements besides the beliefs that they contain or violate. Therefore, it is necessary to determine if the ranking of the advertisements on the basis of attention conforms to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs. This determination was accomplished by testing the following hypotheses:

Null hypothesis: The ranking of the advertisements on the basis of attention does not conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Alternate hypothesis: The ranking of the advertisements on the basis of attention does conform to the

TABLE 15.--Compilation of Chi square values for the 24 advertisements tested.

Advertisements**	Chi Square Value
<u>Watches</u>	
Poor Girl's . . .	50.625*
Are you . . .	10.50*
Rolex	22.375*
Waltham	4.5
<u>Panty hose</u>	
Mojud	35.25*
Hanes	3.25
Supphose	20.75*
Sears	8.75*
<u>Liquor</u>	
Early Times	15.75*
Chivas Regal	20.0*
Dewars	21.75*
Seagrams	23.25*
<u>Cigarettes (A)</u>	
Virginia Slims	4.25
Winchester	4.0
Tareyton	3.625
Salem	5.75
<u>Automobiles</u>	
Volkswagen	16.25*
MG	31.0*
Fiat	28.0*
Honda	39.75*
<u>Cigarettes (B)</u>	
Benson & Hedges	34.75*
Camel	30.25*
Old Gold	19.0*
Raleigh	24.5*

* An asterisk indicates the values for the advertisements which were significant at the .05 level of probability.

** See Appendix A for advertisements identified in this column.

hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

If the advertisements do conform to the hierarchy of beliefs, it would be expected that the Type A advertisements would most frequently be ranked first; the Type B advertisements most frequently ranked second; the Type C advertisements most frequently ranked third, and the Type D advertisements would most frequently be ranked fourth.

The calculations of the median score, median, and mean of the ranks is presented to determine if there is any conformance to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs and the ranking of the advertisements on the basis of attention. The conformance was determined by inspection.

Table 16 presents the rankings for the 'watch' advertisements taken from Table 3 on page 33 of Chapter III. The rankings are presented where they would most frequently be ranked if the advertisements conformed to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Table 17 presents the median score, median, and mean of the ranks for the 'watch' advertisements. The null hypothesis is rejected for the Type A and B advertisements, and the alternate hypothesis is accepted that the ranking of the advertisements on the basis of attention does conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs. The null hypothesis is accepted for

TABLE 16.--Ranking of watch advertisements and hierarchy of beliefs.

Advertisements*	Type of Belief	Frequency of Ranking For Each Advertisement			
		Rank of:	One	Two	Three Four
Poor Girl's . . .	Type A		25		
Are you . . .	Type B			13	
Rolex	Type C				8 (17)**
Waltham	Type D			(13)**	7

* See Appendix A for advertisements identified in this column.

** The numbers in parentheses indicate the highest rankings when they did not conform to the hierarchy of beliefs.

TABLE 17.--Central tendency measurements for watch advertisements.

Advertisements	Type of Belief	Median Score	Median	Mean of Ranks
Poor Girl's . . .	Type A	1	.86	1.2813
Are you . . .	Type B	3	3.318	2.75
Rolex	Type C	4	4.44	3.2813
Waltham	Type D	3	3.192	2.6875

the Type C and D advertisements that the ranking of the advertisements on the basis of attention does not conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Table 18 presents the rankings for the 'panty hose' advertisements taken from Table 5 on page 35 of Chapter III. The rankings are presented where they would most frequently be ranked if the advertisements conformed to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

TABLE 18.--Ranking of panty hose advertisements and hierarchy of beliefs.

Advertisements *	Type of Belief	Frequency of Ranking For Each Advertisement			
		Rank of:	One	Two	Three Four
Mojud	Type A		22		
Hanes	Type B			9	(11) **
Supphose	Type C				9 (18) **
Sears	Type D			(12) **	9

* See Appendix A for advertisements identified in this column.

** The numbers in parentheses indicate the highest rankings when they did not conform to the hierarchy of beliefs.

Table 19 presents the median score, median, and mean of the ranks for the 'panty hose' advertisements. The null

TABLE 19.--Central tendency measurements for panty hose advertisements.

Advertisements	Type of Belief	Median Score	Median	Mean of Ranks
Mojud	Type A	1	.77	1.2813
Hanes	Type B	2	1.61	2.3438
Supphose	Type C	4	4.389	3.375
Sears	Type D	3	3.2	2.8438

hypothesis is rejected for the Type A and B advertisements, and the alternate hypothesis is accepted that the ranking of the advertisements on the basis of attention does conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs. The null hypothesis is accepted for the Type C and D advertisements that the ranking of the advertisements on the basis of attention does not conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Table 20 presents the rankings for the 'liquor' advertisements taken from Table 7 on page 36 in Chapter III. The rankings are presented where they would most frequently be ranked if the advertisements conformed to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Table 21 presents the median score, median, and mean of the ranks for the 'liquor' advertisements. The null

TABLE 20.--Ranking of liquor advertisements and hierarchy of beliefs.

Advertisements*	Type of Belief	Frequency of Ranking For Each Advertisement			
		Rank of:	One	Two	Three Four
Early Times	Type A		14		
Chivas Regal	Type B		(16)**	12	
Dewars	Type C				7 (19)**
Seagrams	Type D			(17)*	12

* See Appendix A for advertisements identified in this column.

** The numbers in parentheses indicate the highest rankings when they did not conform to the hierarchy of beliefs.

TABLE 21.--Central tendency measurements for liquor advertisements.

Advertisements	Type of Belief	Median Score	Median	Mean of Ranks
Early Times	Type A	2	2.346	1.75
Chivas Regal	Type B	2	2.5	1.625
Dewars	Type C	4	4.342	3.3438
Seagrams	Type D	3	3.42	2.375

hypothesis is tentatively rejected for the Type A and B advertisements, and the alternate hypothesis is tentatively accepted that the ranking of the advertisements on the basis of attention does conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs. The null hypothesis is accepted for the Type C and D advertisements that the ranking of the advertisements on the basis of attention does not conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Table 22 presents the rankings for the 'cigarette' advertisements taken from Table 9 on page 37 in Chapter III. The rankings are presented where they would most frequently be ranked if the advertisements conformed to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Table 23 presents the median score, median, and mean of the ranks for the 'cigarette' advertisements. The null hypothesis is accepted for all four of the advertisements that the ranking of the advertisements on the basis of attention does not conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Table 24 presents the rankings for the 'automobile' advertisements taken from Table 11 on page 38 in Chapter III. The rankings are presented where they would most frequently be ranked if the advertisements conformed to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

TABLE 22.--Ranking of cigarette advertisements (A) and hierarchy of beliefs.

Advertisements *	Type of Belief	Frequency of Ranking For Each Advertisement			
		Rank of:	One	Two	Three Four
Virginia Slims	Type A		7	(12) **	
Winchester	Type B			8	(12) **
Tareyton	Type C				6 (12) **
Salem	Type D				(13) ** 4

* See Appendix A for advertisements identified in this column.

** The numbers in parentheses indicate the highest rankings when they did not conform to the hierarchy of beliefs.

TABLE 23.--Central tendency measurements for cigarette advertisements (A).

Advertisements	Type of Belief	Median Score	Median	Mean of Ranks
Virginia Slims	Type A	2	1.75	2.3125
Winchester	Type B	3	3.0	2.625
Tareyton	Type C	3	3.167	2.6875
Salem	Type D	3	3.42	2.375

TABLE 24.--Ranking of automobile advertisements and hierarchy of beliefs.

Advertisements *	Type of Belief	Frequency of Ranking For Each Advertisement			
		Rank of:	One	Two	Three Four
Volkswagen	Type A		12	(15) **	
MG	Type B		(20) **	10	
Fiat	Type C				20
Honda	Type D				23

* See Appendix A for advertisements identified in this column.

** The numbers in parentheses indicate the highest rankings when they did not conform to the hierarchy of beliefs.

Table 25 presents the median score, median, and mean of the ranks for the 'automobile' advertisements. The null hypothesis

TABLE 25.--Central tendency measurements for automobile advertisements.

Advertisements	Type of Belief	Median Score	Median	Mean of Ranks
Volkswagen	Type A	2	2.234	1.8125
MG	Type B	1	.7	1.4375
Fiat	Type C	3	2.9	3.125
Honda	Type D	4	4.196	3.625

is accepted for the Type A and B advertisements that the ranking of the advertisements on the basis of attention does not conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs. The null hypothesis is rejected for the Type C and D advertisements, and the alternate hypothesis is accepted that the ranking of the advertisements on the basis of attention does conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Table 26 presents the rankings for the 'cigarette' advertisements taken from Table 13 on page 40 in Chapter III. The rankings are presented where they would be most frequently ranked if the advertisements conformed to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Table 27 presents the median score, median, and mean of the ranks for the 'cigarette' advertisements. The null hypothesis is rejected for all four of the advertisements, and the alternate hypothesis is accepted that the ranking of the advertisements does conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Table 28 on page 53 presents the compilation of the hierarchy of beliefs and whether or not the null hypothesis was accepted or rejected for all of the advertisements. From the data, it can be concluded that the ranking of the advertisements on the basis of attention does conform

TABLE 26.--Ranking of cigarette advertisements (B) and hierarchy of beliefs.

Advertisements*	Type of Belief	Frequency of Ranking For Each Advertisement			
	Rank of:	One	Two	Three	Four
Benson & Hedges	Type A	22			
Camel	Type B		21		
Old Gold	Type C			18	
Raleigh	Type D				22

* See Appendix A for advertisements identified in this column.

TABLE 27.--Central tendency measurements for cigarette advertisements (B).

Advertisements	Type of Belief	Median Score	Median	Mean of Ranks
Benson & Hedges	Type A	1	1	1.4688
Camel	Type B	2	2.07	1.9688
Old Gold	Type C	3	2.94	3.0
Raleigh	Type D	4	4.227	3.5625

TABLE 28.--Compilation of hierarchy of beliefs analysis.

Advertisements*	Type of Belief	Null Hypothesis
<u>Watches</u>		
Poor Girl's	Type A	Rejected
Are you . . .	Type B	Rejected
Rolex	Type C	Accepted
Waltham	Type D	Accepted
<u>Panty hose</u>		
Mojud	Type A	Rejected
Hanes	Type B	Rejected
Supphose	Type C	Accepted
Sears	Type D	Accepted
<u>Liquor</u>		
Early Times	Type A	Rejected
Chivas Regal	Type B	Rejected
Dewars	Type C	Accepted
Seagrams	Type D	Accepted
<u>Cigarettes (A)</u>		
Virginia Slims	Type A	Accepted
Winchester	Type B	Accepted
Tareyton	Type C	Accepted
Salem	Type D	Accepted
<u>Automobiles</u>		
Volkswagen	Type A	Accepted
MG	Type B	Accepted
Fiat	Type C	Rejected
Honda	Type D	Rejected
<u>Cigarettes (B)</u>		
Benson & Hedges	Type A	Rejected
Camel	Type B	Rejected
Old Gold	Type C	Rejected
Raleigh	Type D	Rejected

* See Appendix A for advertisements identified in this column.

to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Analysis of Reasons for First Rankings of Type A Advertisements

When the subjects ranked the advertisements with Type A beliefs first, they were asked why they did so. It was recorded whether the ranking of the advertisement was because of the Type A belief in the advertisements or for some other reason. Table 29 lists the six Type A advertisements and whether or not the subjects ranked the advertisements first because of the Type A beliefs.

TABLE 29.--Six Type A advertisements and reason for first ranking.

Advertisements *	Number of First Rankings	Because of Type A Beliefs	Because of Some Other Reason
Poor Girl's . . .	25,	25	0
Mojud	22	22	0
Early Times	14	14	0
Virginia Slims	7	7	0
Volkswagen	12	1	11
Benson & Hedges	22	21	1

* See Appendix A for advertisements identified in this column.

It is apparent from the table that all of the advertisements, except for the Volkswagen advertisement, were ranked first because of the type of belief that they violate. From this conclusion and on the basis of the data presented in the Chi square analysis and in the hierarchy of beliefs analysis, it can be concluded that the centrality of a belief used in an advertising appeal, does affect whether or not the advertisement attracts the attention of the subjects exposed to it.

Brand Preference

General Hypotheses

Null Hypothesis

Exposure to advertisements utilizing one of the four types of beliefs has no effect on the brand preference of the subjects.

Alternate Hypothesis

Exposure to advertisements utilizing one of the four types of beliefs has an effect on the brand preference of the subjects (as expressed by opinion), especially those advertisements with elements of higher beliefs, particularly Type A beliefs.

Testing the Difference Between Two Correlated Means

The ratings of the brands for both the experimental and control group are compared by a t-test to determine if there is a difference in the ratings of the experimental group after seeing the advertisements.

The formula used to determine the difference in the brand preference was:

$$t = \frac{\sum D \sqrt{N - 1}}{\sqrt{N \sum D^2 - (\sum D)^2}}$$

D is the difference of the ratings between the pretest and the posttest. These differences were computed by taking the difference of the ratings in the pretest from the ratings in the posttest for each of the 32 subjects in the control group and each of the 32 subjects in the experimental group. For example, if a subject rated one of the brands as 'neither like nor dislike' in the pretest (a rating of four), and then rated the same brand 'like completely' in the posttest (a rating of seven), the difference in the ratings was recorded as plus three.

The degrees of freedom for the test is 31 (32-1), and the level of significance is .05. The critical value for .05 with a sample of over 30 and a two-tail test is 1.96. The sample size for all the tables is 32.

Table 31 on page 58 presents the frequency of the ratings for the three watch brands in the pretest and the posttest, for both the control and experimental groups. The ratings range from 'liking' to 'disliking.'

Table 30 presents the values for t for the watch brands. The null hypothesis is accepted that exposure to

TABLE 30.--t values for watch brands.

Brands [*]	t Values	
	Experimental	Control
Bulova	.366	.21
Rolex	0.0	1.913
Waltham	1.4326	.60375

^{*} See Appendix A for advertisements of brands identified in this column.

advertisements utilizing one of the four types of beliefs has no effect on the brand preference of the subjects.

Table 32 on page 59 presents the frequency of the ratings for the four panty hose brands in the pretest and the posttest, for both the control and experimental groups. The ratings range from 'liking' to 'disliking.'

Table 33 presents the values for t for the panty hose brands. The null hypothesis is accepted for the Supphose and Hanes brands that exposure to advertisements utilizing one of the four types of beliefs has no effect on the brand preference of the subjects. The null hypothesis is rejected for the Mojud and Sears brands, and the alternate hypothesis is accepted that exposure to advertisements utilizing one of the four types of beliefs has an effect on the brand preference of the subjects.

Table 34 on page 61 presents the frequency of the ratings for the four liquor brands in the pretest and the

TABLE 31.--Frequency of ratings for watch brands.

Brand	Dislike Com- pletely	Dislike Some- what	Dislike A Little	Neither Like Nor Dislike	Like A Little	Like Some- what	Like Com- pletely
BULOVA							
<u>Experimental</u>							
Pretest				12		14	6
Posttest				9	5	12	6
<u>Control</u>							
Pretest				11	4	8	9
Posttest			1	10	2	10	9
ROLEX							
<u>Experimental</u>							
Pretest				25	2	3	2
Posttest	1		1	24	1	3	2
<u>Control</u>							
Pretest				26	1	2	3
Posttest				21	4	5	2
WALTHAM							
<u>Experimental</u>							
Pretest				26	1	3	2
Posttest				23	4	3	2
<u>Control</u>							
Pretest			1	26	2	2	1
Posttest				25	3	2	2

TABLE 32.--Frequency of ratings for panty hose brands.

Brand	Dislike Com- pletely	Dislike Some- what	Dislike A Little	Neither Like Nor Dislike	Like A Little	Like Some- what	Like Com- pletely
MOJUD							
<u>Experimental</u>							
Pretest	2	1		27	2		
Posttest	2		2	23	3	2	
<u>Control</u>							
Pretest	1			26	2	3	
Posttest	1		1	26	3	1	
HANES							
<u>Experimental</u>							
Pretest	1		1	15	1	7	7
Posttest		1		13	5	9	4
<u>Control</u>							
Pretest	1			14	3	7	7
Posttest	1	1	1	12	7	8	2
SUPPHOSE							
<u>Experimental</u>							
Pretest	4		1	18	3	4	2
Posttest	3	4		17	3	4	1
<u>Control</u>							
Pretest	2	1		19	4	6	
Posttest	3	1	2	19	5	2	
SEARS							
<u>Experimental</u>							
Pretest	1	1	2	22	2	2	2
Posttest	2	2	1	16	5	4	2
<u>Control</u>							
Pretest	1			21	5	1	4
Posttest	1	1	4	18	4	3	1

TABLE 33.--t values for panty hose brands.

Brands *	t Values	
	Experimental	Control
Mojud	2.518 **	.6858
Hanes	1.1588	.95
Supphose	.9442	.3340
Sears	2.1968 **	.5730

* See Appendix A for advertisements of brands identified in this column.

** The asterisks indicate the brands which were significant at the .05 level of probability.

posttest, for both the control and experimental groups. The ratings range from 'liking' to 'disliking.'

Table 35 presents the values for t for the liquor brands. The null hypothesis is accepted for the four liquor brands that exposure to advertisements utilizing one of the four types of beliefs has no effect on the brand preference of the subjects.

Table 36 on page .63 presents the frequency of the ratings for the four cigarette brands in the pretest and the posttest, for both the control and experimental groups. The ratings range from 'liking' to 'disliking.'

Table 37 presents the values for t for the cigarette brands. The null hypothesis is accepted for the four cigarette brands that exposure to advertisements utilizing

TABLE 34.--Frequency of ratings for liquor brands.

Brand	Dislike Com- pletely	Dislike Some- what	Dislike A Little	Neither Like Nor Dislike	Like A Little	Like Some- what	Like Com- pletely
EARLY TIMES							
<u>Experimental</u>							
Pretest	4		2	23	2	1	
Posttest	6		2	19		4	1
<u>Control</u>							
Pretest	5		1	23		3	
Posttest	4	1		21	2	3	1
CHIVAS REGAL							
<u>Experimental</u>							
Pretest	2			19	3	2	6
Posttest	7		1	15	1	2	6
<u>Control</u>							
Pretest	4			17	1	2	8
Posttest	4			16	3	2	7
DEWARS							
<u>Experimental</u>							
Pretest	4		1	22	4		1
Posttest	5	2	1	16	4	1	3
<u>Control</u>							
Pretest	5	1		19	2	4	1
Posttest	5		3	17	3	2	2
SEAGRAMS							
<u>Experimental</u>							
Pretest	3		1	9	5	6	8
Posttest	5			7	2	8	10
<u>Control</u>							
Pretest	4			9	3	9	7
Posttest	3	1	1	7	4	9	7

TABLE 35.--t values for liquor brands.

Brands *	t Values	
	Experimental	Control
Early Times	.1401	1.572
Chivas Regal	.2726	1.469
Dewars	.1043	.9161
Seagrams	.2726	.3569

* See Appendix A for advertisements of brands identified in this column.

TABLE 36.--Frequency of ratings for cigarette brands (A).

Brand	Dislike Com- pletely	Dislike Some- what	Dislike A Little	Neither Like Nor Dislike	Like A Little	Like Some- what	Like Com- pletely
VIRGINIA SLIMS							
<u>Experimental</u>							
Pretest	15		2	7	5	1	2
Posttest	14	3	3	6	2	1	3
<u>Control</u>							
Pretest	13		1	10	4	2	2
Posttest	17	4	1	5	2	1	2
WINCHESTER							
<u>Experimental</u>							
Pretest	19			12	1		
Posttest	20	3		7	2		
<u>Control</u>							
Pretest	17		2	13			
Posttest	21	1	2	8			
TAREYTON							
<u>Experimental</u>							
Pretest	16		2	10	2	2	
Posttest	19	3	1	5	2		2
<u>Control</u>							
Pretest	15		2	14		1	
Posttest	19	3	1	7			2
SALEM							
<u>Experimental</u>							
Pretest	17		2	10	1		2
Posttest	13	1	5	5	1	3	4
<u>Control</u>							
Pretest	13	1	1	12	3		2
Posttest	15		2	5	3	3	4

TABLE 37.--t values for cigarette brands (A).

Brands *	t Values	
	Experimental	Control
Virginia Slims	.3169	-2.0189
Winchester	.37899	.5545
Tareyton	-.1348	-.2235
Salem	1.777	.2297

* See Appendix A for advertisements of brands identified in this column.

one of the four types of beliefs has no effect on the brand preference of the subjects.

Table 38 on page 65 presents the frequency of the ratings for the four automobile brands in the pretest and the posttest, for both the control and experimental groups. The ratings range from 'liking' to 'disliking.'

Table 39 presents the values for t for the automobile brands. The null hypothesis is accepted for the four automobile brands that exposure to advertisements utilizing one of the four types of beliefs has no effect on the brand preference of the subjects.

Table 40 on page 67 presents the frequency of the ratings for the four cigarette brands in the pretest and the posttest, for both the control and experimental groups. The ratings range from 'liking' to 'disliking.'

TABLE 38.--Frequency of ratings for automobile brands.

Brand	Dislike Com- pletely	Dislike Some- what	Dislike A Little	Neither Like Nor Dislike	Like A Little	Like Some- what	Like Com- pletely
VOLKSWAGEN							
<u>Experimental</u>							
Pretest		3	2	3	5	11	8
Posttest		3	2	3	6	8	10
<u>Control</u>							
Pretest	2	1	2	4	4	10	9
Posttest		2	2	3	5	8	12
MG							
<u>Experimental</u>							
Pretest				5	6	8	13
Posttest				4	5	9	14
<u>Control</u>							
Pretest				4	6	9	13
Posttest	1			8	5	4	14
FIAT							
<u>Experimental</u>							
Pretest		1	1	7	7	6	10
Posttest	1	2	1	6	7	9	6
<u>Control</u>							
Pretest			2	8	8	5	9
Posttest				4	6	9	13
HONDA							
<u>Experimental</u>							
Pretest	6	4		11	4	4	3
Posttest	8	2	4	7	3	7	1
<u>Control</u>							
Pretest	6	3	1	10	6	3	3
Posttest	5	5	2	8	5	5	2

TABLE 39.--t values for automobile brands.

Brands *	t Values	
	Experimental	Control
Volkswagen	.928	1.784
MG	.3252	1.1317
Fiat	.525	1.597
Honda	.519	1.256

* See Appendix A for advertisements of brands identified in this column.

TABLE 40.--Frequency of ratings for cigarette brands (B).

Brand	Dislike Com- pletely	Dislike Some- what	Dislike A Little	Neither Like Nor Dislike	Like A Little	Like Some- what	Like Com- pletely
BENSON & HEDGES							
<u>Experimental</u>							
Pretest	14		2	9	3	3	1
Posttest	15	1	3	6	3	2	2
<u>Control</u>							
Pretest	12		1	11	4	2	2
Posttest	15	3		7	2	4	1
CAMEL							
<u>Experimental</u>							
Pretest	19	1	2	8	2		
Posttest	18	3		6	3	1	1
<u>Control</u>							
Pretest	19	1	1	11			
Posttest	19	2	1	7	2	1	
OLD GOLD							
<u>Experimental</u>							
Pretest	18		2	12			
Posttest	18	3		8	2		1
<u>Control</u>							
Pretest	16		1	15			
Posttest	18	1	2	9	1	1	
RALEIGH							
<u>Experimental</u>							
Pretest	20		1	10		1	
Posttest	20	4		7	1		
<u>Control</u>							
Pretest	16		1	14		1	
Posttest	21	1	1	8		1	

Table 41 present the values for t for the cigarette brands. The null hypothesis is accepted for all four of the cigarette brands that exposure to advertisements utilizing one of the four types of beliefs has no effect on the brand preference of the subjects.

TABLE 41.-- t values for cigarette brands (B).

Brands [*]	t Values	
	Experimental	Control
Benson & Hedges	1.281	.2293
Camel	-.1459	-.7017
Old Gold	.9407	0.0
Raleigh	1.675	-3.772

* See Appendix A for advertisements of brands identified in this column.

On the basis that only two of the advertisements tested had significant t values, it is concluded that exposure to advertisements utilizing one of the four types of beliefs has no effect on the brand preference of the subjects.

CHAPTER IV

SUMMARY OF CONCLUSIONS

Attention

General Hypotheses

Null Hypothesis

The centrality of a belief used in an advertising appeal, does not affect whether or not the advertisement attracts the attention of the subjects exposed to it.

Alternate Hypothesis

The centrality of a belief used in an advertising appeal, does affect whether or not the advertisement attracts the attention of the subjects exposed to it.

On the basis of the evidence presented in Chapter III, the null hypothesis is rejected and the alternate hypothesis is accepted. The centrality of a belief used in an advertisement does affect whether or not the advertisement attracts the attention of subjects, and the effects conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs.

Attention-Attraction Analysis

Although the evidence is strong (18 of 24 instances) that the alternate hypothesis should be accepted, it seemed

desirable to analyze the other six advertisements to ascertain if there were any reasonable explanations as to why the findings were different. The data on these six advertisements are summarized in Table 42.

TABLE 42.--Advertisements for which the null hypothesis was accepted.

Advertisements *	Type of Belief	Group Number	Chi Square Value
Virginia Slims	Type A	4	4.25
Hanes	Type B	2	3.25
Winchester	Type B	4	4.0
Tareyton	Type C	4	3.625
Waltham	Type D	1	4.5
Salem	Type D	4	5.75

* See Appendix A for advertisements identified in this column.

In all four of the advertisements in Group four the centrality of the belief used in the advertisement did not make any difference in their attention-attracting powers. A plausible explanation for this result is that the Type A belief in the Virginia Slims advertisement was more subtle and required greater observational acuity of the subjects to spot it in a cursory glance. The type of the product and the familiarity with the themes of the cigarette advertisements such as the Tareyton advertisement may also

have been a factor in the ranking. Another explanation for the finding about this group of advertisements which the author did not realize but which was pointed out by many subjects during the experiment was that the Salem advertisement utilizing a Type D belief, also violated a Type A belief since it illustrated a man smoking a cigarette with his head wet and his body submerged in water which violates a Type A belief that fire is extinguished by water.

The lack of significant Chi square values for the Hanes and Waltham advertisements cannot be explained by using Rokeach's beliefs theory; however, the Chi square values were significant for the other three advertisements with which they were ranked, and the advertisements do conform, for the most part, with the hierarchy of beliefs.

As already indicated, the type of product and familiarity with advertising themes were also factors in attracting the attention of the subject rather than the appeals in the advertisements. A possible means to avoid the attraction on the basis of product familiarity would be to use only one brand and create four advertisements utilizing one of each of the four beliefs. By using only one brand, it could result in a more definite determination of the effectiveness of the advertisements on the basis of attention and the beliefs which the advertisements utilize.

The findings seem to indicate that the more outstanding the violation of a Type A belief, the more likely it will catch the attention of its target market. Product

familiarity along with the violation of a Type A belief seems to be a strong combination in attracting attention.

Hierarchy of Beliefs Analysis

Table 43 presents the advertisements which did not conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs by their ranking on the basis of attention.

The Virginia Slims, Winchester, Tareyton, and Salem advertisements did not conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs for the same reasons cited for their lack of difference in the Chi square analysis above.

The Rolex, Supphose, and Dewars advertisements utilize Type C or non-primitive, authority beliefs as defined by Rokeach. A possible reason for these advertisements not being ranked third by the subjects on the basis of attention could be that the subjects did not view the authority in the advertisements as authorities for them as persons. This rejection of the authority could also explain why the Type D advertisements, Waltham, Sears, and Seagrams, were ranked above the Type C advertisements.

The Volkswagen advertisement with Type A beliefs was ranked below the MG advertisement with Type B beliefs. The Volkswagen advertisement utilized a written violation of a Type A belief in its headline while the five other Type A advertisements tested utilized illustrations to violate

TABLE 43.--Advertisements that did not conform to hierarchy of beliefs.

Advertisements *	Type of Belief	Hypothesized Ranking	Actual Ranking
<u>Watches</u>			
Rolex	Type C	3	4
Waltham	Type D	4	3
<u>Panty hose</u>			
Supphose	Type C	3	4
Sears	Type D	4	3
<u>Liquor</u>			
Dewars	Type C	3	4
Seagrams	Type D	4	3
<u>Cigarettes</u>			
Virginia Slims	Type A	1	2
Winchester	Type B	2	3
Tareyton	Type C	3	3
Salem	Type D	4	3
<u>Automobile</u>			
Volkswagen	Type A	1	2
MG	Type B	2	1

* See Appendix A for advertisements identified in this column.

their Type A beliefs. This seems to be a possible reason for the nonconformance of the Volkswagen advertisement to the beliefs hierarchy.

Two suggestions for doing additional kinds of research arise. One is that, if possible, it should be determined if the authority figures presented in the Type C advertisements included in the experiment are viewed as authorities by the subjects participating in the experiment. Assuring that the authorities actually exist as authorities for the subjects could be done by making the authorities in the advertisements universal or by targeting particular authorities with a series of advertisements to segmented groups of subjects participating in the experiment.

The second suggestion for further research is to determine if the advertisements containing or violating the four types of beliefs would conform to the hierarchy of beliefs in Rokeach's central-peripheral dimension of beliefs if the beliefs were presented in written form. From the ranking of the Volkswagen advertisement, with its written violation of a Type A belief, the indications suggest that the ranking might not conform to the hierarchy of beliefs. A comparison of the effectiveness of the advertisements between an illustrative presentation of the beliefs and a written presentation of the beliefs could also be conducted.

The suggestions for selecting appeals for advertisements for this analysis seem to be that authorities used in advertisements should coincide with the authorities

of the readers of the advertisement. Another suggestion, although further research appears to be necessary for it to be conclusive, seems to be that an illustrative violation of a Type A belief has more effect in attracting attention than a written violation of a Type A belief.

Analysis of Reasons for First Rankings of Type A Advertisements

The findings for the probing question were presented in Chapter III. The question dealt with whether or not the subjects' attention was attracted by the Type A violations in the advertisements or for some other reason. It seems that advertisements violating Type A beliefs were most effective in attracting attention, with the exception of the Volkswagen advertisement. Only one subject ranked the Volkswagen advertisement first because of its violation of a Type A belief.

It might be necessary in further research to include a probing question for every type of belief to determine if the ranking for all of the advertisements is because of the type of belief that the advertisement contains or violates or for some other reason.

Brand Preference

General Hypotheses

Null Hypothesis

Exposure to advertisements utilizing one of the four types of beliefs has no effect on the brand preference of the subjects.

Alternate Hypothesis

Exposure to advertisements utilizing one of the four types of beliefs has an effect on the brand preference of the subjects (as expressed by opinion), especially those advertisements with elements of higher beliefs, particularly Type A beliefs.

On the basis of the evidence presented in Chapter III, the null hypothesis is accepted that advertisements utilizing one of the four types of beliefs do not have an effect on brand preference.

Testing the Difference Between Two Correlated Means

Two brands exhibited a more favorable preference by the subjects in their ratings of the pretest and the posttest. The difference in the rating for the Mojud Panty Hose brand with its utilization of Type A beliefs supports the alternate hypothesis that exposure to an advertisement with Type A beliefs has an effect on brand preference. The difference in the rating of the Sears Panty Hose brand could be explained by the fact that the product was unknown and might possibly have a poor image with the association of the store, Sears, and the product, panty hose. The subjects might have developed a more favorable image of the product upon learning about the brand by exposure to the advertisement.

Other factors besides advertising often are contributors to brand preference. Some of the factors are: how the product is used, packaging, design of the product, cost,

where the product is sold, and brand name or image.⁵¹ One advertisement by itself cannot be expected to be responsible to alter brand preference significantly. Advertising is only a part of an interrelated system of functions designed to change brand preference. In further research, the beliefs theory in relation to advertisements should be tested on the basis of what the advertisement by itself is supposed to accomplish in the marketing of a product.

The findings gave one indication that advertising has the ability to convert a poor brand image to a more favorable image. This ability was demonstrated when subjects who were exposed to the Sears Panty Hose advertisement were then more favorably disposed toward that brand. Advertising also seems to have the ability to change the brand preference of a relatively unknown brand. Subjects who were exposed to the Mojud advertisement violating Type A beliefs were more favorably disposed to that brand in the posttest.

⁵¹S. Watson Dunn, Advertising: Its Role in Modern Marketing (New York: Holt Rinehart and Winston, Inc., 1969), pp. 240-243.

APPENDICES

APPENDIX A

ADVERTISEMENTS TESTED



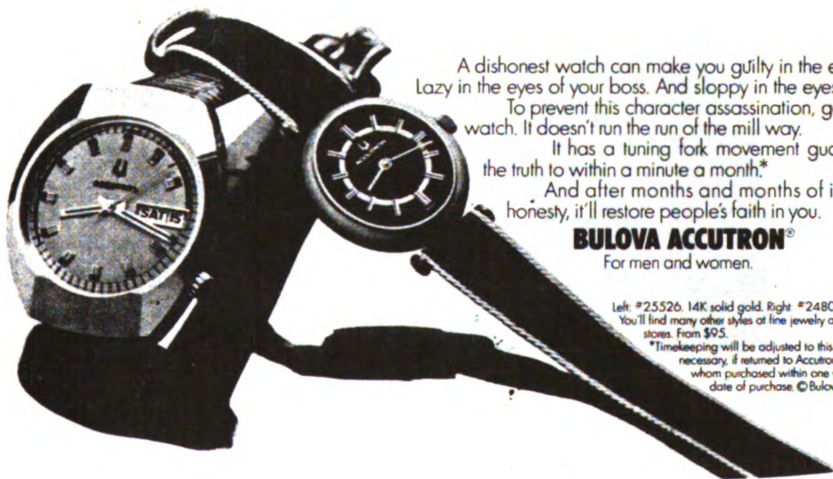
Designer wrist-watches from the House of Dior. But the only expensive thing about them is their look.

The Dior Contemporary Collection from Bulova.

Models shown left to right: #53016 #53014 #53029 #52030. These and other styles from \$100 at fine jewelry and department stores. ©Bulova Watch Co., Inc.



ARE YOU PAYING FOR YOUR WATCH'S MISTAKES?



A dishonest watch can make you guilty in the eyes of the law. Lazy in the eyes of your boss. And sloppy in the eyes of your friends. To prevent this character assassination, get an Accutron® watch. It doesn't run the run of the mill way.

It has a tuning fork movement guaranteed to tell the truth to within a minute a month.*

And after months and months of its unwavering honesty, it'll restore people's faith in you.

BULOVA ACCUTRON®

For men and women.

Left: #25526, 14K solid gold. Right: #24802, 10K gold-filled. You'll find many other styles of fine jewelry and department stores. From \$95.

*Timekeeping will be adjusted to this tolerance, if necessary, if returned to Accutron dealer from whom purchased within one year from date of purchase. © Bulova Watch Co., Inc.

If you ever need a Rolex, you'll find a Rolex needs no pampering. It's Red Adair in action.



Red Adair is internationally famous for fighting oil-well fires. He answers alarms from all over the world.

Probably his greatest challenge was this Sahara blowout that sent a geyser of flame thundering to a height of 700 feet, gorging 550,000,000 cubic feet of gas every 24 hours.

Those who watched this spectacle dubbed it "The Devil's Cigarette Lighter." John Glenn was able to observe it from his space capsule.

It took five long months of punctilious preparation before Adair was ready to move in, perilously close to the raging inferno, and deftly place the specially made explosive charge that — boom! — blew out the fire much as you might blow out a match.

A man like this demands a lot of himself. His possessions must match his life-style. That's why you'll find a Rolex on his wrist.

It looks rugged — and is. The case is carved from a solid ingot of 18 kt. gold or stainless steel. The Triplock winding crown is firmly screwed down into the case so that it

seals like a miniature submarine hatch. The crystal is diamond-cut for a meticulous match with the case and uniquely engineered so that it actually grips more tightly under pressure (deep underwater, for instance).

Inside is a Rolex movement that truly deserves all this protection. Crafted skillfully in time-honored tradition by skilled Swiss hands. Fitted with a self-winding rotor that Rolex invented. Submitted voluntarily to an Official Swiss Institute for Chronometer Tests, where each individual movement undergoes two weeks of exhaustive tests before earning the prized "chronometer" rating. The result

is a triumph of the watchmaker's art: a timepiece you'll own with pride; a timepiece you'll never have to pamper.

Ask Red Adair.

Write for free color brochure, Rolex Watch U.S.A., Inc., 580 Fifth Avenue, New York, N.Y. 10036, Dept. A4.

Owning one is almost as satisfying as making one.



ROLEX



Rolex Oyster Perpetual Day-Date. 18 kt. gold case and matching President bracelet. Also available in 18 kt. white gold.

**Little Swiss masterpieces.
17 jewels. 50 dollars and less.**

Some dramatically less.

Thoroughly female, Swiss watches. Choose from expansion band and bracelet styles. The collection ranges from the ultra feminine to the sporty.

Faceted. Sculptured. Each watch you see here has a 17 jewel Swiss movement. Stunning little works of art, aren't they? And you can pick up any one of these for a lovely little price. Most Waltham ladies' watches, in fact, are from 25 to 50 dollars.

WALTHAM
an international product by Waltham of Chicago

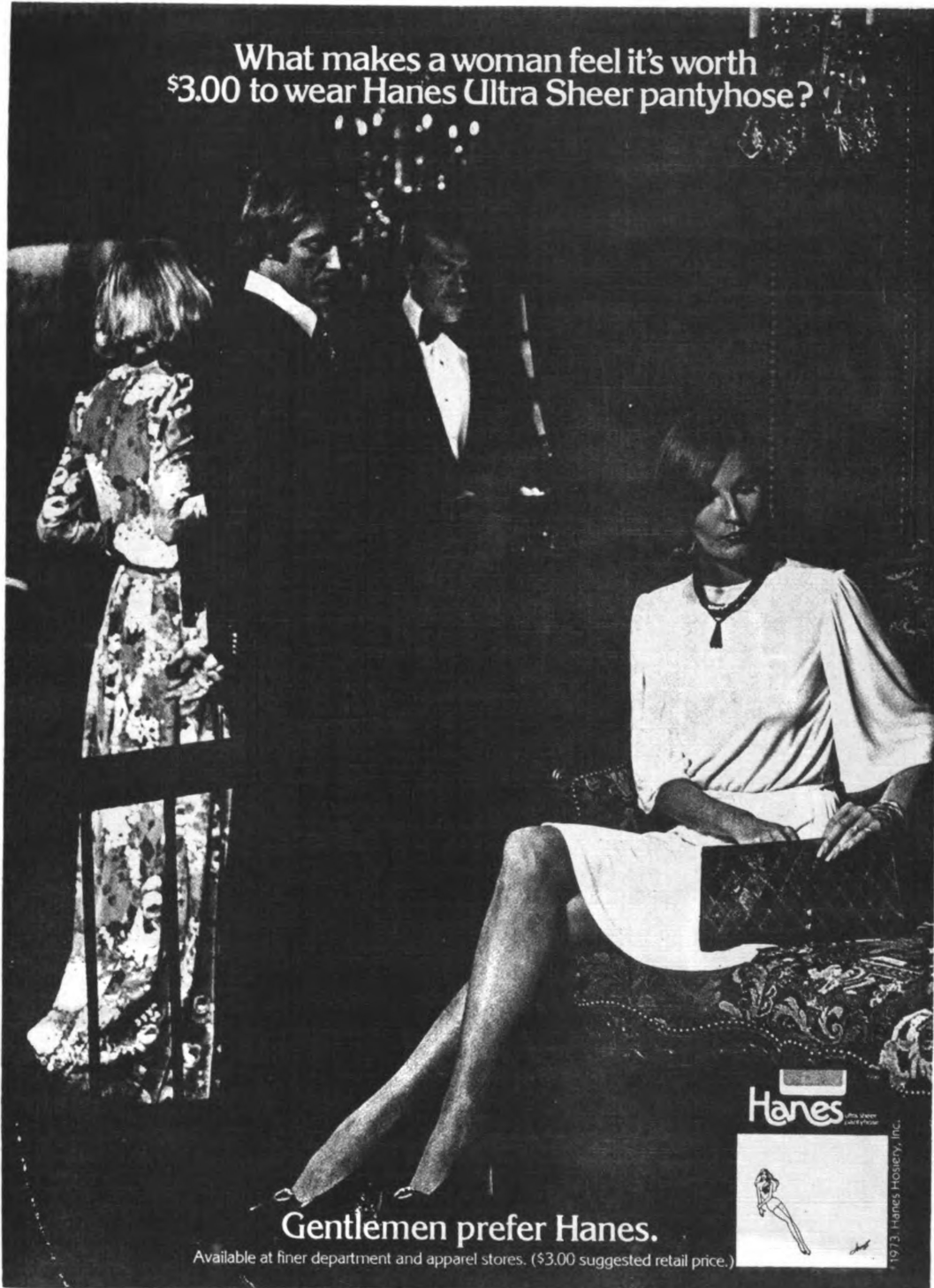
CHICAGO • NEW YORK • GENEVA

Another fine product of Kayser-Roth

Mojud® Panty Hose.
For legs that come alive in the Spring.

This Spring, Mojud brings you more dazzling panty hose colors. In exclusive super stretch Carmelon®, Opaque, Agilon® and Sheer-to-the-Waist. So, no matter where your fashions go, our colors will go with them. It's Mojud's colorful way to wake up your legs this Spring. **MOJUD**

What makes a woman feel it's worth
\$3.00 to wear Hanes Ultra Sheer pantyhose?



Hanes
Ultra Sheer
pantyhose

Gentlemen prefer Hanes.

Available at finer department and apparel stores. (\$3.00 suggested retail price.)

1973 Hanes Hosiery, Inc.



Every girl on this page is wearing the same thing.



**New! Supp-hose®
Sheer-To-The-Waist Panty Hose.**

Now there's a new Supp-hose Panty Hose with ultra sheer, flat knit support.

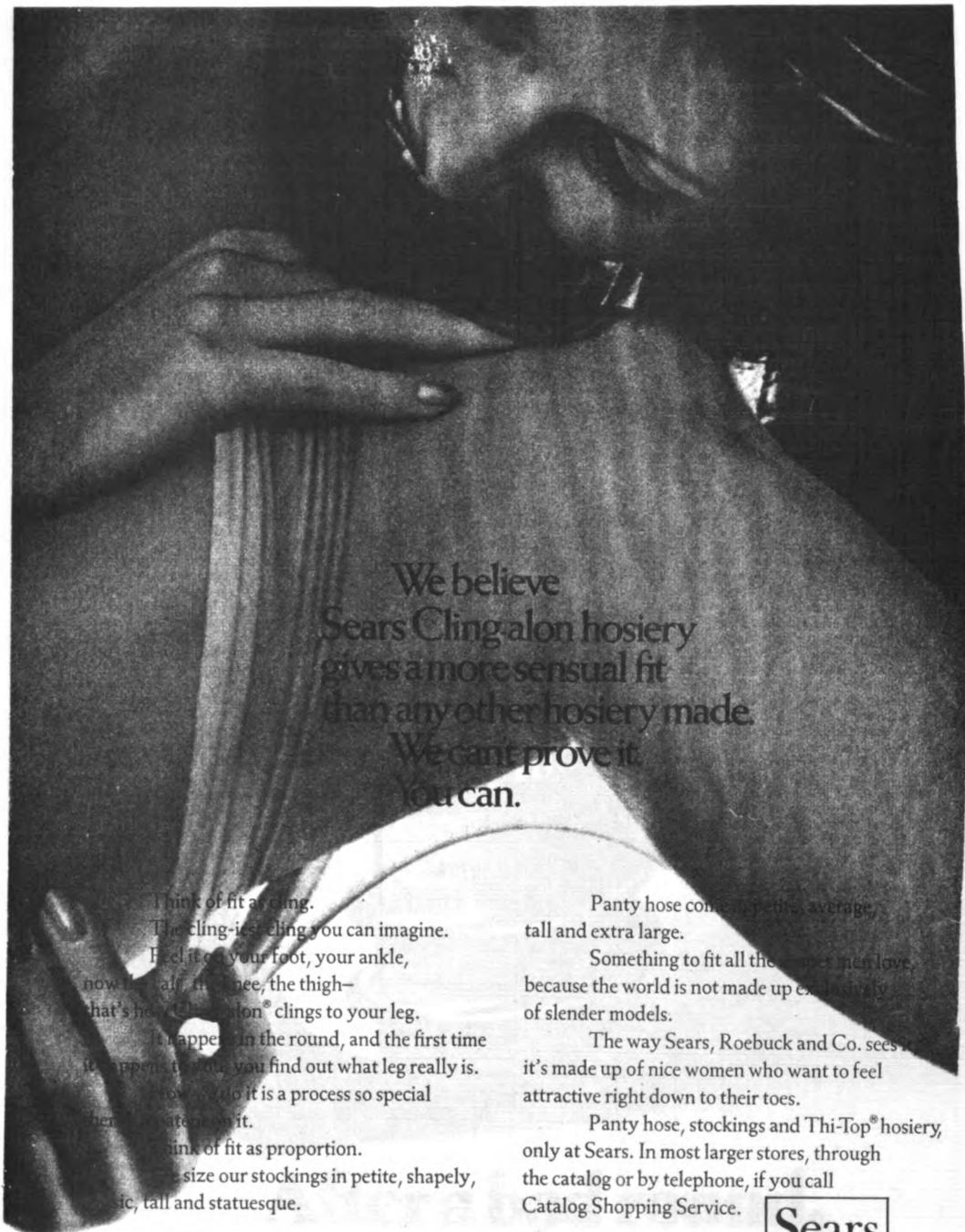
It looks great with all the newest fashions because it's sheer-to-the-waist.

And because it's Supp-hose, it gives you that 9 AM feeling at 5 PM.

For only \$4.95.



KR
Another fine product of Kaysen-Roth



We believe
Sears Cling-alon hosiery
gives a more sensual fit
than any other hosiery made.
We can't prove it.
You can.

Think of fit as cling.
The cling-is feeling you can imagine.
Feel it on your foot, your ankle,
now the calf, the knee, the thigh—
that's how Cling-alon® clings to your leg.
It happens in the round, and the first time
it happens to you, you find out what leg really is.
Now we do it is a process so special
that we call it Cling.
Think of fit as proportion.
We size our stockings in petite, shapely,
classic, tall and statuesque.

Panty hose come in petite, average,
tall and extra large.

Something to fit all the women men love,
because the world is not made up exclusively
of slender models.

The way Sears, Roebuck and Co. sees it,
it's made up of nice women who want to feel
attractive right down to their toes.

Panty hose, stockings and Thi-Top® hosiery,
only at Sears. In most larger stores, through
the catalog or by telephone, if you call
Catalog Shopping Service.

Sears

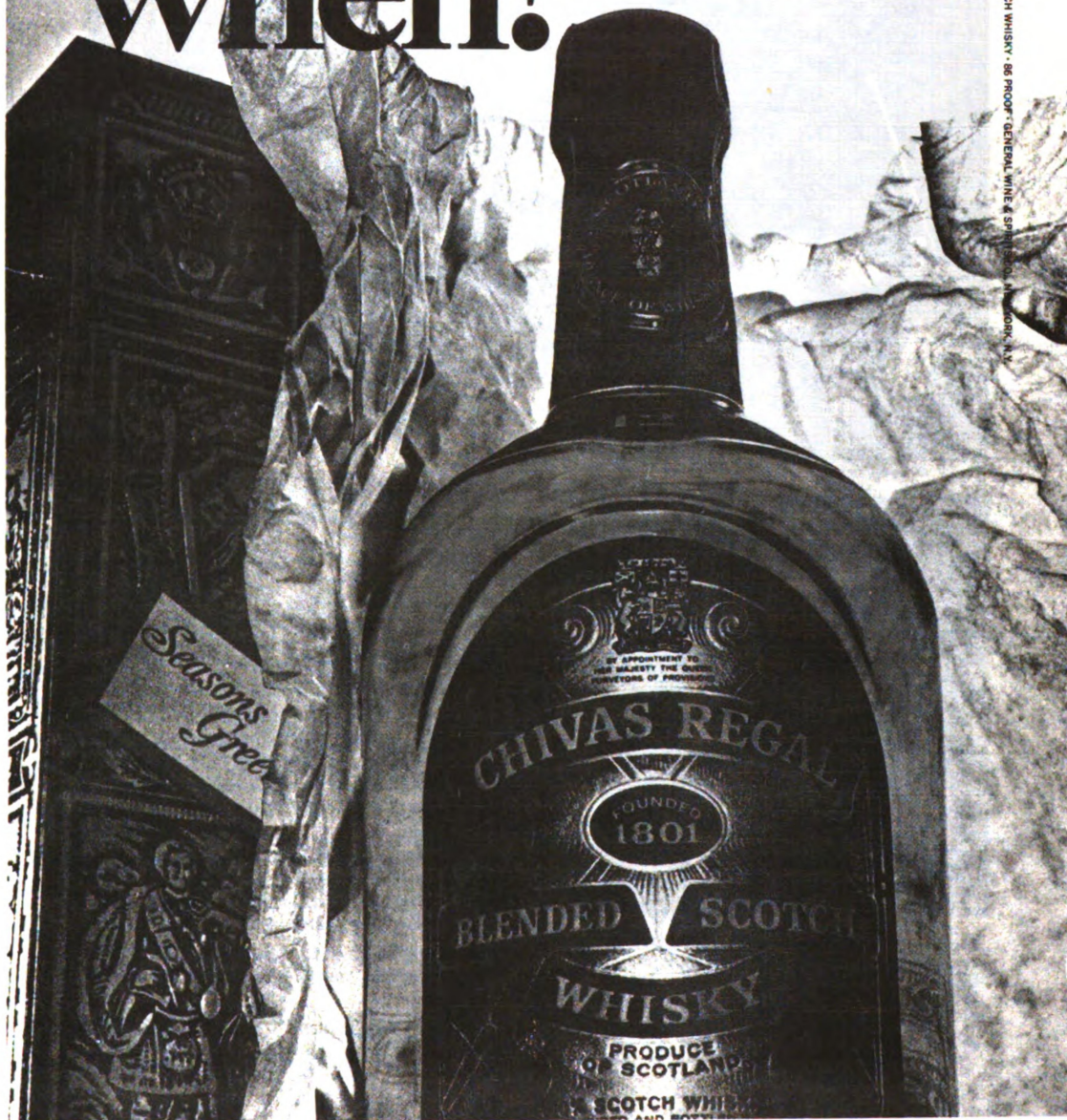
Cling-alon hosiery.
The fit to be tried.



KENTUCKY STRAIGHT BOURBON WHISKY • 55 PROOF • EARLY TIMES DISTILLERY CO., LOUISVILLE, KY. © DEC 1977

**After a bad round,
have a good one.**

If not now, when?



DEWAR'S PROFILES

(Pronounced Do-ers "White Label")



EVE QUELER

HOME: New York, N. Y.

AGE: 37

PROFESSION: Conductor

HOBBIES: Playing the piano; attending concerts.

MOST MEMORABLE BOOK: Dante's "Divine Comedy"

LAST ACCOMPLISHMENT: Recently conducted the Opera Orchestra of New York at Carnegie Hall in Bizet's "Pearl Fishers," receiving raves from New York music critics.

QUOTE: "I think all young American conductors should have the opportunity to come up the way many European conductors have—through opera. It gives you fantastic background and absolute mastery of your materials."

PROFILE: Vigorous. Chic. Exciting. Conducts with a sure command of her music and her musicians.

SCOTCH: Dewar's "White Label"

BLENDING SCOTCH WHISKY • 86.8 PROOF • ©SCHENLEY IMPORTS CO., N. Y., N. Y.



Authentic. There are more than a thousand ways to blend whiskies in Scotland, but few are authentic enough for Dewar's "White Label." The quality standards we set down in 1846 have never varied. Into each drop go only the finest whiskies from the Highlands, the Lowlands, the Hebrides.

Dewar's never varies.

America's whiskey and how to enjoy it.



SEAGRAM DISTILLERS CO., N.Y.C. AMERICAN WHISKEY—A BLEND. 86 PROOF.

It isn't easy, sneaking one past a three-inch goalie.

So when you do, you ought to celebrate. And a Seven Sour is what you ought to celebrate with.

All it takes is lemon juice, sugar, and of course, Seagram's 7 Crown.

Give it a shake, dress it with fruit, and you've got it made.

But no matter how you like your whiskey—in a sour, with soda, or on the rocks—you'll like it better if it's Seagram's 7 Crown.

It's light, smooth, and uniquely versatile.

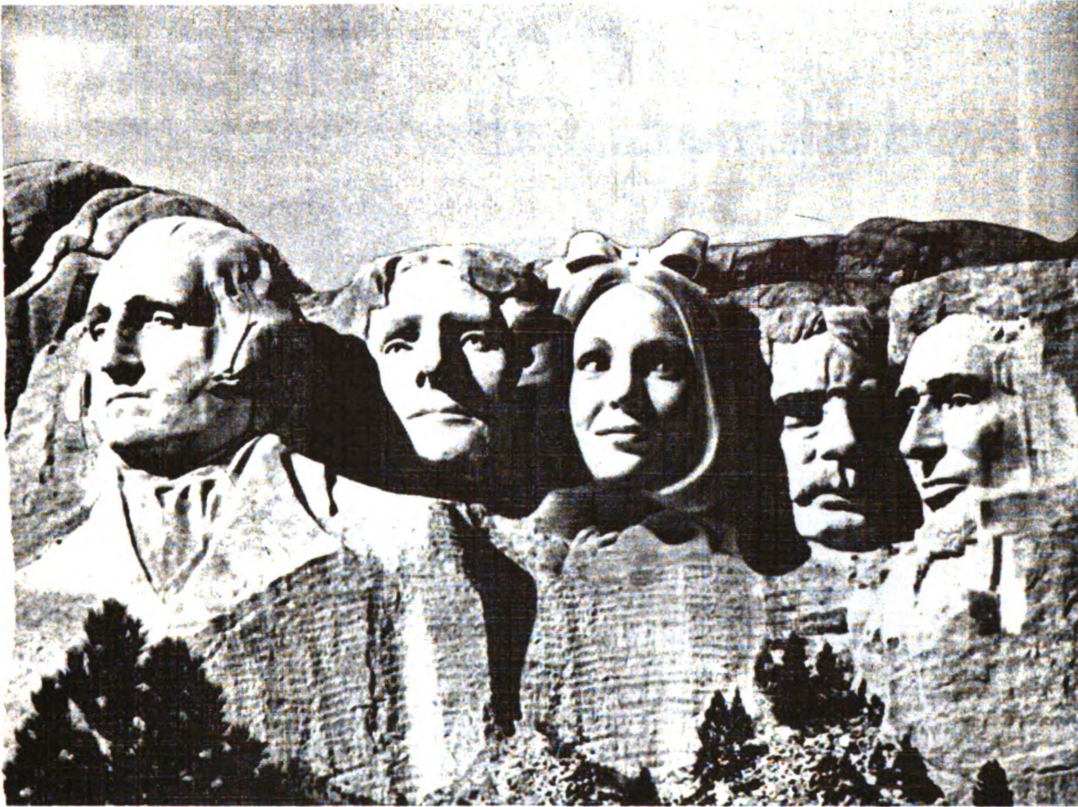
That's why, for 26 championship seasons, it's the whiskey America has liked best.

Seagram's 7 Crown.
It's America's favorite.



THE SEVEN SOUR:

To the juice of one lemon, add one teaspoon fine sugar, and 1½ ounces Seagram's 7 Crown. Shake with ice. Garnish with orange slice and cherry.



On Father's Day, Virginia Slims reminds you that founding fathers couldn't have been founding fathers without founding mothers.



You've come a long way, baby.

VIRGINIA SLIMS.

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

17 mg. "tar," 1.2 mg. nicotine av. per cigarette, FTC Report Feb. '73

Winchester separates the men...from the boys.



©1973 R. J. Reynolds Tobacco Co.

You're a big boy now. And when your taste grows up, your smoke should, too. Winchester is a very mature smoke. Ask any woman. She'll tell you that Winchester is slim and sexy, with a filtered smoothness. Mild and light. She'll tell you that Winchester isn't heavy-handed on aroma. One gentle whiff whispers in her ear: "It's not a cigarette. Not just another little cigar. It's a whole 'nother smoke." Very adult. And she'll tell you that when you're man enough for Winchester, you're man enough for her.

Winchester. It's a whole 'nother smoke.

20 LITTLE CIGARS.



Us Tareyton smokers
would rather fight than switch!



Tareyton is better/Charcoal is why
Tareyton's activated charcoal delivers a better taste.
A taste no plain white filter can match.

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

King Size: 21 mg. "tar", 1.4 mg. nicotine;
100 mm: 21 mg. "tar", 1.5 mg. nicotine, av. per cigarette, FTC Report Sept. '73

Salem refreshes naturally.



- Naturally grown menthol.
- Rich natural tobacco taste.
- No harsh, hot taste.



King or Super King

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

KING: 19 mg. "tar", 1.3 mg. nicotine.
SUPER KING: 19 mg. "tar", 1.4 mg. nicotine, av. per cigarette. FTC Report SEPT. '73.

VOLKSWAGEN OF AMERICA, INC.



Today, it's bigger than a Cadillac.

If you bought a Cadillac Sedan DeVille in '72 and traded it in today,
you'd get back 53%* of its original sticker price.

If you bought a basic Beetle in '72 and traded it in today,
you'd get back 78%* of its original sticker price.

Of course, we can't guarantee you'd do as well next year.

But then again, you might even do better.



* Based on NADA Official Used Car Guide (Eastern Edition) — June '74. (Current trade-in value vs. 1972 sticker price).

MG. First on the scene. And still one jump ahead.



Before MG, there wasn't much of a sports car scene in America.

But from the moment the first MG-TC touched these shores in 1947 the picture changed. So much so that MG has almost become an American synonym for sports car.

Today's MGB is the SCCA National Champion in E Production for the third year in a row. With that kind of track record, you can see why MGB is what great sports car motoring is all about.

MGB is trim, taut and agile.

The four-speed gearbox puts your reflexes in touch with the 1798 c.c. engine. That's a 4-cylinder powerplant

that's as economical as it is lively.

The rack and pinion steering, the race-seasoned suspension and the front disc brakes combine to give you precise, sure-footed handling and stopping—the kind of response that turns driving pressure into driving pleasure.

You'll experience it most where the roads still touch the edges of nature and the air is scented with the sweet smells of earth.

But make no mistake, the MGB is just as much at home on a six-lane expressway as it is on two-lane blacktop.

The MGB is complete with full sports car instrumentation, including

tachometer, trip odometer, and gauges for fuel, oil, water and battery. There are also reclining bucket seats, wrapped steering wheel, carpeting, oil cooler, mag-style wheels and radial-ply tires.

So make the scene at your MG dealer and see why MG is still one jump ahead. For his name and for information about overseas delivery, call (800) 447-4700. In Illinois, call (800) 322-4400. Calls are toll free.

MG. The sports car America loved first.

BRITISH LEYLAND MOTORS INC. LEONIA, N.J. 07605



**IN EUROPE,
WHERE A GALLON OF GAS
GOES FOR BETWEEN
77¢ AND \$1.80,
MORE PEOPLE BUY FIATS
THAN ANY OTHER CAR.**



Prices of regular gasoline in Europe. Denmark, \$1.13, Norway, \$1.22, West Germany, \$1.16, Sweden, \$1.15, Greece, \$1.80. (Costs and currency exchange rate as of 1/2/74.*) Italy, \$1.14, Belgium, \$1.01, Netherlands, \$1.05, Portugal, \$1.05, Switzerland, \$.95, Spain, \$1.17, England, \$.77. (Costs and currency exchange rate as of 1/25/74.**)

*Source: European Embassies, Paris, France. **Source: Institute of Petroleum, London, England.

FIAT

The biggest selling car in Europe.

Overseas delivery arranged through your dealer.

HONDA PRESENTS THE 1974 EPA TEST RESULTS. FOR OBVIOUS REASONS.

What you're looking at are the results of a gas mileage test performed on 1974 cars by the U.S. Environmental Protection Agency.

The test simulated an average trip under city driving conditions.

If you're in the market for a new car, we suggest you make use of these results as follows.

1. Go down the list until you find the car you're considering.

2. Compare its mileage to the car at the top of the list.

3. Then decide.

This list is being published by the makers of the car at the top of the list. Partly as a public service.

TRANS MPG			
Honda Civic	M4 29.1	Chevrolet Vega Hatchback	A3 19.6
Volkswagen 412 Wagon	M4 27.9	Saab 99 LE	M4 19.4
Toyota Corolla 1200 Coupe	M4 27.1	Toyota Mark II Wagon	A3 19.4
Lotus Europa Special	M5 25.2	Alfa Romeo 2000 GTV	M5 19.1
Datsun B210	M4 24.9	Renault 12 Sedan	A3 19.1
Toyota Corolla 1200 Sedan	M4 24.8	Porsche 911 T	M4 19.1
Volkswagen 412 Wagon	A3 24.6	TVR 2500 M	M4 19.0
Chevrolet Vega Hatchback	M3 24.6	Volkswagen Kombi 22 (Microbus)	A3 19.0
Lotus Europa	M4 24.5	Mazda 808 Coupe	A3 18.9
Volkswagen Dasher Sedan	M4 24.3	Renault 12 Sedan	M4 18.8
Volkswagen Dasher Wagon	A3 23.7	MG B	M4 18.7
Volkswagen Dasher Sedan	A3 23.3	Toyota Corona SR Sedan	M4 18.4
Triumph Spitfire	M4 23.1	Toyota Corona SR Sedan	A3 18.4
Ford Pinto	M4 22.8	Volvo 145	M4 18.4
Dodge Colt Wagon	M4 22.8	Volvo 145	M4 18.2
Dodge Colt Coupe	A3 22.7	Opel Manta	M4 18.2
Subaru Wagon	M4 22.7	Opel 1900	A3 18.2
Toyota Corolla 1600 Sedan	M4 22.6	Fiat 124 Sport Sedan	M5 18.0
Volkswagen Convertible	SA 22.6	Renault 15 TL Coupe	M4 17.9
BMW 2002	A3 22.6	Opel Manta Luxus	A3 17.9
Dodge Colt Coupe	M4 22.5	Fiat 124 Special TC	A3 17.9
MG Midget	M4 22.4	Fiat 128 Wagon	M4 17.8
Datsun B210	A3 22.2	Fiat 124 Wagon	A3 17.7
Renault 17 Gordini	M5 22.2	Porsche 914-4	M5 17.5
Renault 12 Wagon	A3 22.2	Renault 17 TL Coupe	M4 17.5
Audi Fox	M4 22.0	Volvo 142	M5 17.5
Dodge Colt Wagon	A3 21.9	Fiat 128 Sedan	M4 17.4
Honda Civic	SA 21.8	Chevrolet Vega Hatchback	M4 17.4
Saab 97	M4 21.7	Ford Mustang	M4 17.3
Volkswagen Karmann Ghia	M4 21.7	Porsche 911 S	M5 17.2
Subaru Coupe	M4 21.7	Ford Pinto	A3 17.1
Toyota Corolla 1600 Wagon	A3 21.1	Peugeot 504 Sedan	A3 17.0
Volkswagen 181 "Thing"	M4 21.0	Volvo 144	A3 17.0
Volkswagen Super Beetle	M4 20.9	Ford Mustang	A3 16.9
Toyota Corolla 1600 Sedan	A2 20.8	Lincoln Mercury Capri	A3 16.9
Datsun 710	A3 20.7	Porsche 911 S	SA 16.9
Datsun 610	M4 20.6	Triumph TR 6	M4 16.9
Fiat X1/9	M4 20.4	Peugeot 504 Sedan	M4 16.8
BMW 2002 i	M4 20.3	Plymouth Valiant Duster	A3 16.7
Fiat 124 Special TC	M4 20.2	Ford Maverick	A3 16.7
Ford Mustang	M4 20.1	Ford Pinto Wagon	A3 16.6
Datsun 710	M4 20.0	MG-BT	M4 16.3
Mazda 808 Coupe	M4 20.0	Datsun 260Z	M4 16.3
Chevrolet Vega Panel Express	M3 20.0	Porsche 911 T	M5 16.3
Chevrolet Vega Kammback	A3 20.0	Audi 100	M4 16.3
Lincoln-Mercury Comet	M3 19.9	Biat 424 Sport Coupe	A3 16.3
Opel Manta Rallye	M4 19.8	Dodge Dart	A3 16.3
Lincoln-Mercury Capri	M4 19.8	AMC Gremlin	A3 16.3
Datsun 610	A3 19.8	Datsun 260Z	A3 16.3
Alfa Romeo 2000 Berlina	M5 19.7	Chevrolet Nova Hatchback	A3 16.3
Ford Pinto Wagon	M4 19.7	AMC Gremlin	M3 15.6
Volkswagen Kombi 22 (Microbus)	M4 19.6	Ford Maverick	A3 15.6
		Lincoln-Mercury Comet	A3 15.5

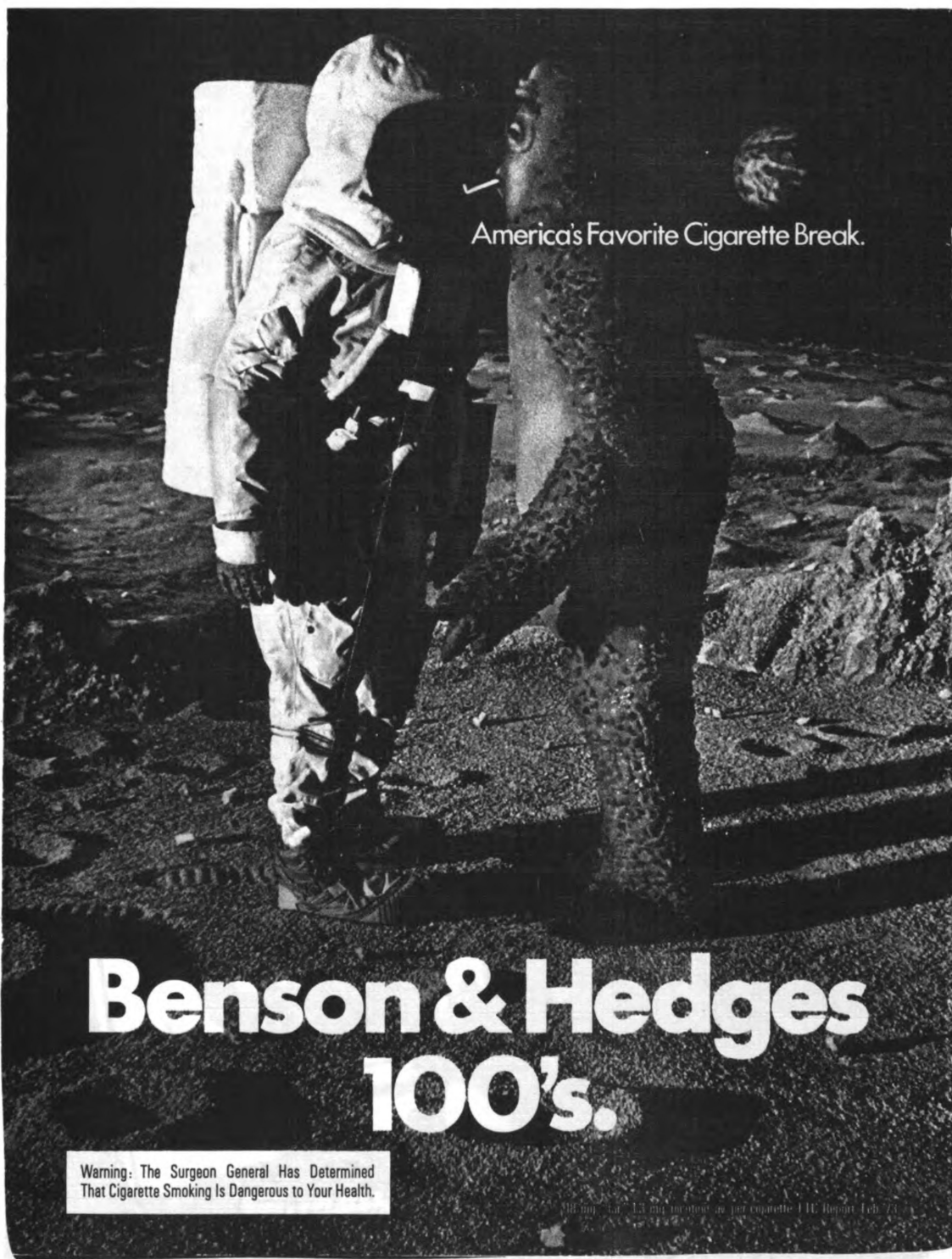
AMC Hornet Sportabout	A3 15.5	Lincoln-Mercury Montego	A3 9.9
Chevrolet Vega Panel Express	M4 15.4	Chevrolet Malibu Classic	A3 9.9
Toyota Mark II Sedan	A3 15.4	Pontiac LeMans	A3 9.9
Toyota Mark II Wagon	A3 15.2	Ford Torino	M4 9.8
Toyota Mark II Sedan	M4 15.2	Buick Century Wagon	A3 9.7
Chevrolet Nova Hatchback	A3 15.2	Jaguar E-Type V-12	A3 9.7
AMC Hornet Sedan	A3 14.7	Buick Estate Wagon	A3 9.6
Volvo 164	A3 14.5	Chevrolet Caprice Wagon	A3 9.6
Mercedes-Benz 230	A4 14.3	Lincoln-Mercury Cougar	A3 9.5
Mercedes-Benz 280	A4 14.1	Ford Wagon	A3 9.5
Ford Torino	A3 14.0	Oldsmobile Cutlass Supreme	A3 9.5
BMW Bavaria	M4 13.8	Pontiac LeMans	M4 9.4
Checker Sedan	A3 13.8	Rolls-Royce Silver Shadow	A3 9.3
Volvo 164	M5 13.1	Pontiac Catalina	A3 9.2
AMC Gremlin	M4 13.2	Pontiac LeMans	A3 9.2
AMC Javelin	M3 13.2	Buick Grand Sport	A3 9.1
BMW Bavaria	A3 12.7	Chrysler	A3 9.1
Plymouth Valiant Duster	M3 12.5	Oldsmobile Delta 88 Royal	A3 9.0
AMC Matador	A3 12.4	Pontiac Ventura GTO	A3 8.9
AMC Matador Wagon	A3 12.3	Pontiac Ventura GTO	M4 8.9
AMC Javelin	A3 12.1	Chrysler Wagon	A3 8.9
Citroen SM	A4 11.9	Plymouth Fury Wagon	A3 8.9
Plymouth Satellite	M1 11.8	Cadillac DeVille	A3 8.9
AMC Hornet	M3 11.7	Buick Regal	A3 8.8
Plymouth Satellite	A3 11.6	Pontiac Grand Am	A3 8.8
Maserati Bora	M5 11.6	Chevrolet Caprice Classic	A3 8.8
Ford Torino Wagon	A3 11.4	Oldsmobile Vista Cruiser	A3 8.7
Lincoln-Mercury Montego Wagon	A3 11.4	Cadillac Fleetwood	A3 8.7
Citroen SM	M5 11.2	Pontiac Trans Am	M4 8.6
Avanti Coupe	A3 11.0	Pontiac LeMans Safari	A3 8.6
Chevrolet Impala	A3 11.0	Excelsior II	A3 8.5
Sports Sedan	A3 11.0	Dodge Sport Wagon	A3 8.5
Lincoln-Mercury Montego	M3 11.0	Pontiac Grand Safari	A3 8.4
AMC Javelin	M4 10.8	Oldsmobile Toronado	A3 8.3
AMC Ambassador	A3 10.8	Buick Electra 225	A3 8.3
Mazda RX 3 Wagon	M4 10.8	Pontiac Catalina Safari	A3 8.3
Ford	A3 10.7	Jensen Interceptor	A3 8.2
Mazda RX 3 Coupe	A3 10.7	Pontiac Grand Ville	A3 8.1
Mazda RX 2 Coupe	M4 10.6	Mercury Wagon	A3 8.1
Mercedes-Benz 450	A3 10.6	Lincoln Continental	A3 7.9
Mazda RX 4 Wagon	M4 10.6	Maserati 120	M5 7.8
Ford Pantera	M5 10.4	Pontiac Bonneville	A3 7.8
Buick Century 350	A3 10.4	Chevrolet Chevelle Laguna	M4 7.6
Buick LeSabre	A3 10.4	Oldsmobile 98 Regency	A3 7.6
Cadillac Eldorado	A3 10.4	Oldsmobile Delta 88 Wagon	A3 7.6
Mazda RX 4 Coupe	A3 10.3	Lamborghini Jarama	M5 7.2
Jaguar E-Type V-12	M4 10.3	Lamborghini Espada	M5 7.2
Oldsmobile Cutlass	A3 10.3	Ferrari 365 GTB-4	M5 6.5
Chevrolet Impala Custom Coupe	A3 10.1		
Pontiac Trans Am	A3 10.1		
Ferrari Dino 246 GT	M5 10.0		
Chevrolet Impala Estate Wagon	A3 10.0		
Pontiac Ventura	A3 9.9		

In transmission listings: A is automatic and M is manual. A3 is a three-speed automatic and M4 is a four-speed manual. SA is semi-automatic. Where two or more cars of the same make, model and transmission were tested, we have listed the best mileage figure recorded for that model, regardless of cylinder or engine size and axle ratio. Data is based on information available as of Feb. 19, 1974.



© 1974 American Honda Motor Co., Inc.

The Honda Civic. More miles per gallon than anybody.

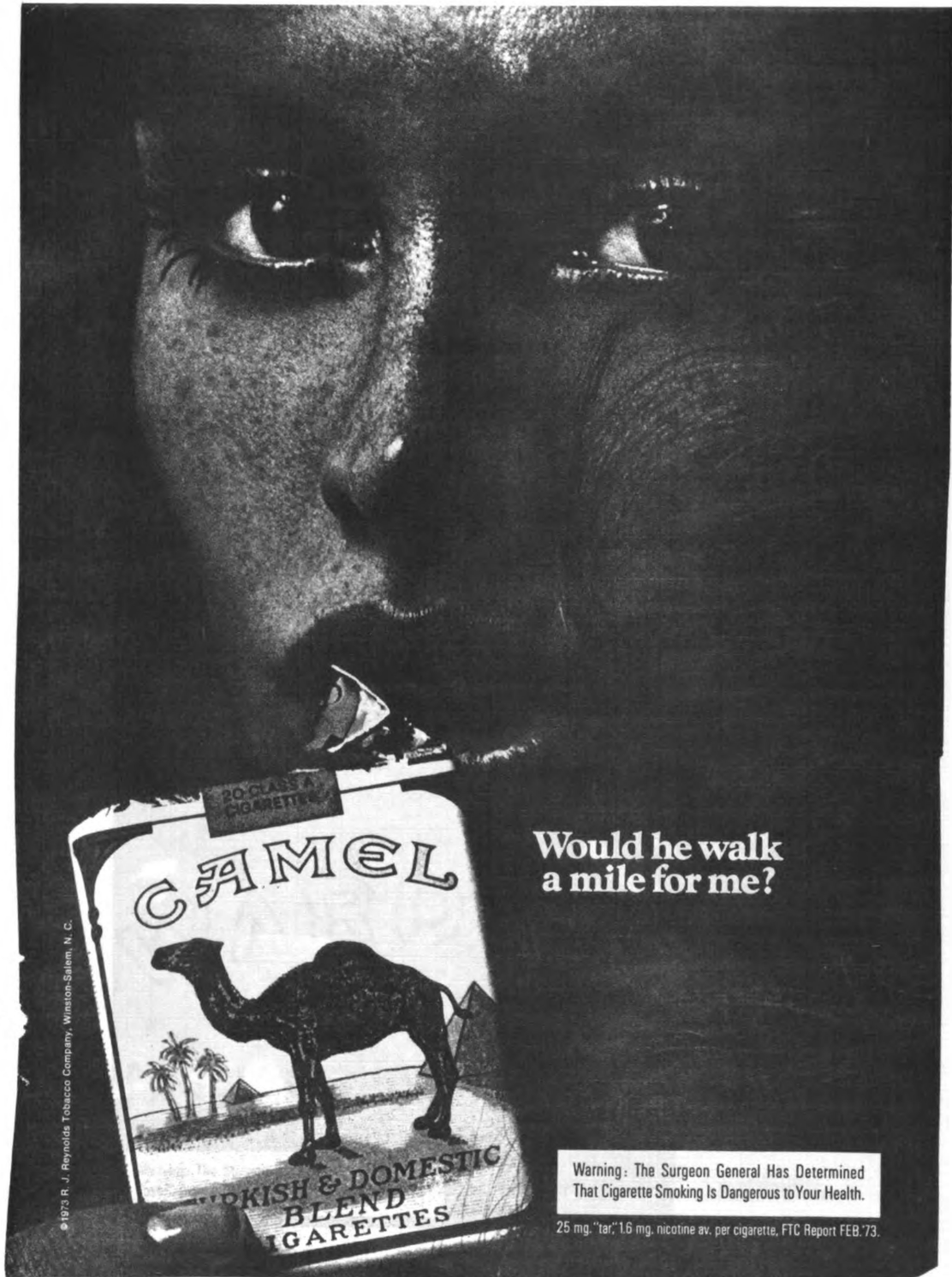


America's Favorite Cigarette Break.

Benson & Hedges 100's.

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

100 mg. "tar," 1.1 mg. nicotine av. per cigarette. © 1994 B&H, Inc. Feb. '94



20 CLASS A CIGARETTES

CAMEL

ARABIAN BLEND CIGARETTES

© 1973 R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

**Would he walk
a mile for me?**

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

25 mg. "tar," 1.6 mg. nicotine av. per cigarette, FTC Report FEB. '73.

© 1974 Lorillard

Have one of mine.



**Get hold of
honest taste.
Have an
Old Gold.**

**OLD GOLD
FILTERS**

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

**Valuable Gift Stars
Coupons, too.**

19 mg. "tar," 1.2 mg. nicotine
av. per cigarette, FTC Report Sept. 73.

Introducing Raleigh Extra Milds

lowered tar
mild natural flavor



New Raleigh Extra Milds joins Raleigh Filter Kings and Longs in offering free B&W coupons. These coupons add up fast for valuable gifts like this sterling silver Duchin table lighter.

For your free Gift Catalog showing over 1000 gifts, write: Box 12, Louisville, Ky. 40201.



Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

BROWN & WILLIAMSON TOBACCO CORP.
Extra Milds, 14 mg. "tar," 1.0 mg. nicotine, av. per cigarette, by FTC method,
Filter Kings, 16 mg. "tar," 1.2 mg. nicotine, Longs, 18 mg. "tar,"
1.3 mg. nicotine, av. per cigarette, FTC Report Sept. '73

APPENDIX B

QUESTIONNAIRES

Page _____

Code _____ (1,2,3)

Con. or EX. _____ (4)

Name _____ Student No. _____

Listed below are eight brands in eleven product categories. For each brand, place an X in the one box which best indicates how much you like or dislike that brand. There are no right or wrong answers. Only your opinion counts.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	DISLIKE COM- PLETELY	DISLIKE SOME- WHAT	DISLIKE A LITTLE	NEITHER LIKE NOR DISLIKE	LIKE A LITTLE	LIKE SOME- WHAT	LIKE COM- PLETELY	
AUTOMOBILES								
Volkswagen								(5)
Datsun								(6)
Audi								(7)
Toyota								(8)
Honda								(9)
Fiat								(10)
MG								(11)
Saburu								(12)

	DISLIKE COM- PLETELY	DISLIKE SOME- WHAT	DISLIKE A LITTLE	NEITHER LIKE NOR DISLIKE	LIKE A LITTLE	LIKE SOME- WHAT	LIKE COM- PLETELY	
SOFT DRINKS								
Coco Cola								(13)
Seven Up								(14)
Pepsi Cola								(15)
Doctor Pepper								(16)
Faygo								(17)
Tab								(18)
Canada Dry								(19)
Mr. Pibb								(20)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
BEER	DISLIKE COM- PLETELY	DISLIKE SOME- WHAT	DISLIKE A LITTLE	NEITHER LIKE NOR DISLIKE	LIKE A LITTLE	LIKE SOME- WHAT	LIKE COM- PLETELY	
Budweiser								(21)
Pabst								(22)
Strohs								(23)
Black Label								(24)
Blatz								(25)
Busch								(26)
Michelob								(27)
Millers								(28)

	DISLIKE COM- PLETELY	DISLIKE SOME- WHAT	DISLIKE A LITTLE	NEITHER LIKE NOR DISLIKE	LIKE A LITTLE	LIKE SOME- WHAT	LIKE COM- PLETELY	
BAR SOAP								
Ivory								(29)
Safeguard								(30)
Lifebuoy								(31)
Camay								(32)
Dove								(33)
Dial								(34)
Irish Spring								(35)
Phase III								(36)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
PANTY HOSE	DISLIKE COM- PLETELY	DISLIKE SOME- WHAT	DISLIKE A LITTLE	NEITHER LIKE NOR DISLIKE	LIKE A LITTLE	LIKE SOME- WHAT	LIKE COM- PLETELY	
Hanes								(37)
No Nonsense								(38)
Sears . Panti-hose								(39)
Ugly Duckling								(40)
Leggs								(41)
Belle- Shameer								(42)
Mojud Panti-hose								(43)
Supphose								(44)

	DISLIKE COM- PLETELY	DISLIKE SOME- WHAT	DISLIKE A LITTLE	NEITHER LIKE NOR DISLIKE	LIKE A LITTLE	LIKE SOME- WHAT	LIKE COM- PLETELY	
LIQUOR								
Old Forester								(45)
Old Grand Dad								(46)
Dewars								(47)
Early Times								(48)
Chivas Regal								(49)
Johnnie Walker								(50)
Seagrams								(51)
Cutty Sark								(52)

MOTORCYCLES	DISLIKE COM- PLETELY	DISLIKE SOME- WHAT	DISLIKE A LITTLE	NEITHER LIKE NOR DISLIKE	LIKE A LITTLE	LIKE SOME- WHAT	LIKE COM- PLETELY	
Honda								(53)
Suzuki								(54)
Yamaha								(55)
Harley Davidson								(56)
Triumph								(57)
Rickman								(58)
Chaparral								(59)
Kawasaki								(60)

CIGARETTES	DISLIKE COM- PLETELY	DISLIKE SOME- WHAT	DISLIKE A LITTLE	NEITHER LIKE NOR DISLIKE	LIKE A LITTLE	LIKE SOME- WHAT	LIKE COM- PLETELY	
Benson & Hedges 100's								(61)
Old Gold								(62)
Raleigh								(63)
Virginia Slims								(64)
Camel								(65)
Winchester								(66)
Tareyton								(67)
Salem								(68)

WATCHES	DISLIKE COM- PLETELY	DISLIKE SOME- WHAT	DISLIKE A LITTLE	NEITHER LIKE NOR DISLIKE	LIKE A LITTLE	LIKE SOME- WHAT	LIKE COM- PLETELY	
Timex								(69)
Bulova								(70)
Rolex								(71)
Waltham								(72)
Seiko								(73)
Butcherer								(74)
Elgin								(75)
Omega								(76)

Thank you for completing the questionnaire.

Page _____

Code _____

Name _____ Student No. _____

I am going to show you a series of four brand advertisements of the same kind of product. I want you to tell me that if you were looking through a magazine, which of the four advertisements do you think would most likely catch your attention first? Second? Third? And Last? This should take you only a few seconds to decide. Are there any questions?

Watches

_____ The Poor Girl's Rich Watch (4)

_____ Are you paying for . . . (5)

_____ Rolex (6)

_____ Waltham (7)

Why did you choose the ads in the order in which you indicated? (8)

Panty Hose

_____ Mojud Panty Hose (9)

_____ Hanes (10)

_____ Supphose (11)

_____ Sears (12)

Why did you choose the ads in the order in which you indicated? (13)

Liquor

_____ Early Times (14)

_____ Chivas Regal (15)

_____ Seagram's 7 (16)

_____ Dewars (17)

Why did you choose the ads in the order in which you indicated? (18)

Cigarettes

_____ Virginia Slims (19)

_____ Winchester (20)

_____ Tareyton (21)

_____ Salem (22)

Why did you choose the ads in the order in which you indicated? (23)

Automobiles

_____ Volkswagen (24)

_____ MG (25)

_____ Fiat (26)

_____ Honda (27)

Why did you choose the ads in the order in which you indicated? (28)

Cigarettes

_____ Benson & Hedges (29)

_____ Camel (30)

_____ Old Gold (31)

_____ Raleigh (32)

Why did you choose the ads in the order in which you indicated? (33)

BIBLIOGRAPHY

BIBLIOGRAPHY

Books

- Bartley, Howard. Principles of Perception. New York: Harper & Brothers, 1958.
- Boyd, Harper W., and Westfall, Ralph. Marketing Research: Text and Cases. 3rd ed. Homewood, Ill.: Richard D. Irwin, Inc., 1972.
- Campbell, Donald T., and Stanley, Julian C. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally & Company, 1963.
- Dunn, S. Watson. Advertising: Its Role in Modern Marketing. New York: Holt Rinehart & Winston, Inc., 1969.
- Ittelson, William H., and Cantril, Hadley. Perception: A Transactional Approach. Garden City, N.Y.: Doubleday & Company, Inc., 1954.
- Rokeach, Milton. Beliefs, Attitudes, and Values: A Theory of Organization and Change. San Francisco: Jossey-Bass, Inc., 1968.
- Rokeach, Milton. The Nature of Human Values. New York: The Free Press, 1973.
- Rokeach, Milton. The Open and Closed Mind: Investigations Into the Nature of Belief Systems. New York: Basic Books, Inc., 1960.
- Rokeach, Milton. The Three Christs of Ypsilanti: A Psychological Study. New York: Vintage Books, 1964.

Periodicals

- Deutsch, J. Anthony, and Deutsch, D. "Attention: Some Theoretical Considerations." Attention. Edited by Paul Bakan. Princeton, N.J.: D. Van Nostrand Company, Inc., 1966.

Vernon, Magdalen. "Perception, Attention, and Consciousness." Attention. Edited by Paul Bakan. Princeton, N.J.: D. Van Nostrand Company, Inc., 1966.

Reports

U. S. Department of Health Education and Welfare, Office of Education, Contract Number 3-20-003. Research and Theory Related to Audio-Visual Transmission. Edited by Robert M. W. Travers. Washington D.C.: Government Printing Office, 1967.

Dictionaries

The Random House Dictionary of the English Language. Rev. Ed. 1968, s.v. "effectiveness."

Unpublished Material

Lessin, Edward J. "An Investigation of Primitive and Authority Beliefs." Unpublished M.A. Thesis, Michigan State University, 1965.

MICHIGAN STATE UNIV. LIBRARIES



31293104860147