

THE USE OF PROJECTIVE TECHNIQUES  
IN CONSUMER ATTITUDE RESEARCH

by

KHOO SUAT CHOO

B.A. (Hons.), University of Singapore, 1966

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF BUSINESS ADMINISTRATION

in the Faculty

of

Commerce and Business Administration

We accept this thesis as conforming to the  
required standard

THE UNIVERSITY OF BRITISH COLUMBIA

April, 1968

In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this for scholarly purposes may be granted by the Head of my Department or by his representatives. It is understood that copying or publishing of this thesis for financial gain shall not be allowed without written permission. -

Department of COMMERCE -

The University of British Columbia,

Vancouver 8, Canada

Date 26th April 1968

## ABSTRACT

The purpose of this thesis is to examine some projective techniques that can be used to study consumer attitudes. The measurement of attitudes is an interesting but perplexing one, mainly because of their abstract nature. Many instruments have been used, notably the direct method of questioning and the scaling techniques. These are based upon two important assumptions: (1) that the individual is aware of his attitudes and can verbalize them and (2) that the individual is willing to reveal these attitudes to an interviewer who is a total stranger. Researchers have recognized the weaknesses of these assumptions and have turned to more indirect approaches.

The usefulness of projective methodology in consumer interviewing is undeniable. Their more subtle, indirect, unstructured and flexible approach overcomes some of the weaknesses found in the more direct methods. But these techniques have some limitations which have been severely criticized. The validity and scientific value of these tools are subjected to great controversy. Yet, it is not enough to list their shortcomings. It is necessary to spell out what they are invalid for and why. More research has to be done especially in comparing

the responses derived from these methods which those obtained from other tools, on the same subject of inquiry and under similar circumstances.

The author has relied solely on secondary data in the study. Any empirical testing of these techniques calls for a considerable amount of experience and skill in psychology and consumer behavior.

## TABLE OF CONTENTS

CHAPTER	PAGE
I THE PROBLEM AND ITS SETTING.....	1
Introduction.....	1
Purpose of the Study.....	2
Limitations of the Study.....	3
Structure of the Study.....	4
II HISTORICAL DEVELOPMENT OF PROJECTIVE TECHNIQUES...6	
Introduction.....	6
Meaning of Projective Techniques.....	8
Origin and Development of Projective Techniques.....	13
Use of Projective Techniques in Consumer Research.....	14
Summary.....	17
III ATTITUDES AND THEIR MEASUREMENT.....	18
Introduction.....	18
Definition of "Attitudes".....	19
Characteristics of Attitudes.....	20
Usefulness of Attitude Studies to Marketers....	23
Relationship Between Attitudes and Behavior....	26
Techniques that can be Used to Measure Attitudes.....	28
Limitations of these Techniques in Consumer Research.....	32

CHAPTER	PAGE
Summary.....	39
IV TYPES OF PROJECTIVE TECHNIQUES.....	40
Introduction.....	40
Word Association Test.....	42
Rorschach Ink Blot Test.....	44
Thematic Apperception Test.....	46
Sentence Completion Test.....	49
Picture Frustration Test.....	50
Role Playing.....	52
Common Characteristics of Projective Techniques.....	53
Summary.....	55
V PROJECTIVE TECHNIQUES IN CONSUMER ATTITUDE RESEARCH.....	56
Introduction.....	56
The Marketing Applications of Projective Techniques.....	56
Word Association Test.....	56
Rorschach Ink Blot Test.....	59
Thematic Apperception Test.....	60
Sentence Completion Test.....	64
Picture Frustration Test.....	67
Role Playing.....	72
Advantages of Using Projective Techniques.....	75
Conditions Under Which Projective Techniques Should be Used.....	80

CHAPTER	PAGE
Summary.....	87
VI PROBLEMS IN THE APPLICATION OF PROJECTIVE TECHNIQUES.....	88
Introduction.....	88
Design of the Tests.....	89
Administrative Problems.....	93
Sample Size.....	95
Interpretation of the Results.....	97
Standardization.....	100
Ethical Problems.....	102
Reliability and Validity.....	103
Relevance in Marketing Research.....	105
Summary.....	107
VII SUMMARY AND CONCLUSIONS.....	108
BIBLIOGRAPHY.....	113

## ACKNOWLEDGEMENT

The author is greatly indebted to Dr. Frederick Webster of the Faculty of Commerce and Business Administration, University of British Columbia, for his guidance, encouragement and patience during the preparation of this thesis.

She is also very grateful to Dr. Robert Kelly for his helpful comments of the preliminary draft.



## CHAPTER I

### THE PROBLEM AND ITS SETTING

#### Introduction

The increasing pressure of competition and the wide variety of products and substitutes available to consumers, make consumer oriented firms realize that the consumers' whims and fancies are not to be ignored. Each manufacturer tries desperately to outwit the other in its quest for the consumers' dollar. In the past, studies of consumer behavior were chiefly concerned with economic and demographic variables but marketers came to realize that the consumer is motivated not only by economic reasons but by a multitude of other factors as well. In an attempt to obtain a more complete and comprehensive picture of consumer behavior, researchers have turned to many fields especially psychology, sociology and anthropology. They seek information not only on external variables but try to probe deeper into the personality of the consumers to obtain information on more complex variables such as opinions, attitudes, traits, emotions and motives. A group of marketers devote their attention to what is termed "motivation research", which in essence, studies

that which motivates the consumer to behave the way he does. These researchers found that tools then used to study consumer behavior were inadequate for such a complex task. Thus they have developed other instruments to supplement the existing ones.

### Purpose of the Study

The purpose of this study is to examine a particular set of tools that can be used by a researcher to obtain a better understanding of consumer attitudes. These tools, termed projective techniques, were first used by clinical psychologists to study the personality of individuals. Lawrence K. Frank who coined the term projective techniques<sup>1</sup> pointed out that they originated from psychoanalytic techniques of dream analysis and free association on one hand, and from Gestalt psychology on the other.<sup>2</sup>

Although these techniques have been used and are still currently used by some marketing researchers, others are still skeptical of their usefulness. Even more

---

<sup>1</sup>Lawrence K. Frank, "Projective Methods for the Study of Personality", Journal of Psychology, Vol.8, 1939, pp. 389-413.

<sup>2</sup>Gestalt psychology emphasized the whole personality of an individual rather than the sum of its parts, i.e., no single trait or mechanism manifests itself in isolation from the rest of the personality structure; equally no single treatment of a person's fantasies, nor his responses to a projection should be considered in isolation. Philip E. Vernon, Personality Test Assessment, (Methuen and Co., Ltd, London, 1953), pp. 170-171.

important are their doubts on the reliability and validity of these techniques. Both the psychological and marketing literature on projective techniques contain conflicting viewpoints not only on their value in consumer research, even the meaning of the term projection from which the term projective techniques is derived, is subjected to controversy.

The aim the author is to examine (1) the characteristics and assumptions of some of the more popular projective techniques and to illustrate how, why, and when they should be used and (2) to analyse some of the problems and limitations that will be encountered in using these techniques.

#### Limitations of the Study

This study examines only six of the many projective techniques that have been developed. These have been selected because they are currently used by marketing researchers in consumer surveys. Perhaps there are other projective techniques which are potentially better than these techniques for measuring consumer attitudes.

The study here deals only with consumer research. It does not relate the information obtained through these methods with the marketing strategies that a company may formulate. Market surveys using these techniques are cited to illustrate how and to what extent these methods can be used to measure consumer attitudes. Some of the

other methods of measuring attitudes will be briefly discussed. It is not possible to compare and contrast the advantages and disadvantages of all these methods with projective techniques. Some of the chief limitations will be briefly mentioned. Since projective techniques were employed by marketing researchers mainly because of the inadequacy of the direct method of questioning, the latter will be examined in greater detail.

Research on these techniques was carried out solely on secondary data. The author felt that to use these techniques in field survey or in laboratory experiments one would have to be thoroughly familiar with these tools. Moreover, the analysis and interpretation of the data gathered demands a considerable amount of knowledge and some experience with consumer research and clinical psychology.

### Structure of the Study

The investigation begins by defining and explaining the meaning of the term, projective techniques, and then traces its origin and development in clinical psychology and in consumer research.

Chapter III deals with the area in which these tools are to be used. Many definitions of attitudes are found in the literature. Some of the more pertinent ones will be examined. From these some conclusions on their characteristics can be drawn. The value of attitude

studies to a marketer is an important question that should not be ignored. That there are other means of studying attitudes should not be overlooked, but some of these have limitations in the field of consumer attitude research. Some of these weaknesses will be mentioned. In Chapter IV the projective techniques are discussed. Some of their features and assumptions will be examined. Although this chapter is a somewhat descriptive one, it is necessary to enable one to have a picture of what these tests are and how they can be administered.

In the Chapter V the task (study of attitudes) and the techniques to be used are brought together. How projective methods can be applied to attitude research will be shown. Illustrations of consumer surveys carried by companies using them will be included. Some of the advantages of using these techniques will be emphasized.

Like all methods of research these techniques are not perfect instruments. Some problems and limitations that might be encountered are analyzed in Chapter VI. The study ends with a summary and some conclusions on the research that has been done.

## CHAPTER II

### HISTORICAL DEVELOPMENT OF PROJECTIVE TECHNIQUES

#### Introduction

The purpose of this chapter is (1) to define and then explain the meaning of the phrase projective techniques, and (2) to examine the origin and development of this tool as it relates to consumer research.

An "attitude" may be defined as a predisposition to behave positively or negatively towards a given object,<sup>1</sup> event, situation, person or group of persons. The term attitude shall be discussed in greater detail in Chapter III.

The term consumer refers to both the buyers and user of products. We are concerned here with consumers' attitudes toward goods and services.

By way of a preliminary observation, the reader should be cognizant that the term projective is derived from the word projection, defined as the process of attributing to another person the same feelings, attitudes, wishes, and emotions that one has of oneself. More

---

<sup>1</sup>Leslie A. Beldo, "An Introduction to Attitude Research and Management Decision", George L. Baker, Jr. (Ed.), Effective Marketing Coordination. Proceedings of the 44th National Conference of the Marketing Association, June, 1961. American Marketing Association, Chicago, Illinois, pp. 583-594.

specifically, use of the word projection by psychologists can be traced back to the works of Sigmund Freud as early as 1895. Currently the term refers to a specific group of tests that have been and are still used in clinical psychology. These can be grouped into the following categories:

1. Association techniques, where the subject is asked to respond to some stimulus presented by the examiner with the first word, image, or precept that occurs to him, e.g., word association, Rorschach ink blot test, cloud pictures.
2. Construction techniques, where the subject is asked to create or construct a product such as a story or picture, e.g., thematic apperception test, Blacky pictures.
3. Completion techniques, where the interviewee is provided with some type of incomplete product and required to complete it in any way he wishes, e.g., sentence test, picture frustration study.
4. Choice ordering techniques, where the respondent merely chooses from a number of alternatives the items or arrangement that best fits some criterion, e.g., Szondi test, picture arrangement test.
5. Expressive techniques, which require the respondent to combine or incorporate stimuli into some kind of novel production, e.g., play technique, drawing and painting techniques, psychodrama and role playing.<sup>2</sup>

---

<sup>2</sup>  
A number of ways of grouping projective techniques have been suggested. (Campell, 1951; Frank, 1939; Helen, 1945). The above classification is taken from Gardner Lindsey, Projective Techniques and Cross Cultural Research, (New York: Appleton-Century-Crofts, Inc., 1961), pp. 51-95.

Since World War II a number of these tests have been employed by marketing researchers to supplement the conventional methods commonly used to obtain information on consumers.<sup>3</sup>

However, these earlier techniques proved to be inadequate in furthering an understanding of consumer motivation and attitudes. Consequently, it is felt by this writer that greater emphasis should be placed on the development and use of projective techniques by marketers in understanding consumers.

#### Meaning of Projective Techniques

Fundamentally, the projective techniques involve the presentation of an ambiguous stimulus to a respondent. In other words, the individual is asked by an interviewer to construct meaning from a given stimulus which in and of itself makes no sense. For example, the subject is given an incomplete sentence, "Buying appliances from a catalogue...", and asked to fill in the rest. Hopefully such a demonstration on the part of the respondent will cause him to unconsciously project his real motivation and/or attitude concerning a given topic. As the individual perceives and interprets the stimulus, without being aware of what he is revealing, one can presume that this technique will allow a greater degree of projection of his inner tendencies than would direct methods. As Frank suggests:

---

<sup>3</sup>These methods refer to the direct method of questioning and the statistical methods.



We can approach the personality of an individual and induce him to reveal his way of organizing experience by giving him a field (objects, materials, experiences) with relatively little structure and cultural patterning so that the personality can project upon that plastic field his way of seeing life, his meanings, significances, patterns, and especially his feelings. Thus, we can elicit a projection of the individual personality's private world because he has to organize the field, interpret the material and react effectively to it.<sup>4</sup>

It follows then, that projective techniques have two important but distinctive characteristics. First, they are disguised in that the real purpose of the testing is not revealed to the subject so as to prevent him from withholding vital information from the interviewer, therefore allowing the subject to unconsciously reveal his true attitudes and motivation. Secondly, the testing is unstructured in that the subject may respond in an almost unlimited number of ways, according to his interpretation of the stimuli. In other words, there is no attempt on the part of the interviewer to put words in the subject's mouth by limiting the scope of the responses.

The success of these techniques lies in the process of "projection", from which the word projective techniques is derived. The concept of "projection" in relation to projective techniques is widely and often rather loosely used. Various connative and dennotative meanings have become associated with this term; there is a catch-all quality in many attempts to define projection

---

<sup>4</sup>Lawrence K. Frank, "Projective Methods for the Study of Personality", Journal of Psychology, Vol. 8, 1939, pp. 402-403.

and many difficulties and disagreements.<sup>5</sup>

In traditional psychology, projection occurs when an individual confronted with unacceptable impulses or attributes within himself, defends against these (i.e. he reduces conflict or avoids anxiety) by displacing them into the outer world upon another person. To illustrate, if we hate another person, e.g. a parent, sibling, or wife whom we should in fact love, this is likely to come into sharp conflict with our ego or superego.<sup>6</sup> We may try to repress our hatred but it is still there. Therefore, we try to convince ourselves through projection that he hates us. Our hatred becomes his hatred. His hate now justifies our hatred. We can release our tension by hating which we could not do so before. This process is unconscious as well as pathological and is termed classic projection.

---

<sup>5</sup> Joseph Zubin, Leonhard D. Evron and Florence Schumer, An Experimental Approach to Projective Technique, (New York: John Wiley and Sons, Inc., 1965), pp. 3-4.

<sup>6</sup> To Freud the personality of an individual consists essentially of three parts - id, ego, and superego. The id is the primary, instinctive, and unconscious aspect. The ego is the conscious rational part, and acts as a buffer to the ego. It does the thinking, problem-solving, reasoning, and remembering, in order to satisfy the id. Instead of operating on the pleasure principle as the id, or the reality principle as the ego, the superego operates on the principle of perfection. Its main functions are to criticize and judge, the thoughts and actions of the individual, to inhibit the impulses of the id that violate the internal standards of the individual and to guide the ego toward a higher standard of behavior.

Projection in the sense used in projective techniques seems more likely to be a process by which a subject when he is given an ambiguous stimuli and asked to make sense out of it, will do so by making use of his own needs, emotions, feelings and knowledge. For example, in the process of constructing a story or painting an artist may project his inner emotions and feelings so that his work is a reflection of his personality. It is this assumption which is the basis of many of the projective techniques. Such a process is felt to be a normal one where the individual's inner state of qualities influences his perception and interpretation of the outer world. This process has been termed generalized projection.<sup>7</sup>

Normal projection differs in many ways from abnormal projection, both in degree and in kind. It does not have to include defensive, unconscious, unacceptable or anxiety avoidance components. As Kerlinger points out,

This idea of projection has been broadened to include not only unacceptable impulses but also values, attitudes, needs, wishes as well as impulses and motives.<sup>8</sup>

Some experiments have been carried out to demonstrate the basic mechanism of projection. One of these include an experiment by Sears where a group of fraternity

---

<sup>7</sup>Gardner Lindsey, Op. cit., pp. 25-31.

<sup>8</sup>Fred N. Kerlinger, Foundation of Behavioral Research; Educational and Psychological Inquiry, (New York: Holt, Rinehart, Winston, Inc., 1966), p. 525.

men were asked to rate themselves and others on the possession of certain traits.<sup>9</sup> Two assumptions were made: (1) that the individuals would use projection to project themselves from the acknowledgement of undesirable traits in their own personalities, and (2) that the largest amount of projection would occur in those who lacked insight. The interpretation of the data collected was based on the following criteria:

1. A subject's average rating by others was used as the estimate of his true score in a trait.
2. His average score in attribution of the trait to the other individuals was taken as the measure of projection.
3. Agreement between self and others' ratings provide the criterion of insight.

The results were in the expected direction. Those who were more stingy than average and who lacked insight into the fact, rated others higher in stinginess on the average, than did those who were equally stingy but recognized this characteristic. Sears concluded,<sup>10</sup>

"...whether it was a conscious or unconscious process, it can be said that the effects of projection have appeared in this situation in a way that was predictable from the present redefinition of that process."

---

<sup>9</sup>R.R. Sears, "Experimental Studies of Projection; I. Attribution of Traits." In Silvano Tomkins, Contemporary Psychopathology, (Cambridge: Harvard University Press, 1943), pp. 561-571.

<sup>10</sup>Ibid., p. 576

### Origin and Development of Projective Techniques

Many would agree that it was Freud's "The Interpretation of Dreams" (1900), that marked the beginnings of projective techniques. In this volume he developed a new technique of dream analysis and included the statement of a general theory that has provided the background from which emerged many other projective techniques.<sup>11</sup>

Each of these projective techniques were developed separately by different individuals at different times. It was Lawrence K. Frank who recognized the similarities of these instruments and provided a label for them. It is undoubtedly his influential paper in 1939<sup>12</sup> containing his "projective hypothesis" which "unlashed a torrent of research, test construction and clinical speculation."<sup>13</sup> He suggested that the name "projective methods" be applied to the various tests that were already in existence, (e.g., word association, Rorschach ink blot, TAT, sentence completion) and drew attention to their value in the study of personality, for it involves:<sup>14</sup>

---

<sup>11</sup>Freud referred to dream interpretation as "the royal road to the unconscious." Sigmund Freud, "The Interpretation of Dreams," in J. Strachey (Ed.), The Complete Psychological Works of Sigmund Freud, Vols. 4 & 5, (London: Hogarth, 1953). Originally published in 1900.

<sup>12</sup>Frank, op. cit., pp. 389-413.

<sup>13</sup>Zubin, Eron, Schumer, op. cit., p. 3.

<sup>14</sup>Frank, op. cit., p. 403.

.....the presentation of a stimulus situation designed or chosen because it will mean to the subject not what the experimenter has arbitrarily decided it should mean as in most psychological experiments using standardized stimuli in order to be objective, but rather it must mean to the personality who gives it or imposes upon it, his private idiosyncratic meaning and organizations.

Frank's ideas and concepts were enthusiastically received by clinical psychologists, as well as social workers, psychiatrists, psychoanalysts and anthropologists. The projective techniques rose in popularity as a revolt against the more rigid tests that developed from the psychometric tradition. These refer to such instruments as that of Binet, Terman, Thorndike, and Thurstone, which emphasized careful quantification, repeatability, efficiency, and exact specification. These were successful in the standardized measurement of intelligence, social attitudes, aptitudes, but were unsuccessful in dealing with the area of emotions, motivations, and values. The promise of projective techniques provided a strong lure and today most clinics are well equipped with these instruments.

#### Use of Projective Techniques in Consumer Research

Since World War II, there has been a significant change in marketing research. Firms became more consumer-oriented. The post war seller's market changed into a buyer's market. The familiar phrase "the consumer is king" became the guiding policy of marketing programs.

Earlier studies of consumer behavior focused on socio-economic and demographic variables, such as income, age, sex, education, family status, etc. Such census-type data have been the backbone of market analysis for several years. Attempts to understand buying behavior consisted mainly of trying to find correlations between these variables and sales. But the marketer needs to know more. It is imperative for him not only to know the answers to questions like "who", "where", "what", "how many", and "when", but also "why". Today the trend has shifted from mere "nose counting" to the study of unconscious reaction in search of significant attitudes, feelings, predispositions, and emotional reactions. The traditional tools that were able to handle the more tangible and rational aspects of consumer behavior were inadequate to deal with these new concepts. Market researchers have therefore turned to other fields, especially the behavioral sciences.

The need to understand consumer behavior has lead to the development of what has been termed "motivation research." There is nothing mysterious about the term. It is simply an attempt to dredge up out of the more or less hidden depths of human nature and human personality, if possible, some practical hints on how to sell people a product more readily and agreeably. For example, if we are trying to sell cars we should try to find out what an automobile means to the consumer. Why does he try to purchase a car? Is it merely for transportation purposes?

Some authors have used this term rather loosely to refer only to the psychological techniques that have been used to study consumer motivations and attitudes, including for example, projective techniques, depth interviewing, and focused group interviewing. These endeavor to elicit information from the respondents indirectly in contrast to the conventional methods of obtaining information. But motivation research is a wider concept and covers not only these indirect methods but other techniques as well that are available and necessary to understand consumer motivation.

Many of the projective techniques were incorporated into marketing research during the 1940's. They have been employed in attitudinal and opinion studies, company brand image, brand name studies, and consumer motivation studies. They have been used for those consumer products that are similar in quality, performance, and price, notably for products like automobiles, soaps, detergents, cigarettes, food products and sundries.

These tests have helped the researcher to gain insight into why people behave as they do, and how best they can be persuaded to behave differently. These methods have made it possible to probe into the minds of the consumer and to obtain information which they would not have revealed even under the most subtle direct method of questioning.



### Summary

The development of projective techniques in the field of psychology and consumer research was the result of the need to find better instruments to deal with the more complex problems that researchers became aware of. The clinical psychologist found limitations in the use of standardized and rigid tests in understanding the personality of an individual. The marketing researcher realized that the ~~statistical and direct methods~~ had several weaknesses in studying consumer behavior. Both realized the sensitivity of human beings and the need to approach them indirectly through the use of more subtle and less rigid and structured tools.

## CHAPTER III

### ATTITUDES AND THEIR MEASUREMENT

#### Introduction

The justification of the technique used to solve a research problem should be concerned with both the strengths and weaknesses of that technique as they might relate to the specific problem in question. One research method might be appropriate for one problem but inappropriate for another. Thus an analysis of the task at hand, that of measuring consumers' attitudes toward products and the techniques to be used, is relevant and necessary.

This chapter begins by examining some of the various definitions of "attitudes" in an attempt to come to some conclusions on their meaning and characteristics.

Secondly, the question of the usefulness of attitude studies to a marketer will be treated. Various techniques have been used to measure attitudes, but these have some limitations when used in consumer research. Some of these weaknesses will be briefly discussed here.

### Definitions of "Attitudes"

Psychologists and sociologists have ascribed a wide variety of meaning to the term attitude. Katz and Allport suggest that the apparent confusion of their meaning is not due to the intrinsic ambiguity in the material studied, but to the differences in the aims of the investigators.<sup>1</sup>

Yet, even if researchers set out with the same aim, they are likely to come out with their own concepts of attitudes. This is because attitudes are not something tangible, nor can they be directly observed or easily measured. Perhaps one can understand what is meant by the term attitude by examining some definitions of various authors.

1. The classical definition is:<sup>2</sup> abstractions, inferences from observable behavior, verbal expressions, and other symptoms of behavior in readiness.
2. Weschler and Bernberg look upon attitudes as:<sup>3</sup> the psychological counterpart of the dynamic

<sup>1</sup>D. Katz and F.H. Allport, Student Attitudes, (Syracuse: Craftsman Press, 1931).

<sup>2</sup>Leslie A. Beldo, "An Introduction to Attitude Research and Management Decision", George L. Baker, Jr. (Ed.), Effective Marketing Coordination. Proceedings of the 44<sup>th</sup> National Conference of the American Marketing Association, American Marketing Association, Chicago, June, 1961, p. 586.

<sup>3</sup>Irving Weschler and Raymond Bernberg, "Indirect Methods of Attitude Measurement," International Journal of Opinion and Attitude Research, Vol. 14, 1950, pp202-225.

processes within the individual, which results in the organization of his perception of any given situation and are manifested in his response.

3. Krech, Crutchfield, and Ballachey feel that attitudes are:<sup>4</sup> enduring systems of positive or negative evaluations, emotional feelings and tendencies, that the individual acquires with respect to social objects.
4. Leslie Beldo's definition is:<sup>5</sup> predisposition to behave positively, negatively, or almost indifferently towards a given object, event, person or group of persons.

#### Characteristics of Attitudes

From these definitions several important characteristics of "attitudes" emerge. Firstly, they cannot be observed directly, i.e., they must be inferred from verbal expressions or overt behavior. The weight or height of a person can be directly measured, and a precise quantitative answer can be obtained. On the other hand, his attitudes towards an object can only be measured through inferences drawn from his responses towards it,

---

<sup>4</sup>David Krech, Richard S. Crutchfield, and Egerton L. Ballachey, Individual in Society: A Textbook of Social Psychology, (New York: McGraw-Hill Book Co., Inc., 1962, p. 139.

<sup>5</sup>Beldo, op. cit., p. 586.

either through overt behavior (e.g., he buys Lucky Strike cigarettes) or verbal statements (e.g., "smoking cigarettes will cause cancer"). This aspect of attitudes is one of the main factors which makes it difficult to develop good instruments for measuring them.

Secondly, attitudes are not the only psychological components or states that determine the individual's reactions to the environment. This implies that one would have to determine whether the subject's reaction to specific objects is caused by his attitudes or some other factors. Very often it is the result of a multiple of interrelated factors.<sup>6</sup>

Thirdly, an individual's attitudes towards an object develop gradually over a period of time and are usually the outcome of several incidents.<sup>7</sup> Once formed attitudes seem to resist change, and are rather stable and enduring. What is more important is that they can be changed by new perceptions and communications. It is because attitudes are not static or fixed that attitude studies are valuable from two viewpoints. First, if the prevailing attitude is unfavorable then attempts can be made to change it. If the existing attitude is favorable then it should be reinforced.

---

<sup>6</sup>Muzafer Sherif and Hadley Cantril, The Psychological Review, Vol. 52, 1945, pp. 300-304.

<sup>7</sup>Of course there can be exceptions to this rule. For example, a woman may develop a hatred for an electric cutting knife if her son cuts his hand whilst playing with it.

Fourthly, attitudes are made up of three important components:

1. cognitive component
2. affective component
3. behavioral component

The cognitive component of attitude includes beliefs, knowledge, and understanding that an individual has of an object. For example, take an object like a particular type of car - the Mustang. The individual knows all about it, and more important still, he makes evaluative judgements on it. He believes that the engine is superior to most cars, it will last longer, has greater depreciation value, etc.

The affective component of the attitude is the emotional aspect of it, i.e., the individual's motivations or feelings towards an object. The sight of the car pleases it. It arouses all sorts of pleasant associations and dreams.

The behavioral component represents the predisposition to act towards the object. This includes all the behavioral readiness associated with the attitude. The individual goes out of his way to read pamphlets, categories, etc., on the Mustang. He spends hours at the dealer's store just admiring it or he may actually purchase the car.

These three components are not separate or independent but are interdependent and incorporated in

some sort of a system, e.g., the cognition of an individual about an object is influenced by his feelings and action tendencies toward that object and a change in his cognitions about the object will tend to produce changes in his feelings and action tendencies toward it.<sup>8</sup>

Thus, the tangible nature of attitudes, the many inter-dependent parts which compose them and the innumerable number of factors which can change or influence them, make it interesting but extremely difficult to study.

#### Usefulness of Attitude Studies to Marketers

Three types of information that can be obtained from attitude studies are of interest to marketers:

1. the direction of the attitude.
2. the intensity of the attitude.
3. the motives underlying the attitude.

Every marketer is anxious to know whether his product is liked or disliked by the consumers. The attempt to find out the direction of consumers' attitudes is the basic aim of most attitude studies. One can argue that sales can be used as a reflector of the market's reaction to a product. However, it is necessary to have

---

<sup>8</sup>Krech, Crutchfield, and Ballachey, op. cit., pp. 139-140.

the product pre-tested even before it is commercialized. A firm has to conduct consumer surveys to learn whether people will accept or reject it's product even before it starts to produce and sell it in the market.

Very often the investigator is not satisfied with information on the direction of the attitude and seeks further information for the intensity of the attitude, i.e., to what extent do consumers like or dislike the product.

Knowing the direction and intensity of attitudes does not tell the researcher how to improve it. He must know the reasons behind the attitudes and, therefore, studies the motives behind the attitudes, i.e., why consumers like or dislike a particular product.

One can conclude that attitude studies reveal three broad factors valuable to the researcher - the direction and intensity of the attitudes and the motives that give rise to them. Not all the information that is obtainable is useful to the marketer. For almost any product there will be a host of attitudes. Maloney lists four criteria useful for selecting the types of attitudes upon which the marketing plan should focus. These are:

1. Importance of attitude type.
2. Compatibility with product in basic marketing strategy.
3. Present consumer awareness and knowledge of the product.
4. Uniqueness of attitude type in product area.<sup>9</sup>

---

<sup>9</sup>John C. Maloney, "Marketing Decisions and Attitude Research," George L. Baker, Jr. (Ed.), Effective Marketing Coordination. Proceedings of the 44th National Conference of the American Marketing Association, American Market Association, Chicago: June 1961, p. 595.



The importance of the attitude type refers to the number of people who use the attitude type in decision making and the weight given to it by buyers when making their evaluations and decisions. Obviously, the higher the number of people and the heavier the weight given the more important is the attitude type to the investigation.

Research may indicate that the price of the product is the most important single attitude, but if the product is a "prestige" item, price would not be a variable that the firm would emphasize in its promotional program. Hence, it would be more desirable for the firm to look for the second most important type of consumer attitude.

It was noted earlier that one of the important components of attitudes is the cognitive factor, i.e, the knowledge, understanding and beliefs of a particular object. This property is often overlooked. If this knowledge is lacking, incorrect, or distorted then the first job would be to provide the basic facts of the product.

It is not surprising to find that many studies are apt to turn up the same basic attitude types as being potentially important for a product class. If the marketing strategy emphasis is the distinctiveness of the product, the investigator should search for some-

thing different from the competitors. As Theodore Levitt remarks:<sup>10</sup>

Eight different motivation research studies have come to eight conclusions that a light, fresh as a daisy, out-doorsy approach might be just fine for menthol cigarettes. The first thing we know is that there are eight brands of menthol cigarettes with eight light green packages to eight airy fairy out-doorsy advertising themes.

The marketer will certainly be better off if he comes up with something more unique.

### Relationship Between Attitudes and Behavior

So far we have assumed that there is some relationship between attitudes and buying behavior, i.e., an individual will buy a product if he likes it or he will not buy if he dislikes it. Since the objective of almost all firms is to maximize profits in the long run, and because profits depend upon sales, their main interest is whether the product will sell. Attitude studies would be of little value if there is no relationship between attitude and behavior. Some research has been done in this area. First of these studies include one by George Brown where an investigation was made to find out the relationship between preference and purchases by housewives of seven classes of household products.<sup>11</sup>

---

<sup>10</sup>Ibid., pp. 607-608.

<sup>11</sup>George H. Brown, "Why People Buy Particular Brands," in Robert Ferber and Hugh G. Wales, Motivation and Market Behavior, (Homewood: Richard D. Irwin, Inc.,

Through interviews and questionnaires, two sets of data were collected and analyzed for correspondence: existing levels of preference for the brands of these products on the Chicago market and purchases of these products by a panel of Chicago housewives during a three week period. The results revealed that there is a direct and close relationship between existing levels of preference for brands of seven classes of household products and their relative purchase by housewives.

Studies done by Katona and his associates indicate that both initial and final attitudes are related to frequency of purchase of durable goods during the year.<sup>12</sup> Through repeated interviews of the same individuals, it was possible to observe the changes in attitudes, the factors leading to such changes, and the effects of changes on individual buying behavior. The data collected revealed that initial attitudes and later changes in attitudes are related to subsequent purchases of durable goods.

It would be too optimistic to say that attitudes are directly related to buying behavior, i.e., a favorable attitude towards a product will automatically lead to

---

1958), pp. 277-292. Adapted from an article by Seymour Banks, Manager of Media Planning and Research, Leo Burnett Co., "The Relationships between Preference and Purchase of Brands," Journal of Marketing, Vol. 14, (Oct. 1950) pp. 145-157.

<sup>12</sup>George Katona, "Attitude Change: Instability of Response and Acquisition of Experience," Psychology Monograph, Vol. 72, 1958.

its purchase or an unfavorable attitude towards a product will mean definitely that there will be no purchase. An attitude toward a product is only one of the determinants of buying behavior. For example, income, availability of the product, its usefulness to the consumer, substitutes of the product, are variables that can determine whether a consumer will buy a product. But one can conclude that although a favorable attitude toward a product does not necessarily lead to its purchase, it seems to indicate a high probability of it being bought, relative to another product toward which the consumer has an unfavorable attitude.

#### Techniques that can be Used to Measure Attitudes

We can see that "attitudes" have certain characteristics which make their measurement difficult. The author feels that projective techniques can overcome some of the weaknesses of other techniques in studying consumer attitudes. Before these projective techniques are discussed, it is necessary to examine some of the other tools that can be used to study attitudes. Since the focus of this investigation is on the use of projective techniques, the discussion on the other methods will be brief.

One way of classifying the methods that can be used to measure attitudes would be by the type of procedure used to obtain information. As Donald Campbell suggests there are four such groups.<sup>13</sup>

<u>Approach</u>	<u>Type of Instrument</u>
1. undisguised - structured	Attitude scales
2. non-disguised - non-structured	Open-end questionnaires Unstructured interviews
3. disguised - unstructured	Projective techniques
4. disguised - structured	Error choice technique

An attitude scale consists of a set of statements or items to which a person responds. The pattern of responses provides a way of inferring about his attitude. There are several ways of constructing attitude scales. Two of the more well known formal scales are the Thurstone and Likert scales.<sup>14</sup>

A Thurstone scale is constructed by having a large number of judges assign scale values to attitude statements indicating the extent to which the items

---

<sup>13</sup>Donald T. Campbell, "The Indirect Assessment of Social Attitudes," Psychological Bulletin, Vol. 47, 1950, p. 15.

<sup>14</sup>Others include the Guttman scale, Cornell technique, quasi-scales and semantic differential.

represent a pro or con position. By providing this information, a scale value is assigned to each item. To measure the attitudes of an individual, he is asked to place a plus sign in front of all statements he agrees with. His attitude score is the median scale value of the items he has selected.<sup>15</sup>

A different approach to the scaling of attitudes was developed by Likert. A large number of judges are asked to express their attitudes on a large number of statements considered by the experimenter to relate to the object in question. For each statement they indicate whether they strongly approve, approve, are undecided, disapprove, or strongly disapprove. These responses are weighted to obtain a total score. The above categories are scored 5,4,3,2,and 1 respectively for favorable items and reversing the scoring for unfavorable items. Through the use of item analysis<sup>16</sup>

---

<sup>15</sup>L.L. Thurstone, "Theory of Attitude Measurement," Psychological Bulletin, Vol. 36, 1929, pp. 22-241.

<sup>16</sup>Item analysis is a way of determining the degree to which attitude items discriminate among individuals who differ in their attitudes toward an object. The discriminating power of an item is measured by computing the correlation between item scores and total scores. Items which correlate most highly with total scores are related as the most discriminating items. See Krech, Crutchfield, and Ballachey,op.cit., p. 178.

the most discriminating items are retained in the final form of the scale.

The scores yielded by a Likert scale can be interpreted only in terms of where the individual's score falls relative to the distribution of scores of other people. The score does not have absolute meaning.

The second category of tests include the essay type questions, autobiographical assignments and open-ended interviews where the individual's response is not restricted to predetermined categories.

The third group of tests, the disguised-unstructured variety, consist of the projective techniques. These will be discussed in detail in Chapter Four.

The disguised-structured tests differ from the projective techniques in that they are unstructured. The respondents participate in an objective task in which he seeks the right answers. The voluntary response of the projective techniques is lacking. To the respondent the situation is similar to that of an achievement or ability test. An attempt is made to diagnose attitudes from systematic bias in the performance of an objective task. The responses are not taken at their face value. Rather, the systematic errors of which the respondent himself is not aware are studied. An example of this type of test is the error choice technique,<sup>17</sup> in which

---

<sup>17</sup>K. R. Hammond, "Measuring Attitudes by Error Choice; An Indirect Method," Journal of Abnormal and

the respondent is presented with alternative choices for answers. In some instances the truth is undeterminable. The subject is thus forced to error. The items in error choice tests are such that the correct answers are not readily apparent. Attitude bias on the part of the subject is revealed by systematic errors in one direction as opposed to random errors.

#### Limitations of these Techniques in Consumer Research

One can see from the preceeding section that there are many techniques that can be used to measure attitudes. The usefulness of each method depends on the purpose of the investigator. In consumer attitude research they have several limitations.<sup>18</sup> Most attitude scales are concerned only with measurement of valence. A valence of an attitude component refers to the degree of the positive or negative aspects of the cognitive feeling or action tendency components of an attitude system,<sup>19</sup> i.e., the degree of favorability or unfavorability with respect to the object of the attitude. Although this kind of information is useful to a marketer

---

<sup>18</sup>Discussion on these limitations will be very brief, serving only as an indication of the inadequacy of these techniques in consumer research.

<sup>19</sup>Krech, Crutchfield, and Ballachey, op. cit., p. 179.



it does not offer him any ideas on what strategies to adopt in order to change the attitudes if they are unfavorable or to reinforce them if they are favorable. The researcher does not know the reasons underlying the attitudes and thus can have no influence or control over them.

The non-disguised, non-structured tests which include the essay type question, open-end interviews, yield a rich source of information on attitudes, but problems arise in the scoring, analysis and interpretation of the data.

One of the advantages of the disguised-structured tests over the first two categories is that it is disguised, i.e., the respondents do not know the real purpose of the tests or how their answers will be interpreted. This reduces the tendency for stereotype answers. However unlike the projective techniques these tests are structured, thus reducing the individual's spontaneity of expression.<sup>20</sup>

Interest in projective techniques developed chiefly because of the inadequacy of the direct method of questioning in obtaining information from consumers. It is important to examine in greater detail whether this criticism against the conventional method is valid.

---

<sup>20</sup> The weakness of this factor will be explained later on.

The usual approaches of the direct method of questioning include:

1. Yes-No Question

Do you smoke? (Yes or No)  
Do you go to the movies often?

2. Multiple Choice

What do you think of the price of the new car  
pur out by company X?

Very reasonable.....  
Fairly reasonable.....  
Fairly unreasonable.....  
Very unreasonable.....

3. Ranking

In buying a pair of shoes which one of these  
factors is the most important to you personally?  
And of those left, which is the most important?  
(Proceed until all items have been ranked)

color.....	brand name.....
shape.....	quality.....
style.....	price.....

4. Open-ended Question

Why do you buy meat at store X?

The direct method of questioning makes certain assumptions. First, it assumes that the respondent knows the answers. This is not always true. In some instances, consumers are unable to answer simply because they do not know. Much of buying behavior is unconscious and many people seldom do much conscious thinking about why they do what they do and they may therefore be unable

to readily produce much in way of explaining on the spur of the moment, their buying behavior.<sup>21</sup> Attitudes are learned and once they have been acquired through experience, it is difficult for an individual to determine how he acquired them. In fact, an individual may not be consciously aware of his own attitudes.

Very often the consumer is asked, "If this new product were available would you buy it?" A respondent confronted with such a question will be likely to say, "Yes," although he has no idea whether he would buy or not if the situation should arise. Answering in the affirmative does not in any way commit him because he might never have to face the situation in reality. Furthermore, he feels he is making the interviewer happy by saying, "Yes." He might feel obligated to do so especially if the interviewer has left him a free sample.

Even if the subject were aware at one time of the factors that shaped his attitudes, he might have difficulty in recalling them at the time of the interview. Often his decision is influenced by a whole host of interrelated factors of varying importance, and the respondent might be unable to remember all of them or sometimes some of the important ones.

---

<sup>21</sup>Joseph Newman, Motivation Research in Advertising and Marketing, (Boston: Harvard University Press, 1957), p. 402.

Perhaps the chief weakness of the direct approach is that it overlooks the inconsistencies that are apt to occur between a respondent's inward thoughts and his outward speech and action, i.e. it assumes that he is willing to reveal information when asked. This is true in certain cases, such as the questions, "Do you like to drive?" or "What do you think of the new vacuum cleaner of X company?" To questions like these the consumer gives his frank and honest opinion and does not attempt to hide his real attitude. But there are some areas in which he is less willing or unwilling to discuss.<sup>22</sup> As Engel and Wales put it:<sup>23</sup>

When a respondent perceives a question as psychologically threatening, his response may be distorted, perhaps towards a stereotyped or normative response. He may be reluctant to venture far from what he considers a psychologically neutral reply, and will react by outright lying, partial concealment of facts or denial of true feelings.

The consumer might not want to admit his real feelings and attitudes on certain issues because of social disapproval or ridicule. Consequently he gives stereotyped responses that use cliches which are commonly acceptable but do not necessarily represent his attitudes.

---

<sup>22</sup>These areas will be discussed in Chapter Four.

<sup>23</sup>James Engel and H.G. Wales, "Spoken versus Pictured Questions on Taboo Topics," Journal of Advertising Research, II, (1962), pp. 11-17.

Several examples can be cited as illustrations. A number of people in a large city were interviewed and asked several questions. Among these was the question, "Do you borrow money from a personal loan company?" All those interviewed answered negatively. Yet, all of them were listed in the records of a local company as having recently borrowed money.<sup>24</sup>

Sometimes the respondent may hesitate in answering because he feels that there are "right" answers to the questions. He tries to give the answer which he thinks is technically correct. For example, if asked how he would rate the price of a new car brought out by a certain company, his answer might not reflect his own opinion but that of friends or some authority on cars. If he really thinks that the price is unreasonable he would not consider buying it although he might have told the interviewer that the price is reasonable.

In using the conventional research method, there is always the danger of putting words in the respondent's mouth. For example, in the ranking method the subject is given a limited number of variables to choose from. The factor which most influenced his purchase of a pair of shoes might not be found on the list supplied and he

---

<sup>24</sup>Louis Cheskin and L. B. Ward, "Indirect Approach to Market Reaction," Harvard Business Review, Vol. 26, (September, 1948), pp. 572-580.

is forced to choose one of the variables. It is often unrealistic to put people's reactions into neat categories for immediate punch card coding. Sometimes an additional "others" item is added to the list given and the respondent is asked to specify precisely what he means by "others." Even so this method is faulty because it assumes that he has conscious reasons for his purchase actions. He may make up some since he has to give a reason. It is never clear whether the buyer's plans are real or merely created during the interview.

In the multiple-choice type of question the respondent may find it difficult to distinguish the various shades of opinions. If he were asked whether he thinks the quality of a product is "very good," "quite good", or "fairly good", or "fairly poor", he might have difficulty deciding which of these indicate his true feelings. The alternatives presented to the respondent may be too many and the respondent may be too confused. There is a tendency for him to avoid extremes in his replies. This may cause a bias in the replies.

Perhaps the observation of Weschler and Bernberg adequately sums up the limitations of the direct method:<sup>25</sup>

---

<sup>25</sup>Irving R. Weschler and Raymond Bernberg, "Indirect Methods of Attitude Measurement," International Journal of Opinion and Attitude Research, Vol. 14 (1950) pp. 209-225.

There is a steadily growing belief that we have developed direct questioning to almost the limit of perfection. The residual deficiency seems inherent in the very method. After all a magnifying glass cannot perform the service of an electron-microscope even if one constantly polishes the lens and goes on improving the lighting conditions.

### Summary

Attitudes have several characteristics, some of which make their measurement difficult. Yet studies are valuable to a marketer. There are many techniques that can be used to obtain information on consumer attitudes. These have some limitations where consumer research is concerned. The next chapter deals with projective techniques which overcome some of these weaknesses.

## CHAPTER IV

### TYPES OF PROJECTIVE TECHNIQUES

#### Introduction

The purpose of this chapter is to discuss the more important tests that constitute the projective techniques. As it was noted in Chapter Two there are a number of ways of grouping these tests.<sup>1</sup> Not all the tests in each group will be discussed. Only the more familiar and popular methods used in consumer research will be selected.<sup>2</sup> The following tests will be included:

<u>Categories of the Tests</u>	<u>Tests to be Discussed</u>
Association techniques	Word Association test Rorschach ink blot test
Construction techniques	Thematic apperception test
Completion techniques	Sentence completion test Picture frustration study
Expressive techniques	Role playing Psychodrama

For each test the more important and distinctive characteristics and the method of administering will be examined.<sup>3</sup>

---

<sup>1</sup>As in Chapter Two, the classification of Gardner Lindsey will be adopted.

<sup>2</sup>The only exception is the Rorschach ink blot test which has rarely been used in consumer research.



The reader will note that technical details of interpreting the data, i.e., the scoring, tabulating and coding has been excluded from the discussion. Only brief comments will be given. Firstly, because it is too complicated and secondly, because much of the literature written on the actual details of analysing and scoring the data are based on a purpose, that of studying the personality of the individual, which is different from that of the focus of this thesis. Any attempt to develop a framework for analysing and scoring the data cannot be done without reference to a specific purpose.

The chapter will conclude with a summary of the important characteristics of these techniques.

- 
- <sup>3</sup>For details refer to any of the following books:
- John E. Bell, Projective Techniques, (New York: Longmans, Green and Co., Inc., 1948)
- Harold Anderson and Gladys Anderson, (Ed.), An Introduction to Projective Techniques and Other Devices for Understanding the Dynamics of Human Behavior, (New York: Prentice-Hall, Inc., 1951)
- Gardner Lindsey, Projective Techniques and Cross Cultural Research, (New York: Appleton-Century-Crofts, 1961)

### Word Association Test

Originally known as the free association test, the word association test is one of the oldest projective techniques and was first used in the laboratory. The clinical application of this method was stimulated largely by the psychoanalytical movement. A well known psychiatrist, Carl Jung, contributed significantly to the systematic development of the word association.<sup>4</sup>

The test consists of a list of carefully selected words read aloud one at a time and after each word the respondent is asked to reply as quickly as possible with the first word that comes to mind. Many different lists of stimulus words are in existence. One of the earliest and most well known ones is that of Kent and Rosanof (1910). This consists of a list of 100 common neutral words chosen because they tend to evoke the same association for people in general. Studies revealed that there were marked differences between associations of mentally disordered and normal people.

In the analysis of the replies three factors are studied:

1. The content of the responses.
2. The time lapse between the stimulus and response.

---

<sup>4</sup>Jung developed the word association technique, which had been used for the study of normal cognitive structure and for psychiatric research, and used it to identify important areas of unconscious conflict.

3. The reaction and the behavior of the response.

A content analysis is carried out in which the stimulus words and the responses are grouped in terms of the particular motives or psychological processes they reflect or with which they seem to be associated. In addition, these factors are also taken into consideration.<sup>5</sup>

- a. repetition of the stimulus words
- b. misunderstanding or whispered replies
- c. multi-word responses

The recording of the time lapse between the stimulus and the response can be done with an ordinary stop watch. An analysis of the time it takes for the respondent to give a response and his ability to give the same response quickly during a second test, reveals his stability of association and the extent of his emotional reaction to each symbol. The normal time lapse is slightly less than three seconds. If the interviewee takes more than three seconds this means that some emotional factor has been tapped. On the other hand, too quick a reply suggests that the respondent is trying to cover up his disturbance.

Finally, the behavior of the respondent during the test is observed. Shifting around in one's chair, laughing, looking away, flushing, coughing, catching

---

<sup>5</sup>Bell, op. cit., p. 18.

one's breath, movement of the hands, etc., may indicate that the subject is under emotional stress.<sup>6</sup>

The test that has been discussed above refers to the free association test where, given a word, a respondent is asked to say the first thing that comes into mind. There are many modifications of the test, e.g., the Controlled Association test where the subject's choice is limited or controlled and he is asked to give a word of similar meaning or opposite meaning, or an adjective or color. Another variation is the Successive Word Association where the person interviewed is asked to say as many words as he can as long as they continue to come to him. This is an emptying process often bringing unique results.

To help in the analysis and interpretations of the results, subjects are sometimes asked to clarify their associations or the stimulus words are presented and the respondent asked to recall the associations they gave previously.

### Rorschach Ink Blot Test

The Rorschach ink blot test, named after its originator, Hermann Rorschach, is one of the best known

---

<sup>6</sup>Yet this need not necessarily be true. A person who shifts around in his chair, or moves his hand about frequently might do so out of habit or because he is nervous and shy and not because the given word has aroused him.

yet least understood of the projective techniques. The subject is presented with a series of ten cards on which are printed bi-symmetrical blots,<sup>7</sup> some of which are black and white and some colored, and he is asked to report what he sees. What might the blot be? What does it make him think of? Because the cards present shapes or figures which are relatively unstructured and are therefore susceptible of being perceived and interpreted in various ways, they compel the subject to "see" in them what he imposes on them. He may turn the cards anyway he likes. The cards are then gone through a second time to find out how the subject arrives at the responses. The respondent's behavior during the test, whether he laughs, fidgets or blocks in his speech, etc. are noted. In analysing and interpreting the responses the examiner considers:

- a. the location of the responses - this refers to the part of the blot which the subject associates with each response, i.e., does the individual response pertain to the whole blot, to a large detail, to some tiny detail.
- b. the determinants of the responses - includes form, color, shading, movements,<sup>8</sup> i.e., which

---

<sup>7</sup>These blots look like the sort that might be produced by folding a sheet of paper over a drop of ink.

<sup>8</sup>Although there is no movement in the blot itself, the subject's perception of the blot as a representation of a moving object is scored. Further

determinants or combination of determinants does the respondent use.

- c. the content of the responses. These might be animal forms, human forms, or inanimate objects.<sup>9</sup>

A massive array of literature gives rules for interpreting personalities from the responses given. Various scoring systems have been adopted. No single one has gained exclusive acceptance among clinical psychologists. For example, seeing a preponderance of human movement over animal movement in the blots (e.g., two people dancing), may indicate richness of inner life, imagination and creativeness. It should be emphasized that the results of the test should be interrelated with other information of the subject derived from outside sources such as other tests, interviews, and case histories.

### Thematic Apperception Test

The Thematic Apperception Test was introduced by Morgan and Murray about 25 years ago as one of the methods used for investigating the fantasy of normal

---

differentiations are made within this category, e.g., human movement and animal movements and abstract or natural movement are separately recorded.

<sup>9</sup>George Horsely Smith, Motivation Research in Advertising and Marketing, (New York: McGraw-Hill Book Co., Inc., 1954), pp. 149-150.

individuals. From the data collected, the authors tried to build a theoretical framework of personality, however, the clinical use of the test outstripped its research application.

The test consists of twenty cards on which are printed full pictures (not line drawings) selected from magazines, illustrations, paintings, drawings and other art sources.<sup>10</sup> The respondent is asked to make up a story around each picture and to tell what the situation is, what events were that led up to it and what the outcome will be, then describe the feelings and thoughts of the characters. The examiner records the story as accurately as possible, prompting the respondent if he fails to include some of the required aspects of the picture. The test can be given individually with the oral responses recorded or it can be administered in groups with subjects writing down their stories.

This procedure usually involves two one-hour sessions. Ten cards are used during each session. There are four overlapping sets of cards available - those for boys, for girls, for men over fourteen years and those for women over fourteen years. Most of the pictures in each of these sets contain a character with

---

<sup>10</sup> Actually nineteen of the cards contain vague pictures in black and white and one is blank. In the case of the blank card, the subject is instructed to imagine some picture on the card, describe it, then tell a story about it.

whom the subject can identify. Next to the Rorschach, it is the most widely used of all projective techniques, yet there is still very little standardization in the interpretation of the test. As Gardner Lindsey points out:<sup>11</sup>

....as used clinically, TAT's interpretation has not typically rested upon a set of objective scores for specified variables. Much more customary has been the use of the stories as an additional behavioral data which could be examined in connection with information concerning the case.

The original method of analysis proposed by Murray depended upon an initial identification of a hero figure in each story and then an analysis of needs displayed by the hero in each story, as well as the press (environmental forces) that acted upon the hero. It is assumed that there is some kind of a relationship between the tendencies felt or expressed by the hero in the story and those that exist with the story teller. Although this method of scoring TAT stories is one of the most popular of the various schemes available, there is little restriction upon the interpreter and he may use any system of content analysis he wishes.

---

<sup>11</sup>Lindsey, op. cit., p. 68.



### Sentence Completion Test

The sentence completion test, as the name indicates, is a test whereby the individual is presented with a series of incomplete sentences, generally open at the end, to be completed by him in one or more words. These statements contain incomplete ideas and he is asked to complete the sentences as rapidly as possible with the first words that come to his mind.<sup>12</sup> For example:

1. I like to shop in an A.G. supermarket because.....
2. I think that food prices are .....
3. The thing that bothers me most about food shopping in an A.G. store is.....

In the construction of such sentences, the researcher deliberately varies the ideas presented so that the subject will not be aware of the specific sentences which are inserted to obtain data directly related to the problem. Moreover, the phrases have to be so constructed not to give any clues as to what might be the expected answer. The sentences can be designed to assess a large number of relatively independent variables or a single variable.

---

<sup>12</sup>However, there is no pressure for immediate associations.

The sentence completion test is the best known of the completion techniques and one of the most widely used projective techniques. However, there are so many modifications of it that there is little standardization in scoring and administration and very little in the way of norms that might aid the individual with the problem of making inferences from particular test protocols.<sup>13</sup>

### The Picture Frustration Test

Devised by Saul Rosenweig, the picture frustration study, or more correctly referred to as the Picture Association Study for Assessing Reactions to Frustrations, consists of 24 cartoon-like pictures with each picture showing two principal characters in some form of social intercourse. One of them is involved in a mildly frustrating situation of common occurrence; the other person is saying something which either gives rise to the frustrating circumstances or calls attention to the frustrated person. The speech balloon for the frustrated person is left blank and the respondent is asked to fill in the first thought that occurs to him which would be appropriate for the character.

---

<sup>13</sup>The chief exception is the Rotter Incomplete Sentence Test which is relatively well standardized and is accompanied by relatively adequate norms for certain categories of people. See Gardner Lindsey, op. cit., p.78.

The frustrating situations are of many types:

1. Ego blocking - some obstruction, personal or impersonal, impedes, disappoints, deprives or otherwise thwarts the character directly.
2. Super-ego blocking - the character is insulted, accused, or otherwise discriminated by another character.

The instrument is designed to provide scores for a number of variables that describe the individual's characteristic mode of dealing with frustration.<sup>14</sup>

The picture frustration test is based on the assumption that the subject identifies himself with the frustrated character in each picture and projects his

---

<sup>14</sup>Each response is scored for:

1. direction of response (extra punitive, intro-punitive, or impunitive).
2. type or mode of response (obstacle dominant, need persistence, ego defensive).

Combination of the two categories lead to nine different classifications to which each response can be assigned, e.g., extra-punitive-need persistence, impunitive-obstacle dominant. By totalling the number of responses one can obtain an over-all score representing the general tendency for the subject to employ each mode of response.

The picture association stands midway in design between the word association and the TAT. Like the word association, this test is designed to reveal the first association, although here the stimulus material is more complex and the responses more complex and structured.

own bias in the answer given. To permit such projection the facial features and other expressions of personality of the pictured characters are purposely omitted.<sup>15</sup>

### Role Playing

This is an action technique in which the respondent is asked to play the role of another person. He has to put himself in the latter's place and try to imagine how he would react if he were under the same situation. It requires the subject to act out in a more or less public setting some kind of personally relevant drama or personal interaction.

From the practical point of view, the application of this technique is limited by its demands on the time, personal action and properties. Interpretation of the subject's response is usually completely qualitative and there is little in the way of objective guideposts for the investigator. There is also a lack of standardization in administration and recording. Researchers who have made use of this technique have modified it. Rather than have the subject actually act the role, he is asked to use his imagination and to respond verbally.

---

<sup>15</sup>Recent research by Engel and Wales indicate that better projection is obtained by using stick pictures instead of fully clothed ones and by using a very sketch-like treatment for background materials (cars, books, shelves, etc.). This will reduce the bias derived from suggesting a standard of living by the environmental circumstances surrounding the figures in the cartoons.

### Common Characteristics of Projective Techniques

Having discussed some of the important features of each test, this chapter will conclude with some common characteristics of these techniques.

One striking feature of all these tests that have been discussed so far is their indirect approach in obtaining information. Unlike the conventional research method of questioning these techniques are more subtle. The respondents are not asked directly their attitudes and feelings towards any subject matter, rather information is elicited in a round-about or indirect way. Similarly, the responses are not taken at their face value but the attitudes of the respondents are deduced from the replies given. There is a lack of awareness on the part of the subject as to the purpose of the test. Since the specific purpose of the test is not apparent, the respondents are unable to attempt to create the desired impressions or answers. In some cases an intelligent subject who is familiar with these instruments might suspect the general goal of the examiner. However, he will not be able to guess how his answers will be interpreted.

Projective techniques are free and unstructured, i.e., they allow the individual to manipulate or react to the situation according to his own interpretation

---

of the situation. As Lawrence Frank points out, "The essential feature of a projective technique is that it evokes from the subject what is in various ways of expressive of his private world and personality process."<sup>16</sup> The responses are not limited or restricted as in some of the conventional methods where the interviewee is forced to choose his answer from a selected range of choices. Theoretically, the number of ways of responding are unlimited. The individual is bound only by the restrictions of the language and his psychological make-up.

These tests are sensitive to the unconscious or latent aspects of personality. One of the implicit assumptions is that they may uncover private thoughts, feelings and attitudes of the individual. Intuitively, it is easy to perceive one trying in every way to hide his real attitudes in certain areas by lying or distorting the answers and resorting to stereotyped replies. It is hoped that the subject will become so absorbed in explaining what seems to be an objective bit of material that he loses sight of the fact that in his interpretation he discloses his wishes, fears and aspirations.

---

<sup>16</sup>Lawrence K. Frank, "Projective Methods for the Study of Personality," Journal of Psychology, VIII (1939), p. 47.

The respondents are made to feel that there are no right or wrong answers to the questions. They are asked to use their imagination and give the replies they think are appropriate.

Although there are individual projective techniques that do not meet all these criteria and there are non-projective techniques that meet one or more requirements, the vast majority of projective techniques will meet these requirements than will non-projective measures.

#### Summary

Although projective techniques were developed at different times by different people and for different purposes originally, there is running through most of them some distinctive features which bind them together to form a class of their own, different from other psychological tests. This chapter was only concerned with the characteristics of some of the more popular tests. The following chapter will deal with their application in consumer research.

CHAPTER V  
PROJECTIVE TECHNIQUES IN  
CONSUMER ATTITUDE RESEARCH

Introduction

Having examined some of the characteristics of attitudes as well as of each selected projective technique, we now turn to the application of these tests in consumer attitude research. How each test can be used to obtain information from the consumer will be shown. Illustrations will be given of actual consumer surveys that have been carried out using these techniques. Some of the advantages of using these tools as compared to the direct method of questioning will be analysed.

Yet one should not forget that projective techniques are built on certain principles. Thus, they work better under certain conditions. They are not appropriate under all conditions. Some of these situations will be investigated in this chapter.

The Marketing Applications of  
Projective Techniques

Word Association Test. Because of the limited information it reveals, the word association test is not the principal method used in most marketing surveys. It is



useful as a preliminary probing tool that must be supplemented by other research techniques before any valid conclusions can be reached.

The word association is relatively simple and easy to administer. The usual approach would be for the interviewer to instruct the respondent carefully:

"Here is a list of words which I will read aloud one at a time. I want you to say the first word that comes to your mind. For example, if I say the word 'hot' you might say 'cold' or for 'book' you might say 'read'."

The word list usually consists of a number of crucial words placed at random among some relatively neutral words. These words should not be too intellectualized or obtrusive. It is important not to use different inflections, emphasis or mannerisms when the significant words are read and to note carefully the subject's reaction in detail.

To illustrate, in the Donahue Sales Corporation Home Sewing Study<sup>1</sup> the word association test was used to find out consumer reactions to a number of words and phrases such as zippers, buttons, snaps, making a dress, and Talon zippers.

If the same word produces a considerable number

---

<sup>1</sup>Joseph W. Newman, Motivation Research and Marketing Management, (Boston: Harvard Business School, 1967), p. 426.

of "hesitations" among various persons interviewed and also among still others a considerable number of "no responses", it is likely that it is a dangerously or commercially unpromising word. But if a word evokes many "hesitations" but few, if any, "no responses", it is usually regarded as a word worthy of consideration since it is a "charged" word.

In a second study, Social Research Inc.<sup>2</sup> conducted a survey on consumer attitudes towards soaps, chemicals and detergents. The respondents were given words by the interviewer with instructions to respond with the first word that came to mind. Examples of the words used were: towels, sudsy, homemaker, scrub, soiled, family, babies, detergents, Spic-and-Span. From the responses given it was possible to obtain some cues as to what a given word means.

When several test results are brought together, tabulated and studied by competently trained analysts, they may produce valuable results. Yet this tool has been criticized because the information it evokes is too scanty to be reliable. Not knowing the subject's internal frame of reference, one could interpret the data in many ways and it may be difficult to say with certainty whether the conclusions reached about the subject's

---

<sup>2</sup>Ibid., p. 426.

attitudes from single word responses were correct.

Moreover, this test is quite well-known and most subjects are aware that the examiner is interested in knowing his associations with the given words, so that they could, if they were uncooperative, resort to stereotyped answers. This can happen quite easily if the test is administered too slowly.

Another problem is in judging the emotional reactions of the respondents during the test. It calls for competence and flair in judging human reactions.

The word association has been successfully used in studying consumers' to brand names, company names, advertising slogans and themes. It is certainly a useful and handy device for the researcher, but it should be used in conjunction with other techniques if valid conclusions on consumer attitudes are to be drawn.

Rorschach Ink Blot Test. The Rorschach ink blot test has not, to the author's knowledge, been used very often in consumer attitude research.<sup>3</sup> This is due chiefly to the fact that this technique is not flexible and can only be used in its standardized form. Unlike the other projective techniques which can be modified, the original form of the

---

<sup>3</sup>The Rorschach ink blot test has been included here to illustrate that not all projective techniques are suitable for consumer research, although they might be popular tools among clinicians.

ink blots have to be used. Thus it cannot be readily adapted to meet any specific research problem.

It has been pointed out that much of the data obtained through the use of this technique is useless to the marketing researcher. It reveals information on the personality of the individual and not his attitudes or feelings, and thus is not appropriate in the study of consumer attitudes. Moreover, it is difficult to design an experiment using the original form of the ink blots for this purpose.

Thematic Apperception Test. It is not difficult to visualize how the Thematic Apperception Test can be used in consumer research. Instead of using the pictures originally developed by Murray and Morgan, the marketing researcher can substitute with those pertinent to his research study.

An application of this technique was carried out by Social Research Inc.<sup>4</sup> One of the pictures used showed an open highway as seen from the driver's seat. Hands were shown on the steering wheel with the speedometer reading 70 miles per hour. The consumer was asked to put himself into that position and to say what kind of things came to his mind. It is assumed that the respondent

---

<sup>4</sup>Newman, op. cit., pp. 72-155.

will identify himself with the characters in the pictures and will project his own attitudes and feelings in the responses. Respondents told stories of how fun it was to go fast on an open road, but it was also someone else doing it. Among other findings, the picture brought out contradictory attitudes toward speed. Responses were interpreted to mean that speed involved both pleasure and fear. While speed is wrong, a car should nevertheless be capable of high speed.

The illustrations used in this method are full pictures, not cartoons. Thus the situation they attempt to portray will look more realistic. It is easier for the respondent to put himself in the place of the characters in the picture.

An interesting application of the TAT was its use in studying consumers' reactions to an advertisement.<sup>5</sup> The investigators were interested to know the consumer attitudes to a well-known painting by Gauguin for a new fragrance, "Naomi." The painting featured two South Seas girls. Four pictures were shown to the respondents.<sup>6</sup> One of them the critical picture, "Naomi," and the second

---

<sup>5</sup>George H. Smith, Motivation Research in Advertising and Marketing, (New York: McGraw-Hill Book Co., 1954), pp. 170-172.

<sup>6</sup>The sample consisted of 50 women carefully chosen to represent the desired population.

picture, "Naomi-2" represented a young American girl clasping flowers.<sup>7</sup> The following instructions were given:

"I'd like you to make up a story about each picture. Use your imagination. What are their feelings, moods, and so on. You have as much time as you need."

The stories revealed the women's attitudes towards the two pictures. The first picture (Naomi) created images of heavy-set native women always doing housework chores, unglamorous, and unromantic. Respondents imagined that women who preferred "Naomi" perfume would be older, fairly heavy, and dark-skinned. Obviously, they did not want to identify themselves with this type of woman.

The second picture (Naomi-2) aroused pleasant and romantic associations. The women were eager to identify themselves with the girl and the fragrance which symbolized youth, romance, beauty, etc. In light of the data collected, the decision was made not to use the Gauguin painting to advertise the new perfume.

In comparison to the other projective techniques, TAT provides more material for the examiner to work on. Yet, this can be a weakness of this instrument. Analysis

---

<sup>7</sup>Two other pictures symbolizing a fragrance called "White Glove" were included as controls.

of the data could be time consuming and difficult. Marketing researchers have not developed any objective scoring system for interpreting the data. Thus the conclusions drawn rely heavily on the subjective interpretation of the examiner.

Although projective techniques operate on the principle of an unstructured testing situation, the subjects have to be guided in their story-telling if they are to provide material relevant to the situation.<sup>8</sup> This has to be carried out carefully to avoid putting words into the respondent's mouth.

Perhaps one of the main weaknesses of this technique is that the responses rest upon the complex linguistic skills, so that for the subject, who because of education or intelligence finds it difficult to manipulate verbal symbols, the test is relatively inappropriate.<sup>9</sup>

---

<sup>8</sup>The problem of the test design will be brought up again in Chapter Six.

<sup>9</sup>Gardner Lindsey, Projective Techniques and Cross-Cultural Research, (New York: Appleton-Century-Crofts, Inc., 1961), p. 73.

Sentence Completion Test. The sentence completion is the best known of the completion techniques. It is favored by many investigators because of its flexibility. It can be adapted fairly easily in order to evoke responses relevant to a particular variable. It assumes that some people have verbal inertia. They will usually talk once one can get them started. For example, to study consumer attitudes toward coffee, these incomplete sentences can be used:<sup>10</sup>

Powdered coffee.....

The nicest coffee.....

Coffee that is quickly made.....

She was ashamed of the coffee she had just

served because.....

The thing I enjoy most about coffee.....

People who never drink coffee.....

On the other hand, if the investigator is concerned about housewives' attitudes toward domestic chores in general, the following sentences can be given:

What I like best about looking after a house

is.....

Women who go out to work.....

Housework.....

---

<sup>10</sup> Harry Henry, Motivation Research: Its Practices and Uses for Advertising, Marketing and Other Business Purposes, (New York: Frederick Ungar Publishing Co., 1958) pp. 59-60.



Tinned foods.....  
 Slaving over a hot stove.....  
 Women who use labor-saving devices.....  
 Looking after a family.....<sup>11</sup>

The assumption underlying the use of this method is that the respondent is so concerned with getting an answer that he cannot be too concerned with what he is saying and that his unconscious mind has a much greater chance of expressing itself. The respondent might find it difficult to complete the given phrases and because he is so eager to say something, his defenses are down. But it is not always possible to conceal from the respondents just what is being sought. An intelligent subject would be able to spot the "trap" and could produce a rationalized answer.

Since the test is relatively simple to design and to administer, it has been used in many marketing surveys. It was one of the techniques employed by Social Research Inc. in a survey entitled, "Automobiles-What they Mean to Americans."<sup>12</sup> In this study a number of incomplete sentences were used. Among other findings, this test revealed that men and women had different ideas and attitudes toward automobiles. The replies from the women to the sentence stem, "When you get a car....."

---

<sup>11</sup>Ibid., p. 60.

<sup>12</sup>Newman, op. cit., p. 246.

included:

- .....you can't wait till you take a ride.
- .....you could go for a ride.
- .....take rides in it.

The men responded to the same stem as follows:

- .....you take good care of it.
- .....I want to make darn'sure it has a good  
coat of wax.
- .....check the engine.

To another sentence stem, "A car of your own....." the women's responses included:

- .....is a pleasant convenience.
- .....is fine to have.
- .....is nice to have.

The men's responses to the same sentence stem included:

- .....I would take care of.
- .....is a good thing.
- .....oh, absolutely a necessity.

A conclusion reached from the above findings was that an automobile to a woman was something to use and that pride of ownership was reflected by being seen in the car. For men, the automobile was something which they should protect and for which they should be responsible. The pride they had in their car was of a different nature. They took pride in keeping their car in good

condition.<sup>13</sup>

Like the word association test, the sentence completion test is a simple yet useful device for the marketing researcher. It seems to be a better instrument to use in the study of consumer attitudes because it narrows the respondent's field of replies, therefore making the interpretation of the data easier.

It has a further advantage compared to the TAT or Rorschach because of the relative economy of time and effort involved in collecting and analysing the responses. But one should remember that the result of this instrument is not sufficient to build important policy formulations. It should be supplemented by other methods as well.

Picture Frustration Test. The picture frustration test has been one of the most popular projective techniques among marketing researchers.

Both group and individual administration is practical. In both cases, each subject is presented with a test leaflet and on the outside page are the following instructions:

"Each of the following contains two or more people. One person is always shown saying certain words to another. You are asked to write in the empty space

---

<sup>13</sup>These findings will be valuable to a car manufacturer in making decisions on the design of cars, or to the dealer in planning marketing strategies.

the first words that come to mind. Avoid being humorous. Work as quickly as you can." <sup>14</sup>

In individual administration the subject is asked to read his answers out loud and the examiner notes other responses, e.g., a sarcastic tone of voice which may help in the interpretation and analysis of the responses.

Although the test was originally designed around a frustrating situation it does not necessarily have to be so. Instead respondents may be asked to resolve a problem. This technique was used to study consumer attitudes towards automobile insurance.<sup>15</sup> The respondents were shown some cartoons, two of which were:

1. A woman and a man, with the woman saying, "Here's an advertisement that says you can save as much as 40 percent on your auto insurance. Do you think we ought to look into it when ours expires next month?" The man's balloon is left blank.
2. Two men, with one saying, "Yes, that company's auto insurance is not expensive as some, but

---

<sup>14</sup>Saul Rosenweig, "The Picture Association Method and Its Application in a Study of Reactions to Frustrations," Journal of Personality, Vol. 14, No. 1, (September, 1945), p. 7.

<sup>15</sup>Smith, op. cit., pp. 170-172.

what kind of satisfaction do they give you if you had an accident. The second man's balloon is left blank.

The interviewees were asked to imagine what the second person might reply. Some of the replies to the first cartoon were:

1. I'll look into it - of course, with reservation.
2. If we can save 40 percent, we had better look into it.
3. I would be suspicious of that and 40 percent off is quite a bit.
4. I don't believe there's such a company - can't be a reliable one.

It is not difficult to come to some conclusions on the reactions of consumers to a price appeal in auto insurance.

The great strength of this method lies in the fact that people are prepared to put into the mouth of a third person what they might hesitate to admit on their own account. The interviewee is asked to imagine how the person in the cartoon will react. As he does this he will unconsciously inject his own feelings and attitudes into the picture.

Respondents seem to enjoy working with cartoons and it is easier to enlist their cooperation. Pictorial methods present a problem more clearly and effectively than verbal techniques. The pictures are just rough

sketches and can be adapted to meet the needs of the marketing researchers. All sorts of situations can be represented, e.g., a scene showing two housewives, a husband and wife, or a purchaser and shopkeeper. Not only is the drawing flexible but the wording of the cartoon can also be designed to focus on whatever aspect is required. To find consumer attitudes toward a particular brand of cake mix, a cartoon can be presented showing two housewives sitting over a table with one saying, "Would you like a piece of X pie?", (X being a brand name). Alternatively, this scene could show a salesman and a housewife with the former saying, "Sorry, we are out of X pie. Do you want another type instead?"

To illustrate, a milk company felt that the people of a certain city had an unfavorable attitude toward its company.<sup>16</sup> The sales force reported that they could not compete successfully because their milk was thought to be low in butterfat and unclean. The president was planning a major change in company policy. He was not certain that the unfavorable attitude existed and how it might influence the new policy. A survey was conducted to determine the attitude of the people towards the milk company and the picture frustration test was one of the techniques employed. One of the pictures

---

<sup>16</sup>Martin Zober, "Some Projective Techniques Applied to Marketing Research," Journal of Marketing, Vol. 20, (January, 1956), pp. 262-268.

used was a scene where two women were talking over the backyard fence. The first woman is saying, "Mrs. Jones has just changed milk companies. Are you going to change, too?" Another scene shows two women in a grocery store. One is pushing a cart and the other is bending over a large refrigerated case. The first woman says, "Would you get me a bottle of milk while you are bending down - any brand - they're all the same." In both cartoons, the balloon for the second person was left blank. The responses indicated that the milk company did not have an unfavorable reputation in the minds of the respondents. A typical response was, "All milk is processed under the same state laws so one isn't much better than the other." On the basis of this finding the company launched a new pricing policy and has been very successful with it.

Although it has many advantages, one of the drawbacks of using the picture frustration test is in the interpretation of the data. It is not clear whether the responses represent:

- a. what the subject would do in a similar situation,
- b. what he thinks he ought to do, or
- c. what he feels like doing but would not actually do.

It has been observed that the cartoon responses take the form of a "symbolic conversation" between the person interviewed and the principal subject in the cartoon. This conversation often seems unrelated to

what the respondent's actual behavior might be if the stimulus occurred in reality.<sup>17</sup>

The cartoon method shares the same problem as the TAT in that time and effort should be devoted to preparing a precise and accurate pictorial stimuli, specifically oriented toward the desired subject matter. It is possible that the problem involved may outweigh the value of these instruments and equally effective information may be observed at less expenditure, time, and money with verbal open-ended questions.<sup>18</sup>

Role Playing. Although role playing is a separate test of its own, the process occurs in most of the projective techniques, e.g., TAT, picture frustration, story completion. The respondent is asked to put himself in the place of a third person and to look at the situation from the impersonal point of view. This will draw his attention away from the idea that the investigator is actually interested in his attitudes and opinions.

One of the earliest (and certainly best known) examples comes from an enquiry carried out by Mason Haire

---

<sup>17</sup>James F. Engel, "A Study of a Selected Projective Technique in Consumer Research," Unpublished PhD. thesis, University of Illinois, (1960), p. 219.

<sup>18</sup>Ibid., p. 222.



at the University of California in 1949.<sup>19</sup>

A conventional survey of attitudes toward Nescafe revealed that most of the consumers disliked instant coffee.<sup>20</sup> The bulk of the responses fell into the general area - "I don't like the flavor." Haire suspected this to be a stereotyped answer so he used an indirect approach to get behind the facade.

Two shopping lists containing seven items each and identical in all respects except that one included the item, "Nescafe coffee (drip grind)", were given to a sample of housewives with the following instructions: "Read the shopping list below. Try to project yourself into the situation as far as possible until you can more or less characterize the woman who bought the groceries. Then, write a brief description of her personality and character."

About half the housewives who were shown the shopping list with the Nescafe item described the woman as lazy, a spendthrift, a poor wife or as failing to plan household purchases well. From these findings alone it is not possible to tell which items on the list were contributing to this idea. The results of the second list, (one containing the Maxwell House coffee), showed that

---

<sup>19</sup>Mason Haire, "Projective Techniques in Marketing Research," Journal of Marketing, Vol. 14, (April 1950) pp. 649-656.

<sup>20</sup>This questionnaire included the questions, "Do you use instant coffee? (If no, what do you dislike about it?"

no one described the woman with this shopping list as lazy and only 12 percent described her as failing to plan household purchases. It can be concluded that it was the presence of the Nescafe item on the list which lead to these unfavorable connations and hence a great deal can be deduced through this projective techniques about housewives' attitudes toward Nescafe. Those who rejected instant coffee in the original question blamed its flavor, but their dislike was due to their fear of being seen by one's self and others in the role they projected onto the Nescafe woman in the description. When asked directly it is difficult to say, "I don't use Nescafe because people will think I am a lazy and not a good wife." Yet, we know from these data the feeling regarding laziness and thriftlessness was there.<sup>21</sup>

The role playing technique is a valuable device for studying attitudes if one can be certain that the respondent does in fact project his attitudes into the picture. It is possible that some answers reflect the subject's opinions of how the third person might behave. Studies should be carried out to determine the validity and reliability of this instrument.

---

<sup>21</sup>Smith, op. cit., p. 101.

### Advantages of Using Projective Techniques

We have seen how projective techniques can be used in consumer research and for each test some of the strengths and weaknesses were pointed out. In this section some advantages common to all the projective techniques will be discussed. Although in some places this will be a repetition of the preceeding section, it will be necessary in order to give a more cohesive picture of this tool in consumer research.

One of the most valuable assets of the projective technique is that it is "disguised", i.e., it conceals from the individual the intent of the measurements. The reluctance to reveal truthful and accurate answers is a serious problem in certain situations that might threaten the external image of the respondent. He might try to guess the answers that he believes he is supposed to give rather than admit his ignorance or reveal his private feelings and attitudes. He could fabricate his responses according to what he thinks is expected of him out of the goodness of his heart to please the interviewer. If he is unaware of the reasons behind the question he is less likely to deliberately create the impression he thinks fit. For example, in the word association tests where the respondent is merely given a list of words and asked to say the first word or opposite word that comes to his mind, it is difficult

for him to know the intentions behind the questions.

An important feature of these tests is that they are more impersonal than the conventional survey methods. Very often the respondent is not directly asked for his opinion. Rather he is put in the position of a third person and asked to solve his problems. The theory of projective techniques assumes that in the process of responding in terms of other people he will unconsciously project or inject his own feelings and attitudes in the picture which he would be more likely to deny or distort in direct questioning. If the purpose of the survey is to measure brand loyalty, respondents could be asked directly what they would do if faced with this situation:

At a supermarket they see two brands of the same product. One of these is the usual brand which they can buy at the regular price. The other brand which they have never tried is at half its usual price.

Which brand would they choose?

Such direct form of questioning could produce unrealistic answers, for housewives dislike to reveal how price conscious they are and some might say they would definitely choose their usual brand. Another better way of tackling the problem would be to use the TAT to elicit information:

Respondents could be shown a drawing of a woman shopping in the supermarket, facing a row of shelves. On one of them is placed the two brands of the product and she is asked, "What is the woman in the picture likely to do? What do you think she should do?"

It is assumed that the respondent will identify herself with the person in the picture and in the process of giving her opinion on the latter's reaction she would reveal herself.

Another advantage of projective techniques is that they have a greater ability of securing expressions of attitudes in a more natural form. They offer the subject the widest latitude in choice of response or form of expression. The conventional surveys offer the consumer a restricted selection of ways of expressing their attitudes. The extreme example of this would be "yes" or "no" types of question and answer as compared to the TAT where the reader is asked to make up a story based on the pictures presented to him.

But the profusion and richness of the response data they elicit creates serious problems in analysing and interpreting the information. This method is more informal than that of the direct technique. This may lead to replies which are more conversational and unrelated to the topic.

The use of projective techniques in consumer research takes into consideration an important characteristic of human beings which the conventional research techniques overlook. Temporary forgetfulness is occurrence. Forgetfulness applies to things we have learned through experience. Using the direct approach a survey was conducted to find out what items the people used for making sandwiches.<sup>22</sup> About 17 percent mentioned liver sausages among an array of products. Yet studies of actual purchases in the same geographical area revealed that more than 80 percent of all families actually bought the product. It cannot be inferred that this discrepancy is due to the fact that the usage of this product in the household area is unimportant because actual consumer purchases showed that not only did the majority of the respondents buy the item but they bought it regularly as well. Subsequent research through indirect methods revealed that forgetfulness was the explanation for the discrepancy. In surveys using projective methods, the answers do not depend so much on the respondent's memory and power of recall but on their attitudes and feelings at that particular moment.

---

<sup>22</sup>Dietz Leonhard, Projective Techniques in Business Research, (Boston: World Publishing House, 1955), pp. 27-28.

Some tests like the Rosenweig's Frustration Test, Thematic Apperception Test, have an additional advantage over the conventional research tools in that they present the consumer with pictorial stimuli as well as verbal stimuli. For some types of investigation, picture association would yield more valid results than verbal association since they are more concrete, vivid and specific than the corresponding verbal stimuli. In a survey<sup>23</sup> which attempted to measure the attitudes, feelings, satisfactions and dissatisfactions of tourists visiting Hawaii, picture cards were shown to respondents. This method produced responses that were more meaningful and with less difficulty than if purely verbal stimuli had been used. Furthermore, respondents found this method of investigation more interesting and enjoyable.

The projective techniques are in the form of games or reports on how fictitious persons might react or other such devices which gets the respondent to involve himself and to abandon the role of the opinion-giver. He does not feel on the spot and therefore may find the task less serious and formal and will be more willing to cooperate.

---

<sup>23</sup>Martin Grossack, Understanding Consumer Behavior, (Boston: The Christopher Publishing House, 1964), pp. 193-220.

Conditions Under Which  
Projective Techniques Should be Used

Like all techniques, one should not forget that the projective techniques are built on certain assumptions. Hence they work better under certain conditions. The advantages of using projective techniques in consumer research are valid under these conditions. Here are some of these conditions and an analysis of them.

Projective methods are often inadequate by themselves to resolve research problems. Very often the utilization of more than one method is necessary to provide a meaningful basis upon which the responses can be analysed. Traditional methods of questioning are more suitable for procuring conscious information while newer psychological techniques are designed to probe below the surface of the personality. Hence, traditional methods and psychological methods should be viewed as complementary to each other.<sup>24</sup> The extent to which each is used will depend on the problem at hand. When projective techniques are not employed as the principal approach in surveys, they are useful for pre-testing purposes to provide valuable material for formulating hypotheses with greater precision and for phrasing

---

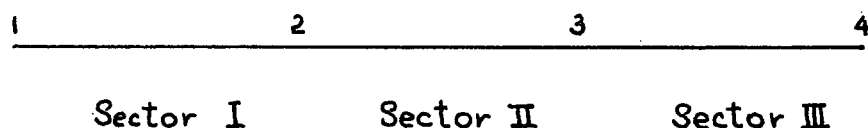
<sup>24</sup>James F. Engel, "Motivation Research - Magic or Menace," Michigan Business Review, Vol. XIII (March, 1961), pp. 28-32.



questions more meaningfully.

In some cases the investigator has a choice of several techniques which are more or less appropriate for the survey. These are situations where projective techniques or direct questioning will elicit essentially the same answer. In view of the lower costs of administration and the more simple and easier tasks of analysis and interpretation of the latter, the investigator will be less inclined to use the more indirect method of approach.

Projective techniques should be employed in areas where there is a tendency for the respondents to hold back their answers. The ability and willingness of a person to discuss his attitudes toward certain subjects varies widely on a continuous scale as illustrated below.<sup>25</sup>



Positions 1 and 4 are the two extremes. Position 1 is the polar region of easily obtained data. The degree of social conflict present in the attitude information increases steadily across the scale to position 4, the position of maximum social conflict.

---

<sup>25</sup>James F. Engel, "A Study of a Selected Projective Technique in Consumer Research," Unpublished PhD. Thesis, University of Illinois (1960), p. 13.

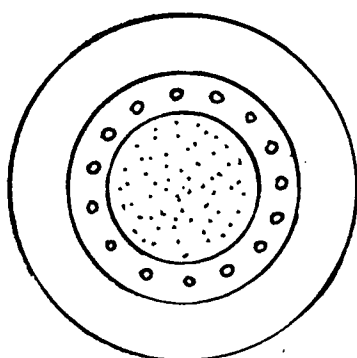
In sector 1 the distortion of the respondent's response to a direct question is slight. Within this section we find material where the subject is willing to describe and make public, for example, to questions such as, "Do you like watching T.V.?" or "Do you prefer tea or coffee?" the respondent will answer with little hesitation.

In sector 3, the barrier to response is much greater. When verbal questions are directed at him he will not reveal his attitudinal set because there is conflict between this and the demand of the question. Fear of self-depreciation increases ~~anxiety and~~ anxiety and defensiveness of the respondent and he produces answers that are stereotyped, distorted and vague. It is here that the conventional research methods become inadequate and projective tests are necessary to elicit information.

Sector 2 is the middle position between the two extremes. Although the sketch shows the scale divided into three sectors, there is no clear-cut division among them, i.e., it is not possible to indicate precisely where each sector begins and ends. They form a scale, as they go from sector 1 to sector 3, and it becomes more difficult to obtain truthful information from the consumers. The conventional research tools have to be supplemented by projective techniques.

One should bear in mind that useful marketing research is concerned with getting sufficiently below

the surface to do the necessary job. One can differentiate between three levels of awareness of a human mind. There are two layers of the conscious mind around a layer of unconscious or subconscious. In investigating people's opinions, attitudes and motivations we need to deal only with the outer layers. The third and innermost layer consists of non-verbal and non-rational emotions, which can only be and need only be invaded by the psychiatrist.<sup>26</sup> These levels of awareness are illustrated below:<sup>27</sup>



- ⊙ Unconscious; subconscious;  
Non-verbal, non-rational  
emotions.
- ⊙ Top of the mind, conscious.  
Concepts, feelings, emotions  
which can be verbalized.
- Top of the mind, conscious.  
Rationalizations, beliefs,  
attitudes, existing in  
verbal form.

In the outer layer we may find many rationalizations which already exist in verbal form. Within these sectors are topics on which the respondent is willing and able to reveal his attitudes, feelings and beliefs. For example, preference of women for one of the

---

<sup>26</sup>Leonhard, op. cit., p. 44.

<sup>27</sup>Ibid., p. 43.

two different brands of margarines. Even at this level there are problems for the researcher. As Smith comments: "...consumers' lack of training in introspecting may make it difficult for them to give complete information.....they may often lack the right word or the right concepts to express themselves....."28

The third area is beyond the area of awareness. It is not necessary for the investigator to penetrate into this level. To do this successfully it would be necessary for him to be a trained psychiatrist. Moreover, it would reveal data that might be interesting but useless to the marketer. It would be difficult to see just what a cigarette manufacturer could make use of the following information: "The ceremonial nature of smoking is usually explained as a continuation of, or regression to, infantile forms of auto-eroticism (e.g., thumb-sucking)."29

It is the second layer which is of interest to the investigator of consumer attitudes. Here the material is not likely to be readily forthcoming through direct questioning but can be uncovered through an indirect approach. The attitudes and motives of the

---

<sup>28</sup>Smith, op. cit., p. 19.

<sup>29</sup>Henry, op. cit., p. 27.

subject are usually concealed behind a mask of rationalizations and intellectual discussion and half-truths. For example, the desire to impress one's neighbors with a bigger T.V. set may be masked behind an insistence to buy a set because the old one had a flicker, or, smoking cigars in order to feel more masculine yet saying one smokes because of the pleasant aroma, or, reading a certain newspaper in order to feel like a big shot, behind the rational to read it because it contains more news.<sup>30</sup> It is here that projective techniques become very useful and essential to uncover the emotions, concepts, and feelings around which consumers have erected the layers of self rationalization.

The conditions under which projective methods can be used most efficiently is summarized by W. G. Coblener:<sup>31</sup> He holds that projective tests can be used with good effect at the very point where direct questioning is weakest. He lists four such cases:

1. Respondents who have 'unstable' attitudes.  
They shift.
2. Respondents who are undecided about, unaware of their attitudes or unable to express them.

---

<sup>30</sup>Smith, op. cit., pp. 18-23.

<sup>31</sup>W. G. Coblener, "On the Place of Projective Tests in Opinion and Attitude Surveys," International Journal of Opinion and Attitude Research, Vol. V, (Winter 1951), pp. 480-490.

3. Respondents who for some reason or other are unwilling to disclose certain of their attitudes although they seem cooperative otherwise.
4. Respondents who intentionally or unintentionally indicate attitudes that they may not actually possess.

The reliability of the data depend to some extent on the type of respondents selected. Projections in business research work best with the broad group of middle-majority consumers. Non-responses or useless answers might come from unimaginative people or people with no higher education. The more highly educated people may be the ones most likely to see through the interviewer's attempts to obtain their feelings and opinions rather than those of a third person. Also respondents who have been subjected to this type of questioning may be able to guess what the interviewer is seeking. Some may withhold information or deliberately mislead the examiner.<sup>32</sup>

In research of any kind it is usually necessary to rely on more than one method or technique of collecting and analysing data, no matter how reliable or valid the technique might be for the purpose. This principle applies to the use of projective techniques, too. One

---

<sup>32</sup>Leonhard, op. cit., p. 46.

should not make the results of the tests the basis for final decisions.

### Summary

Despite the scepticism of projective techniques among some researchers, these instruments have been used by some firms in their consumer surveys. Experiences with these tools have in most cases been successful in obtaining the information desired. They have been able to overcome some of the inherent weaknesses of the conventional method of questioning.

But like all instruments, they should be used under certain circumstances. Where the direct method can be used, that is preferred to the projective method, because of the lower costs and less difficulty in administering the tests and in analysing the data.

Projective techniques have their weaknesses and the researcher is faced with many problems when working with them. These problems will be examined in the next chapter.

CHAPTER VI

PROBLEMS IN THE APPLICATION  
OF PROJECTIVE TECHNIQUES

Introduction

In the previous chapter it was observed that there are a number of significant advantages open to the market researcher when using projective techniques. However, no technique is free from limitations and/or problem areas. The purpose of this chapter is to discuss the nature of the problem associated with projective techniques.

Several problem areas have been identified by this writer and are itemized as follows:

1. design of the tests.
2. administrative problems.
3. sample size.
4. interpretation of the results.
5. standardization.
6. ethical problems.
7. reliability and validity.

Solutions have not been found for all these problems. Nevertheless, it is important to recognize them and, if they cannot be eliminated, attempts should be made to minimize their effects.



### Design of the Tests

An important characteristic of projective techniques is that they are unstructured, i.e., an individual can interpret the ambiguous stimuli in any way that is most meaningful to him. In clinical psychology these tests are useful in finding out what motivations are at work in the break-down of an adjusted personality. They give a comprehensive picture of the individual's personality, his emotional needs, conflicts, etc. In such a situation an unstructured test design would enable the respondent to reveal the various aspects of his personality. In consumer's attitude research, the researcher is concerned with a narrower field. He is only interested in one aspect of consumer's personalities, towards some specific aspect of marketing. Although these tests should be so designed as to encourage freedom and spontaneity of expression, there are disadvantages in the interpretation and analysis of data. The test should be designed so that the focus will be on the research area that the investigator is interested in, at the same time, sufficiently unstructured so as not to restrict the respondent's answers. For example, in the word association test, rather than use the free association form, the respondent could be given the controlled form. In the TAT the subject can be guided by the interviewer to focus his attention on a few significant areas. In

clinical psychology the client will be presented the pictures and asked to tell a story based on his own interpretation of the stimuli. In consumer attitude research the respondent will be shown a picture but given more detailed instructions. Together with other devices the TAT was used in a survey carried out by Social Research Inc. on consumer attitudes towards automobiles.<sup>1</sup> One of the pictures showed a car with an open hood, beside the road and a man looking at the engine. The respondents were not only to give a short story about what was going on, how it happened, and how things would turn out, but were also asked to include what kind of people were in the car and what kind of car they were driving.

The second problem in designing these tests is in keeping them disguised. If no precaution is taken their specific purpose may be apparent. There are two ways of constructing the tests so that their purpose is disguised,<sup>2</sup> a fictitious purpose may be ascribed and in addition, a neutral or unrelated stimuli may be included

---

<sup>1</sup>Joseph W. Newman, "Automobiles-What They Mean to Americans," Motivation Research and Marketing Management, (Boston: Harvard Business School, 1967), pp. 228-230.

<sup>2</sup>Claire Selitz, Marie Jahoda, Morton Deutsch and Stuart W. Cook, Research Methods in Social Relations, (New York: Holt-Rinehart, Inc., 1964), p. 286.

in addition to the stimuli relevant to the investigator's objective.

In consumer surveys it is difficult to keep the respondents from realizing the real purpose of the projective tests because very often they have to be used with other techniques whose purposes may be quite obvious. But this is not too serious if the subject does not know how his responses are going to be interpreted. For example, in using the picture frustration test one could be shown a drawing of a husband and wife in an appliance store. The husband is shown saying, "Oh, here comes the salesman." The respondent is asked to fill in the wife's reply. The interviewee may guess that the interviewer is either interested in knowing his attitudes towards in-store buying, but he has no idea as to how his responses will be interpreted. Moreover, the subject may find it easier to express himself if he is not asked explicitly to talk about his own feelings and attitudes, even though he knows that what he says will be interpreted.<sup>3</sup>

Thirdly, there is a danger that respondents might try to seek for what they feel is the correct answer. In constructing these projective tests it is important that the stimuli does not reveal bias in one direction, i.e., it does not lead the respondent to feel

---

<sup>3</sup>Ibid., p. 287.

that there is an "expected" or "right" answer. The risk of doing this occurs especially in the verbal instructions given to the subjects by the interviewer.<sup>4</sup> One way of avoiding this would be to make the stimuli as ambiguous as possible. On the other hand, it will bring forth a profusion of responses which will raise difficult problems in analysing, interpreting, and standardizing the responses to arrive at any valid conclusions.

Before a projective test is used it should be tested to see that it is satisfactory in producing the type of information that is related to the situation being studied. For example, before the picture frustration or TAT tests are designed, a series of depth interviews<sup>5</sup> should be conducted in the field so that it is possible to develop problem areas about which pictures can be created. After designing the tests, they should again be tested to make sure that the responses elicited are related to the subject being studied.

In designing these tests there should be consultation with someone who has training in the use of these tests, perhaps a clinical psychologist or social

---

<sup>4</sup>This will be further discussed in the next section.

<sup>5</sup>These could take the form of very informal, unstructured, personal interviews where the respondents are asked to give their opinions on various topics that might be related to the problem.

psychologist. Once the projective techniques have been carefully designed, the actual implementation in the field can be done by an ordinary interviewer with ordinary intelligence, a lot of common sense and a disarming and tactful personality, if he is carefully instructed.<sup>6</sup> It is only in the design of the tests and the analysis and interpretation of the data that it is necessary to enlist the aid of a person trained to handle these clinical tools. The actual administration can be handled by an interviewer who merely records the responses as verbatim as possible.

#### Administrative Problems

One of the difficulties involved in the administration of these tests is the interviewer can influence the responses of the subjects. These tests are conducted in a personal interview and various aspects of an interviewer may affect the answers of the subjects. For example, the tone of ones voice, sex, appearance, attitude, the phrasing of instructions, expressions of encouragement, etc., can modify the answers of interviewees.

An investigation was carried out to ascertain the degree to which the examiner, as part and parcel of

---

<sup>6</sup>Robert Ferber and Hugh G. Wales, Motivation and Market Behavior, (Homewood: Richard D. Irwin, Inc., 1958), p. 137.

the total stimulus situation in a projective technique, might influence the productions of the subject.<sup>7</sup> The subjects were administered the Human Figure Drawing test<sup>8</sup> and asked to draw a picture of a person. The first group was interviewed by the examiner who had a mustache and the second by one who was a clean-shaven male. The results revealed that in the first group 8.88 percent of the drawings contained mustaches whereas only 1.66 percent of the second group had such a mustache. It seems, therefore, that the presence of a mustache in the male figure drawing by female subjects is significantly related to the male examiner having a mustache. In other words, this investigation suggests that the Figure Drawing test might perhaps not be a projective device in the sense that the expressive behavior is solely determined by factors within the subject herself, but rather that the environmental factors do influence the results. This could possibly apply to the other projective techniques, and is a factor worthy of exploration.<sup>9</sup>

---

<sup>7</sup>Gerald Yagod and Willian Wolfson, "Examiner Influence on Projective Techniques and Responses", Journal of Clinical Psychology, Vol. 20, (1964), p. 389.

<sup>8</sup>This is another Projective Technique. For details of this technique see: Gardner Lindsey, Projective Techniques and Cross-Cultural Research, (New York: Appleton-Century-Crofts, 1961), pp. 91-93.

<sup>9</sup>Other experiments showing the influence of the examiner on the respondent include, identity of the examiner (Baughman, 1951; Kenny and Bijou, 1953; Lord, 1950)

It has been argued that it takes months if not years of long probing interviews for a trained analyst using these techniques to ascertain the personality of the client. Market interviews are at best only a few hours in length and generally not conducted by anyone with psychiatric training and are administered in the parlor or on the doorstep to a distracted housewife.<sup>10</sup> How can one expect to get at the underlying attitudes of consumers in such a situation? One should remember, however, the objective of the clinical psychologist and marketing researcher are not identical. As it has been pointed out, the scope of the latter is much narrower and more specific and he may require a shorter period of time to accomplish his task.

### Sample Size

Much has been written about sampling in marketing research but there is still some controversy especially in the area of consumer research.

Many criticisms have been made against the

---

whether he is of the same sex or of different sex than the respondent, (Clark, 1952; Curtis and Wolf, 1951); whether he is supportive, hostile or neutral to the respondent (Bellak, 1944; Lord, 1950).

<sup>10</sup>N. D. Rothwell, "Motivation Research Revisited," Journal of Marketing, Vol. XX, No. 2., (October 1955), p.152.

reliability and conclusions of consumer surveys because of the sample size. Because of the high costs of conducting the surveys and of interpreting the data, it has been necessary to work on small samples and generalizations have to be made on the results of the data. It is true that in any type of survey such a procedure makes the findings less reliable scientifically. Each individual will have a unique personality of his own and the attitudes, motivations and feelings of a small section of the population may not be representative of the universe.

How large, then, must the sample be before one can make reasonably valid conclusions regarding findings. There is no absolute "good" sample whether it refers to the size or to the method of selecting respondents.

Sample size depends on three factors:

1. the objectives of the research,
2. the accuracy of measurement desired, and
3. the amount of money available for the research.<sup>11</sup>

For many questions relating to consumer attitudes rough measurements are satisfactory and greater precision can make no difference in terms of what actions might be taken on the basis of findings. Even if it were practical or feasible to use a large sample, it would be difficult

---

<sup>11</sup>Newman, op. cit., p. 449.



or almost impossible to measure consumer behavior with precise accuracy. Often these studies have been primarily exploratory and have merely enabled the researcher to identify significant variables.

Other things being equal, a larger sample will give a more representative picture of the population than will a smaller one. However, the incremental costs involved in using a larger sample may exceed the value of the information obtained.

It then becomes a question of one's objectives in a survey; one must decide which factors are more important and which we are willing to sacrifice.

### Interpretation of Results

The most difficult task in the application of Projective Techniques in consumer attitudes research is in the interpretation of the results. Most of the responses cannot be taken at their face value, i.e., they cannot be interpreted directly but must be interpreted symbolically or indirectly. This poses several problems. First, when responses are studied, should they be taken literally or should one read behind them to recover any latent or hidden significances of the response.

Secondly, there is a possibility that the responses may be a product of "a temporary affective state", i.e., some unusual factors in the immediate past of the subjects might generate emotions or motives not

ordinarily characteristic of these persons but which may influence test responses.<sup>12</sup> For example, if the interviewer is trying to study women's attitudes towards home sewing, a woman who has just sewn a frock but is unhappy about the way it turned out would show a negative attitude toward home sewing, although normally she enjoys doing it. She might be unconscious of this temporary change of attitude. If the interviewer is not told anything about the incident he will assume that the responses are representative of her usual state.<sup>13</sup>

It has been noted that there is a possibility that the respondent might merely recall and make use of the contents of a movie he has seen or a book he has read. It is argued that the answers may not be a reflection of the individual's own attitudes. On the other hand, it is significant that of the experiences the subject has, he selects certain ones to remember and to make use of. Thus these selections do have some personal meanings.

The interpretation of the results obtained in using these techniques is subjective in nature for it

---

<sup>12</sup>Lindsey, op. cit., p. 163.

<sup>13</sup>This is not solely a matter of belief; there is excellent empirical evidence demonstrating the co-variation of Projective Techniques responses with a variety of special states. (Clark, 1952; Crandale, 1951; Lindsey and Herman, 1955; Lord, 1955; Pattie, 1954; Sanford, 1937; Shipley and Veroff, 1952; Singer, Meltzoff and Goldman, 1952).

depends heavily on the personal judgement of the analyst. As such it provides a great leeway for the projection on the part of the interpreter himself. It is essential that the data is handled by someone adequately trained and skillful enough to evaluate the data. He must be thoroughly familiar with these tests and should have considerable insight and experience with them before he attempts to draw any conclusions. Attempts should be made to cross-check the results at various stages of the survey. A number of interviewers rather than one or two should be used. At least two research analysts should interpret the data separately and then compare the results.

One should be very careful before making any generalizations from the results of particular surveys on consumer attitudes using projective techniques. These responses are drawn from a sample, at a particular time, place, and under a unique set of circumstances and the results may not be applicable under another set of circumstances.

Interpreters of the data obtained through the use of projective techniques in consumer attitude research should bear in mind that "attitudes" cannot be measured precisely, i.e., it is almost impossible to give a meaningful number or figure to something that is an abstraction or inference from verbal expressions or observable behavior. What the investigator is interested

in is the direction of the attitude and, most important, the motives underlying the attitudes. Perhaps he may want to know the intensity of the attitude although not a definite and precise figure such as the number of degrees of liking or disliking, but a relative measurement of the strength of the attitude. The scaling methods perhaps would serve as a better tool to obtain this information.

### Standardization

Many psychologists would agree that one of the greatest deficiencies of projective techniques is the lack of normative data, i.e., there should be some objective norms for various groups, classified according to age, socio-economic data, status, sex, educational levels, etc. Since there are no standards for the interpreter to depend upon, there is little objectivity in scoring, analysing and consistent interpreting of the results. Evaluation of the data depends a great deal on the skill and clinical experience of the examiner. This restricts the use of the projective techniques to those who are properly qualified. It also means that the results obtained by different interpreters may not be comparable. Furthermore, it implies that the interpretation of the results is often as unstructured for the examiner as the stimuli are for the respondent.<sup>14</sup>

and is subject to the theoretical bias, perceptions and idiosyncrasies of the analyst.

The usual standardization procedures of mental tests have not been successfully applied to projective methods. As Helen Sargent observes, it is the configuration of factors present rather than the independent quantity of each factor that describes the personality. Broad experience of the psychologists rather than statistical reliable norms is the necessary prerequisite for using these procedures.<sup>15</sup>

These instruments are not adequately standardized with respect to both administration and scoring. As Anastasi has noted, "There is evidence that even subtle differences in the phrasing of verbal instructions and in examiner - subject relationships can appreciably alter performance on certain projective tests."<sup>16</sup>

---

<sup>14</sup>Anne Anastasi, Psychological Testing, (New York: The Macmillan Company, 1954), p. 623.

<sup>15</sup>Helen Sargent, "Projective Methods; Their Origins, Theory, and Application in Personality Research," Psychological Bulletin, Vol. 42, No. 5, (May 1945), p. 275.

<sup>16</sup>Anastasi, op. cit., p. 623.

### Ethical Problems

In many instances, projective techniques have been able to probe below the surface and to obtain information which the respondent would not expose to the public. This raises the question whether the investigator has the right to investigate other people's attitudes and to receive them in order to get at their attitudes. One should not forget that these techniques were developed to study personality. Clinicians used it for the purpose of helping the individual with his emotional problems. Even though the individual may not understand or know the purpose behind these when they are used on him, he trusts the clinician and knows that he has his interest at heart. This is not the case when the marketing investigator uses these techniques to get at attitudes of the individuals who are unwilling to indulge their opinions and attitudes through the use of more direct techniques. Does he have the right to pry into the private world of the subject<sup>17</sup> through such disguised methods that the latter is unaware of what is going on?

---

<sup>17</sup>For a discussion of these ethical issues in greater detail see, Irving R. Weschler, "Problems in the Use of Indirect Methods of Attitude Measurement," Public Opinion Quarterly, Vol. 15, (Spring 1951), pp. 133-138.

### Reliability and Validity

The reliability of a test refers to its consistency in measurement. A test or measuring device is reliable if it gives the same results<sup>18</sup> when applied at different times or when applied by different persons.<sup>19</sup>

The validity of a test can be defined as the extent to which a test measures what it has been designed to measure. A thermometer is said to be reliable if it consistently and accurately gives the same measurement for the same set of conditions. It is valid if it measures temperature and not some other factor like blood pressure.

A projective test used to study attitudes can be said to be reliable if it gives similar results when repeated under the same conditions. It is said to be valid if it does in fact measure attitudes.

There is a great deal of controversy on the reliability and validity of projective techniques. Critics maintain that these tests do not meet the standards of reliability and validity set aside for psychological

---

<sup>18</sup>By the same results we do not mean 100 percent consistency. Since chance errors are always present in any testing situation, a reliability coefficient of 1.00 is not possible.

<sup>19</sup>Steuart Rice reported that the attitudes of the interviewers, (who were social workers engaged in interviewing homeless men applying for free lodging) affected their behavior in filling out the forms although a standardized questionnaire was used. See S.H. Britt, "Four Hazards of Motivation Research and How to Avoid Them," Printers' Ink, Vol. 2, (June 1955), pp. 40-48.

tests. The lack of an objective system of scoring, the need for standardized methods of administration, analysis and interpretation of the results are some of the factors that make it necessary for the test to be handled by a skilled and well-trained clinician. Some psychologists are skeptical of the reliability and validity of these tests. Many have tried to point to the weaknesses of these methods by using checks that have traditionally been used on other personality tests.<sup>20</sup>

Besides the disadvantages of using these tools to measure the reliability and accuracy of any psychological test, some proponents of projective techniques have pointed out that they should not be used in testing projective techniques; at least, not without some modifications. As it has been pointed out, "projective techniques have been developed from a climate of opinion so radical and different from that which made possible other personality assessment procedure that their validity and reliability can never be established in

---

<sup>20</sup>The usual checks proposed to test reliability have been:

1. split-half technique.
2. correlation either between repetition of the same test or between alternate forms.
3. comparisons between judges and interpreters.

The methods frequently used for establishing validity are:

1. correspondence with other criteria.
2. internal consistency.
3. predictive success.

For details see Helen Sargent, op. cit., pp. 257-283.



the same ways.<sup>21</sup>

### Relevance in Marketing Research

In the field of marketing research again there are different opinions on the reliability and validity of projective techniques. Some have strongly attacked the use of these methods in marketing research by drawing our attention to the fact that some psychologists themselves are still skeptical of using these tests. They cite many experiments that have been conducted and have been documented in the scientific literature which indicate that these techniques have several limitations, even for diagnostic purposes. For example, they have cited failures in the use of the Rorschach ink blot test for selecting successful trainee pilots, for predicting which clinical psychologists would graduate and pass the licensing, and for predicting which mental patients would continue to undergo treatment.<sup>22</sup>

---

<sup>21</sup>L.E. Abt, "A Theory of Projective Psychology," Projective Psychology, Lawrence E. Abt and Lepold Bellak (Ed.), (New York: Alfred A. Knopf, Inc., 1950), p. 221.

<sup>22</sup>For example see Zubin, "Failures of the Rorschach Techniques," Journal of Projectives, Vol. 18, (September 1954), pp. 303-315; W.H. Holizman and S.B. Sells, "Prediction and Flying Success by Clinical Analysis of Test Protocols," Journal of Abnormal and Social Psychology, Vol. 49, (October 1954), pp. 485-490.

But other marketing researchers have observed that these failures have little relevance in marketing research. For example, the question of validity of any instrument must take into consideration the purpose to which it is put, i.e. the correct question is not to ask, "Is this technique valid?" but "Is this technique valid for studying consumer attitudes?" Many of the unsuccessful experiments in the use of projective techniques refer to their failure to predict behavior. In using these tests a marketing researcher should consider whether these tests enable him to obtain the type of data he is looking for and whether it will do so as well or better than any alternative method.

Many of these tests have been modified and simplified to a great extent by marketing researchers, and the purpose in using these tools has been less ambitious than that of the psychologists. Moreover, they have not been the sole basis of obtaining data in any survey. They are often used in conjunction with other techniques.

More research has to be done before one can justify one's criticisms of the reliability and validity of these projective techniques. By research is meant more than just citing failures of these tests in the field of psychology. Experiments have to be carried out in the field of marketing research itself.

### Summary

This chapter has endeavored to bring out some of the weaknesses of projective techniques. Many of the problems involved in using the tests stem from its extreme flexibility in terms of the structure or design of the test and the interpretation of the data collected. Perhaps the most serious problem is in the subjective nature of the analysis and the lack of a systematic method of procedure for interpreting the results. Conclusions drawn depend very heavily on the skill, experience and judgement of the investigator.

The researcher should take the precaution of carefully pre-testing these instruments before he makes use of them. Moreover, he should try to validate his results by cross-checking them with other techniques.

## CHAPTER VII

### SUMMARY AND CONCLUSIONS

Projective techniques refer to a group of psychological tests that originated as a revolt against the rigid framework which grew up around mental testing. The tests that were examined were the word association, Rorschach ink blot, TAT, picture frustration and role playing techniques.

Although Frank did not develop these tools himself, his great emphasis on their use in the study of personality aroused a considerable amount of attention and interest among psychologists, especially clinical psychologists.

Almost any technique can be called a projective technique if it involves the presentation of an ambiguous stimulus to the respondent, who is asked to construct some meaning from it. The purpose of these tests is not revealed to the respondent and they appear in the form of games or problems to be solved. It is assumed that this will draw the subject's attention away from the idea that the investigator is interested in finding out his attitudes or feelings. Hopefully, the respondent will unconsciously project his own feelings, attitudes and motives into the picture.

The success of these methods lies in the process of projection. It is recognized that the idea of projection as it relates to projective techniques has been broadened to include not only the Freudian concept - the externalization of impulses unacceptable to agencies like the ego and superego - but also to conscious, unrepressed, acceptable or even admirable traits, attitudes, motives and values.

Projective techniques have found their way in many fields besides clinical psychology, e.g. counseling, therapy, social sciences and marketing. These techniques were introduced in consumer research shortly after World War II, when it was realized that the conventional research methods were not adequate to deal with the increasing complex problems on consumer behavior. A group of researchers turned to other fields especially the social sciences and were engaged in motivation research. More and more researchers were attracted to it for it was associated with more glamorous and sophisticated tools. Yet, there were others who still clung to the traditional methods, unconvinced of the validity of these psychological instruments. They pointed out that these methods were too subjective in nature and did not meet statistical and scientific tests readily and easily. Much of the criticisms arose because too much was expected of these techniques. It

should be emphasized that they are only one of the several tools that are used in consumer research. They were developed not so much to replace existing techniques, but to supplement them. Britt urges the use of the "double-barrelled technique."<sup>1</sup> This is a combination of quantitative and qualitative methods. Both are needed to get as complete a picture as possible to the 'why' of consumer behavior. Each research technique provides information that the other does not, and each serves as a cross-check on the other.

Marketing researchers who have been innovative enough to use these tools in consumer surveys have found them extremely useful, if not necessary, for some problems. The study of attitudes is one example. To obtain consumers' attitudes on almost anything is a delicate matter, especially if it involves personal or social connotations. Not many people like the idea of a stranger trying to pry into their thoughts. Yet there seems no other way of getting at them except by asking the respondents.<sup>2</sup>

There are two ways of obtaining this information.

---

<sup>1</sup>Steuart Britt, "Why It's Best to Use 'Combination' Research," Printers' Ink, Vol. 249, (October 1954), pp. 60-66.

<sup>2</sup>One could come to some conclusions about an individuals' attitudes towards a particular object by observing his behavior towards it. This means, however, that one would have to observe him for a considerable length of time which is impractical.

(1) By assuming that the interviewee will cooperate and ask him directly. But the investigator is never certain whether he has his full cooperation, for he may be outwardly cooperative, but in fact resorts to cliches or distorts the answers. (2) To approach the subject indirectly and to get him to reveal the attitudes unconsciously. Projective techniques have several characteristics which seem capable of achieving this aim. These instruments lie somewhere between the two extreme approaches. One finds the rigid, structured, standardized and conventional methods which are extremely limited in obtaining certain types of information from consumers, on one hand, and on the other there is the very informal, totally unstructured, open-ended, interviews, which reveal interesting information but much of which is irrelevant.

Projective techniques are by no means perfect instruments. There are still many problems that have to be overcome or at least minimized. More empirical work should be carried out in the area of test design to enable the investigator to develop and modify the tests so that they are satisfactory in eliciting the type of information that is related to the situation being studied. Another area that needs experimentation is in the objective scoring, analysing and interpretation of the responses. Yet it is difficult to set any rules

of thumb because no two situations are identical. Moreover, in dealing with consumer behavior we are concerned with a complex and dynamic phenomena. Weschler comments on the future and it is worth noting: "Indirect methods of attitude measurement have established themselves as useful and provocative tools, but their status and development depend upon the type of research which will stress methodology rather than originality, and scientific technique rather than ingenuity of design."<sup>3</sup>

---

<sup>3</sup>Irving R. Weschler, "Problems in the Use of Indirect Methods of Attitude Measurement," Public Opinion Quarterly, Vol. XV (1951), p. 122.



## BIBLIOGRAPHY

Books

- Allen, Robert M., Guide to Psychological Tests and Measurements, Miami: University of Miami Press, 1955.
- Anderson, Harold H. and Gladys Anderson (Ed.), An Introduction to Projective Techniques and other Devices for Understanding the Dynamics of Human Behavior, New York: Englewood Cliffs: Prentice Hall, Inc., 1951.
- Anastasi, Anne, Fields of Applied Psychology, New York: McGraw-Hill Book Company, Inc., 1964.
- Anastasi, Anne, Psychological Testing, New York: The Macmillan Company, 1954.
- Bell, John E., Projective Techniques, New York: Longmans, Green and Company, 1948.
- Britt, Steuart H., Consumer Behavior and the Behavioral Sciences, New York: John Wiley & Sons, Inc., 1967.
- Brower, D. and L.E. Abt, Progress in Clinical Psychology, Vol. I, Section 1, New York: Grune & Stratton, 1952.
- Crisp, Richard D., Marketing Research, New York: McGraw-Hill Book Company, Inc., 1957.
- Cronbach, L.J., Essentials of Psychological Testing, New York: Harper, 1949.
- Ferber, Robert and Hugh G. Wales, Motivation and Market Behavior, Homewood: Richard D. Irwin, Inc., 1958.
- Frederick, George J., Introduction to Motivation Research, New York: Business Course Publishers, 1957.
- Green, Paul E. and Donald S. Tull, Research for Marketing Decisions, Englewood Cliffs: Prentice Hall, Inc., 1966.

- Grossack, Martin, Understanding Consumer Behavior, Boston: The Christopher Publishing House, 1964.
- Henry, Harry, Motivation Research: Its Practices and Uses for Advertising, Marketing and other Business Purposes, New York: Frederick Ungar Publishing Company, 1958.
- Kerlinger, Fred N., Foundations of Behavioral Research, New York: Holt-Rinehart-Winston, 1966.
- Kleinmuntz, Benjamin, Personality Measurement: An Introduction, Homewood: Dorsey Press, 1967.
- Krech, David and Richard S. Crutchfield, Theory and Problems of Social Psychology, New York: McGraw-Hill Book Company, 1948.
- Leonhard, Dietz L., Consumer Research with Projective Techniques, Shenandoah, Iowa: Ajax Corporation, 1955.
- Lindsey, Gardner, Projective Techniques and Cross-Cultural Research, New York: Appleton-Century-Crofts, 1961.
- Lucas, Darrell B. and Steuart H. Britt, Advertising Psychology and Research, New York: McGraw-Hill Book Company, 1951.
- Lucas, Darrell B. and Steuart H. Britt, Measuring Advertising Effectiveness, New York: McGraw-Hill Book Company, 1963.
- Newcomb, Theodore M. and Ralph Turner and Philip E. Converse, Social Psychology - the Study of Human Interaction, New York: Holt-Rinehart-Winston, Inc., 1965.
- Newman, Joseph W., Motivation Research and Marketing Management, Boston: Harvard Business School, 1967.
- Schreier, Fred T., Modern Research: A Behavioral Science Approach, California: Wadsworth Publishing Co., 1963.
- Selitz, Claire, Marie Jahoda and Morton Deutsch and Stuart W. Cook, Research Methods in Social Relations, New York: Holt-Rinehart-Winston, Inc., 1964.

- Smith, George H., Motivation Research in Advertising and Marketing, New York: McGraw-Hill Book Company, 1954.
- Young, Kimball, Social Psychology, New York: Appleton-Century-Crofts, 1956.
- Zober, Martin, Marketing Management, New York: John Wiley & Sons, Inc., 1964
- Zubin, Joseph and Leonhard D. Eron and Florence Schumer, An Experimental Approach to Projective Techniques, New York: John Wiley & Sons, Inc., 1965.

### Periodicals

- Bachelder, Joseph E., "The Friendly Persuaders," Consumer Behavior and the Behavioral Sciences, (New York: John Wiley & Sons, Inc. 1967) p. 51.
- Bain, Robert, "An Attitude on Attitude Research," American Journal of Sociology, Vol. XXXIII (1928), pp. 940-957.
- Banks, Seymour, "The Relationships between Preference and Purchase of Brands," Journal of Marketing, XV, (1950), pp. 145-147.
- Beldo, Leslie A., "An Introduction to Attitude Research and Management Decisions," George L. Baker, Jr. (ed.), Proceedings: 44th National Conference of the American Marketing Association (Chicago: June 1961), pp. 583-594.
- Blankenship, Albert, "Psychological Difficulties in Measuring Consumer Preference," Journal of Marketing, VI (1942), pp. 66-75.
- Britt, Steuart H., "Four Hazards of Motivation Research," Steuart H. Britt (ed.), Consumer Behavior and the Behavioral Sciences, (New York: John Wiley & Sons, Inc. 1967) pp. 43-46.
- Britt, Steuart H., "Why Its Best to Use 'Combination Research'," Printers' Ink, Vol. 249 (October 1954) pp. 60-66.
- Brown
- Brown, J. F., "A Modification of the Rosenweig Picture Frustration Test to Study Hostile Inter-racial Attitudes," Journal of Psychology (1967) pp247-272.

- Brown, George H., "Measuring Consumer Attitudes Towards Products," Journal of Marketing XIV, (1950), pp. 691-698.
- Brown, Lyndon O., "Principal Psychological Techniques in Motivation Research," Robert Ferber and Hugh G. Wales (ed.), Motivation and Market Behavior, (Homewood; Richard D. Irwin, Inc. 1958), pp. 76-88.
- Campbell, Donald T., "A Typology of Tests, Projective and Otherwise," Journal of Consulting Psychology, XXI (1957), pp. 207-210.
- Campbell, Donald T., "The Indirect Assessment of Social Attitudes," Psychological Bulletin No. 47 (1950), pp. 15-38.
- Cattell, Raymond B., "Principles of Design in 'Projective' or Misperception Tests of Personality," Harold H. Anderson and Gladys L. Anderson (ed.), An Introduction to Projective Techniques, (New York: Prentice-Hall, Inc., 1951) Chapter II.
- Cattell, Raymond B., "Projection and the Design of Projective Tests of Personality," Character and Personality, XII, (1944), pp. 177-194.
- Cheskin, Louis and L.B. Ward, "Indirect Approach to Market Reaction," Harvard Business Review XXVI, (1948), pp. 572-580.
- Coblener, Godfrey, "On the Place of Projective Tests in Opinion and Attitude Surveys," International Journal of Opinion and Attitude Research, V, (1951-1952), pp. 480-490.
- Dichter, Ernest, "Scientifically Predicting and Understanding Human Behavior," Robert Ferber and Hugh G. Wales (ed.), Motivation and Market Behavior, Homewood: Richard D. Irwin, Inc., 1958, pp. 21-31.
- Engel, James F., "Motivation Research - Magic or Menace," Michigan Business Review XIII, (1961), pp. 28-32.
- Engel, James F. and Hugh G. Wales, "Spoken versus Pictured Questions on Taboo Topics," Journal of Advertising Research, II (1962), pp. 11-17

- Ferber, Robert, "Projective Techniques from an Analytical Point of View", Robert Ferber and Hugh G. Wales (ed.), Motivation and Market Behavior, Homewood: Richard D. Irwin, Inc., 1958, pp. 133-143.
- Frank, Lawrence K., "Projective Methods for the Study of Personality," Journal of Psychology, VIII (1939), pp. 389-413.
- Fromme, Allan, "On the Use of Certain Qualitative Methods of Attitude Research: A Study of Opinions on the Methods of Preventing War," Journal of Social Psychology, XIII (1941), pp. 429-459.
- Haire, Mason, "Projective Techniques in Marketing Research," Journal of Marketing, XIV (1950), pp. 649-656.
- Hammond, Kenneth R., "Measuring Attitudes by Error Choice: An Indirect Method," Journal of Abnormal and Social Psychology, Vol. 43 (1948), pp. 38-48.
- Korner, Anneliese F., "Theoretical Considerations Concerning the Scope and Limitations of Projective Techniques," Journal of Abnormal and Social Psychology, Vol. 45 (1950), pp. 619-627.
- Lambert, William W. and Wallace E. Lambert, "Attitudes," Steuart H. Britt (ed.), Consumer Behavior and the Behavioral Sciences, New York: John Wiley & Sons, Inc., 1967, p. 138.
- Lucas, Darrell B., "Can the Clinical Techniques be Validated?", Robert Ferber and Hugh G. Wales (ed.), Motivation and Market Behavior, Homewood: Richard D. Irwin, Inc., 1958, pp. 122-132.
- Maloney, John C., "Marketing Decisions and Attitude Research," George L. Baker (ed.), Proceedings: 44th National Conference of the American Marketing Association (Chicago: June 1961), pp. 595-618.
- Nelson, Erland, "Attitudes: Their Measurement," Journal of General Psychology, XXI (1939), pp. 417-436.
- Politz, Alfred, "Motivation Research - An Opportunity or Dilemma," Public Opinion Quarterly, Vol. 20, (1956-1957), pp. 663-673.
- Rosenweig, Saul, et.al, "Revised Scoring Manual for the Rosenweig Picture Frustration Study," Journal of Psychology, Vol. 24 (1947), pp. 165-208.

- Rothney, John W. and Robert Herman, "Development and Application of Projective Techniques", Review of Educational Research, Vol. 26 (1956), p. 66.
- Rothwell, N. D., "Motivation Research Revisited," Journal of Marketing, XX (1955), pp. 150-154.
- Sanford F. H., "The Use of a Projective Device in Attitude Surveying," Public Opinion Quarterly, XIV (1950-1951), pp. 697-709.
- Sargent, Helen, "Projective Methods: Their Origins, Theory and Application in Personality Research," Psychological Bulletin, No. 42 (1945), pp. 257-283.
- Stembler, Herbert, "New Techniques in Questioning," Public Opinion Quarterly, XV (1951), pp. 788-793.
- Tiongson, Corazon R., "Psychological Devices in Marketing Research," University of the East Business Review (August 1966), pp. 32-42.
- Vicary, James M., "Free Association Tests Can Help Advertisers," Printers' Ink (September 1948), pp. 44-50.
- Vicary, James M., "How Psychiatric Methods Can be Applied to Market Research," Printers' Ink (May 1955), pp. 38-48.
- Vicary, James M., "Word Association and Opinion Research," Public Opinion Quarterly, XII (1948).
- Weschler, Irving R., "Problems in the Use of Indirect Methods of Attitude Measurement," Public Opinion Quarterly, XV (1951), 133-138.
- Weschler, Irving R. and Raymond Bernberg, "Indirect Methods of Attitude Measurement," International Journal of Opinion and Attitude Research, XIV (1950), pp. 209-225.
- Wood, Albert J., "Word Association Test - Help in Product and Copy Research," Printers' Ink (October 1946), pp. 48-49.
- Yagod, Gerald and William Wolfson, "Examiner Influence on Projective Technique Response," Journal of Clinical Psychology, II (1964), p. 389.

Zober, Martin, "Some Projective Techniques Applied to Marketing," Journal of Marketing, XX (1956), pp. 262-268.

Unpublished Material

Engel, Frederick J., "A Study of Selected Projective Techniques in Marketing Research," Unpublished PhD. thesis, University of Michigan (1960).