PRE-TESTING ADVERTISEMENTS FOR EFFECTIVENESS OF COMMUNICATION.

by

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ABSTRACT

The purpose of this study was to examine a technique of Pre-Testing Advertisements for Effectiveness, and to seek to provide a Psychological basis for such Pre-Testing. The results of this study suggest a possible system for Pre-Testing the effectiveness of advertisements. The approach taken in this study was to test the effectiveness of communication of advertisements. Three advertisements were tested on a sample of a target audience, that sample consisting of 78 people taken from three market segments; census classifications A, B, and C1, whose ages ranged from 25 to 60. Respondents were given three tests: 1) Catalogue selection; 2) Focus of attention using an eye movement recorder test and; 3) completion of a questionnaire. Results showed significant differences between the effectiveness of the three experimental advertisements. Advertisements 1 and 2 failed to communicate the intended messages and were thus classified as ineffective. The 3rd advertisement was communicated effectively. Hence the system used, was shown to distinguish between advertisements.

It is the aim of this study to establish whether the consumer decoded advertising communication in the manner intended by the sender, and to provide a scientifically based advertising/communication Pre-Test system which could prove useful for Advertising, Research, and for Psychology.
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INTRODUCTION

The effectiveness of advertising depends on the extent to which it communicates its intended message. The intended message should be to the greatest possible degree, what the target audience perceives. This perception does not simply involve receiving and recognising the stimuli presented in the advertisement, rather those individuals who comprise the target audience will cognitively organise, interpret and categorise the informational content in the stimuli. The accurate perception of advertisements increases the likelihood of the target audience behaving in the direction desired by the advertiser, whether that be to increase the use of seat belts, buy consumer products or as in this study, to save with a financial institution.

"It is of course what the consumer actually interprets, not necessarily the intended message, that is the correlate of any attitude or behaviour change which may occur as a result of the advertisement". Levy (1986). This makes it all the more difficult to measure the effectiveness of advertising, as the communication received may be interpreted and even modified to fit differing environments, as a result of different motives, needs, attitudes or opinions.

In this era of consumer choice and new technology, "the core of the problem for advertisers is the difficulty in establishing whether the consumer decodes the communication in the manner intended by the sender". Levy (op.cit).

It is known that many advertisements are ineffective, whether because the communication is unclear, or if the message is clear, because it is re-interpreted by the receiver. Recent research in the U.S.A. Weinblatt (1984, 1987), suggests, that approximately 90% of all television, radio, magazine, newspaper and billboard advertisements, are either ignored or forgotten.
This ineffectiveness of advertising presents an opportunity for psychology to study the basis of advertising effectiveness.

A scientific framework is needed to measure that effectiveness, assuming that it is possible to measure it, and of course that valid and reliable measuring instruments be developed.

Two main schools of thought exist as to how advertising effectiveness may be evaluated. These two approaches have been identified by Majoro (1970) and are:

1. Advertising should be evaluated in terms of sales achievements,
   or

2. Advertising should aim to accomplish clearly defined communication objectives and therefore succeed, or fail, on how well it communicates the predetermined information or attitude change, to the specific target audience.

Very little support seems to be documented for the first of these approaches - evaluating advertising in terms of sales achievements. This approach is seen as being impractical, due to its dependency on product variables, including quality, price, availability and competition, and also the time lag between the advertising campaign and sales results.

The second main approach to evaluating advertisements listed by Majoro (op.cit) relates primarily to evaluating the extent to which an advertisement communicates its intended message. This approach to evaluating advertisements is supported by Britt (1969), Colley (1961) and West (1975).

In designing the scientific framework for the present study, the second approach to evaluating advertisements was adopted. The present experiment involves Pre-Testing advertisements to predict their effectiveness in order to establish how well they communicate the predetermined information to the specific target audience.
In addition the study explores, to the extent possible, a number of psychological processes, including recall and preference, which could be considered to be important mediating variables between the presentation of an advertisement and its perception among the target group.

According to Bettman (1986) "the focus of consumer psychology is on understanding and explaining the psychological factors that influence choice, purchase and usage behaviour".

This focus is also shared by Cohen and Chakravarti (1990), who maintain that research in consumer psychology "has forged links between underlying psychological processes and consumer behaviour".
Purpose of the Study:

The purpose of this study is to investigate the hypothesis; that a given advertisement can be Pre-Tested to predict the effectiveness of the Communication intended in the advertisement.

It is the assumption of this study that the extent of the intended communication within an advertisement is an important aspect of its overall effectiveness.

It is proposed to investigate this hypothesis by conducting an experiment to establish if a given Pre-Testing system can measure communication effectiveness in Advertisements.

New approaches and research in this area are required, "anything that can be done to develop a better understanding of what happens psychologically to an individual at the moment of confrontation with an advertisement, a sales message, or any other marketing communication, is significant for further development in more effective advertising than at present". Henderson-Britt (1978).

However, theories of advertising psychology, are often difficult to apply in practice in the current advertising environment as they:

1) may be affected/influenced by several external factors,
2) human beings are not a homogenous group,
3) the advertising environment may not be conducive to the application of the psychology of advertising/communication.

Because, the advertising environment has substantially changed in the last decade, new research is called for in order to establish, in present circumstances, if in fact, the intended communication is effectively transmitted and received through current advertisements.
This problem underlines the need to Pre-Test for the purpose of predicting the effectiveness of the advertisement when seen and/or heard under normal current advertising environment.

When considering advertising as a means of communication it is also suggested that greater emphasis needs to be placed on the gap between the message transmitted and the message actually received.

This gap appears occur because of the decoding by the receiver of the messages aimed at him or her. It is suggested that this decoding is what may account for differences between Perception of the message transmitted and the message received.

Because a difference in perception may exist between message sent and that decoded by the receiver, it is necessary to Pre-Test, using a sample of the target audience to establish the extent the message sent is received intact - if at all.

It is of course most important from a validity point of view, to Pre-Test under conditions which reflect or reproduce "real life", that is, actual or simulated viewing environment.

By testing/pre-testing the communications objectives of the advertisement it is suggested that it is possible to establish for some of the underlying psychological factors influencing advertising, for example cognitive and/or motivational aspects.

This approach could strengthen the role of psychology and the psychological analysis of advertising. It could also make advertising more effective and consequently provide a much more credible basis for pre-testing for effectiveness.

This approach could also eliminate some of the problems
associated with the lack of confidence in advertising, and it could give psychology a more useful role than it has at present in relation to advertising.

An advertisement should be designed to gain the attention and involvement of the target audience and to affect their existing pre-disposition in such a way that their intention may be altered in favour of the product being advertised.

Assuming that the message(s) is relevant to the target audience, (a working assumption of this study), an effective advertisement will be one which:

- captured attention
- was convincing
- communicated what was intended
- improved the image of the product/service advertised
- caused a change in attitude
- caused a behavioural intention to purchase.

To achieve the foregoing, qualifies an advertisement to be labelled "Effective".

The problem for an advertiser or agency is to predict whether the proposed advertisement will deliver the intended message(s) and be effective as per the above criteria.

In these circumstances it is suggested a Pre-Testing system which would accurately predict the effectiveness, would be a vital asset for advertisers in the present advertising environment.

Research from the U.S.A. proposes that diagnostic tools and measurements (e.g. eye movement recorder) as part of a pre-testing system, are useful in helping to understand why certain advertisements perform in a certain way. Weinblatt (1987). This study will evaluate this proposition.

Diagnostic power helps to enhance a system which accurately predicts the effectiveness of advertising/communication, and the psychological reaction to a
given advertisement, in a given situation, at a specific time, and in the reality of the advertising environment obtaining.

Criterion measurements are generally regarded as useful in establishing or predicting "real world" behaviour. Consequently, it is important to establish evaluative measurements and procedures to find out whether or not the advertisements succeeded in reaching their intended goals.

It is also possible that confusing criterion measurements and diagnostic tools could lead to serious judgment errors. This suggests the need for improved criterion measurement and methodologies, as well as the need to avoid the misuse of diagnostic measurements.

It is suggested by Weinblatt (1984, 1987) that a hybrid system incorporating criterion measurements and methodologies, and relevant diagnostic instruments is, likely to be an effective system. This study evaluates the system described by Weinblatt as a method of measuring communication effectiveness.

It is true that there have been some developments in the area of research for the testing of the effectiveness of advertising. Claims and counter claims are made as to the benefits or otherwise of Pre-Testing. Some confusion exists concerning the worth or "effectiveness" of these systems. (See chapter 2 - review of literature).

Psychologically based research seems necessary to clarify the developing situation or at least to establish certain guidelines for this aspect of advertising.

Rationale for this Study:

This study is presented as a start in what is practically a new and more specific field of research with a strong psychological base.

This study presents the view:

That a given advertisement can be Pre-Tested to predict the effectiveness of the Communication intended in the
advertisement. It is proposed to investigate the hypothesis by conducting an experiment to establish if a given Pre-Testing system can measure effectiveness in advertisements.

Corkindale and Kennedy (1978) agree with this pre-testing approach, "We strongly urge the use of Pre-Testing to check that the communication intended is the one being perceived by the target audience".

They maintain "the principal purpose of Pre-Testing is to check whether or not the communications objective of a particular advertisement have been achieved. In practice, the most common use of Pre-Testing is to screen out negative reactions to an advertisement". They conclude by saying "a positive use of Pre-Testing will provide the company with more constructive information. For Pre-Testing to be fully used it is vital that the company knows what the advertisement is intended to achieve; specific objectives provide this".

Outline of the Study:

The study was conducted as per the following outline.
1) Review of literature - (A) Research relating to psychological aspects of Advertising. (B) Research relating to testing systems and techniques in Advertising.
2) Selection of an experimental Pre-Testing System.
3) Design and methodology of selected Pre-Testing system.
4) Analyse and interpret results.
5) Discuss findings.
6) Draw conclusions and suggest continuing research within this aspect of Psychology.

1) Review of Literature: (see chapter 2)

In chapter 2, Literature relating to (A) the research dealing with the psychological basis employed in the development of advertisements is reviewed. This review has been divided into two broad headings/approaches, one
cognitive/perceptual approaches and two motivational, behavioural and affective factors.

(B) The literature regarding research relating to testing systems and techniques for testing the effectiveness of advertisements is very sparse.

2. **Selection of an experimental System** (see chapter 3)

Access to research the specific Pre-Testing system was afforded by an Irish Company, involved in measuring the effectiveness in advertising.

This company is an internationally based market research company, which holds the franchise for Ireland for this patented Pre-Testing system. Weinblatt (1984).

The parent company "Pre-Testing Inc." was developed by a psychologist/sociologist Lee Weinblatt in the U.S.A.

The literature indicates that the formation of the company results from fifteen years experience in the area of Pre-Testing advertisements using all forms of Pre-Testing methodology.

3) **Design and Methodology of the Pre-Testing system**

(A) Experimental Advertisements (See chapter 3)

The experimental advertisements chosen were those of a Financial Institution (name withheld on request). The aim was to evaluate the communicative effectiveness of these (three) experimental advertisements for savings on behalf of the Institution by determining if:

- The experimental advertisement captured the attention of the respondents.
- Communicated the intended product messages of the experimental advertisement.
- Generated a change in intention to purchase the experimental product.
(B) Sample of the target audience: (see chapter 3)

The target audience for this study consisted of 78 people selected from three market segments: census classification A, B and C1 - known as the experimental group. The target audience was also distributed under various age groups.

Each of the respondents went through a screening process. They were each asked certain questions to ensure that they met the criteria of the "Specific Target Audience" corresponding to the advertisement being tested.

(C) The Pre-Testing System: (see chapter 3)

There were three instruments used in this Pre-Testing System.

(A) Catalogue Selection; The purpose of this Catalogue Selection test is to measure the extent of respondents' perception of one brand versus another before and after the viewing of the advertisements within the experiment.

(B) Eye Movement Recorder; It is the purpose of the Eye Movement Recorder test to: 1) Expose respondents to the test advertisement and other control advertisements, for a certain length of time. 2) To measure and record the length of time the respondent's eye focused on individual components of the experimental and control advertisements.

(C) Questionnaire; The core questionnaire was designed and developed by "Pre-Testing Inc."

Incorporated into this core questionnaire were aspects of the product attributes, as indicated by the Financial Institution used in the experiment.

The questionnaire lists a series of questions in relation to the test advertisements: 1) Respondent's recall of the experimental advertisements. 2) Respondent's behavioural intention - arising from exposure to the experimental advertisements. 3) Respondent's preference and commitment to the experimental advertisements.
4. Results Analysis : (see chapter 4)

The data for test 1 - the Catalogue Selection Test - was collected and presented in table form. The data for test 2 - the Eye Movement Recorder system - was processed using a software programme called "Genstat", from which various analysis such as an analysis of variance and a Duncan's multiple range test was administered. The raw data from test 3 - the Questionnaire - was analysed using a software programme called "SAS". This analysis included: Anova tests, Chi Squares and Percentage Tables.

5. Findings : (see chapter 5)

The findings are discussed in some detail as set out in chapter 5.

6. Conclusion/Future Research : (see chapter 5)

In chapter 5 the conclusion drawn and suggestions made for future research are recorded.
CHAPTER 2

Review of Literature

"The focus of consumer psychology is on understanding and explaining the psychological factors that influence choice, purchase and usage behaviour". Bettman (1986).

The literature is reviewed in two sections: (2.1.0) The Psychological process in Advertising, and (2.2.0) Testing systems and techniques in Advertising.

Section 2.1.0

The literature review in this section relates to the psychological aspects which form the basis for advertising as part of the process in influencing choice, purchase and usage behaviour.

There are pervasive differences in how consumer researchers structure problems/information within this domain, however, this research is structured on the lines of the orientation taken by Cohen and Chakravarti (1990).

This section of the review (2.1.0) will be taken under the broad headings/approaches:

(2.1.1) Cognitive and (2.1.2) Perceptual approaches.
(2.1.3) Motivational and Behavioural and Affective approaches.

(2.1.1) Cognitive / Perceptual approaches

This research stresses how perception, knowledge, memory and related information - processing differences influence decision, choice, and responses, to marketing or advertising stimuli.

Within the field of Cognitive Psychology, which is referred to by Sampson (1981) as "that broad and diverse range to psychological approaches which emphasise the structures and processes within the individuals mind, that are said to play the major role in behaviour", recent research has indicated
that consumers have limited attentional capacity, and often require knowledge via processes needing minimal effort or conscious control. It is also suggested that consumers encode information selectively, so that mental representation may not always coincide with that of the given stimuli (or advertisement). Cohen and Chakravarti (1990).

The Effect of Prior Knowledge to Advertising Stimuli:

One recurring issue in understanding consumer behaviour or consumer psychology is, how to account for the role of prior knowledge. Consumers often are provided with a good deal of information via advertising, the package, brochure, and so on. In addition, consumers may have had prior experience with a product, hence prior knowledge is usually available. In many areas of consumer research, understanding how much knowledge affects and is affected by ongoing processing is a major concern. Bettman (1986).

Cohen and Chakravarti (1990) maintain "search and choice are guided by prior knowledge and are realizations of adaptive and contingent information - processing" and that it is "now well established that prior knowledge moderates selective exposure, attention and interpretation". Brucks (1985) found that prior knowledge improved external search efficiency, allowing quicker identification or elimination of inappropriate alternatives.

Empirical results show decreased search for external knowledge, that is, information available from sources outside of the consumer, with increases in prior knowledge, Kiel and Layton (1981), Biehal (1983), Punj and Staelin (1983).

Reilly and Conover (1983) report a meta-analysis of seven previous studies which shows a high degree of support for a negative relationship between familiarity with a product category and the amount of external search. While these results fairly consistent, several authors have noted that their
explanation is not as simple as it might appear.

Johnson and Russo (1981, 1984) Srull (1983b) also state that individuals with greater prior knowledge should have greater ability to process current information, Brucks (1985) supports this view and maintains that because of prior knowledge, individuals might require more information in some circumstances. However, it should be said that the individual may have less need for such information and may therefore be less motivated to process it.

Consumer psychologists have noted also that organised knowledge structures such as schemas, scripts or categories play important roles in perception. Bettman (1986). While there have been a reasonable number of conceptual discussions, empirical work has been limited to attempts to measure scripts, schemas and categories in consumer settings and to examine how they may affect memory.

Alba and Hutchinson (1987) maintain a more general associative structure such as memory schemata, help consumers assimilate, integrate, and retrieve information., and may trigger affective, and evaluative reactions toward stimuli based on schemata - consistency dynamics.

However, Alba and Hasher (1983) note that there are problems in attempting to apply the notion of organised prior knowledge structures. They argue that there is not just one schema theory, and that memory for events is often more detailed than schema theories could predict. Thus, they maintain, one cannot assume that prior expectations over-ride processing of the details of current experience. Bettman (1986) also maintains that schema and script notions applied in consumer psychology have tended to be fairly loosely specified stating that "what is needed is more empirical work with carefully specified versions of these theories".
The Effect of Memory to Advertising Stimuli:

"Research on memory has become a strong focus in recent consumer research, reflecting the realization that prior knowledge plays a major role in consumer behaviour. Hence, memory has major interactions with many other components of choice processes such as perception, information acquisition and decision processes". Bettman (1986).

Prior knowledge and experience have been found to have strong effects on consumer memory.

Johnson and Russo (1984) provide a framework for understanding the effects of prior knowledge on memory. They outline three skills that should develop with knowledge: superior knowledge of existing products, greater ability to encode new information and greater ability to select relevant information. They continue to say that the impact of prior knowledge on memory will depend on the relative importance of these three skills.

However, it can be argued that while greater ability to encode will tend to increase memory - superior knowledge of existing products and greater ability to be selective may actually lead to fewer items of information recalled, if new information is presented. Bettman (1986).

Cohen and Chakravarti (1990) state that although prior knowledge is available in memory, it must be perceived as relevant and be accessible in order to be used in a given judgement or choice. They continue: "consumers transform knowledge by abstracting and elaborating existing information and generating inferences".

The relative influence of recalled attributes versus prior evaluations in memory - based judgments has received attention.
Lichtenstein and Srull (1985) found that mental representation of overall evaluations influenced memory-based judgments independent of the attribute information on which they were based. Kardes (1986) maintain initial stimulus-based judgments influenced subsequent memory-based judgments over and above attribute information in memory.

The Effect of Memory and Consumer Choice to Advertising Stimuli:

One of the major developments in research on consumer decision processes is the realization that memory and decision processes interact. According to Lynch and Srull (1982) earlier work on consumer decision making had implicitly assumed that all the information needed to implement various decision rules was available, either externally or in memory. The purest case of this assumption is stimulus-based choice, where all of the information is available in a display of the alternatives.

However, if choices are made based only on information in memory, then information may be incomplete, inferences may be made about missing information and the information available for choice may also be a function of salience and other factors that influence memory. They conclude that memory-based choices are much more dependent upon retrieval cues in the choice environment.

As an alternative, Bettman (1979) and Hayes-Roth (1982), maintain most consumer choices are probably a mixture of memory- and stimulus-based processes, where some data are available in the choice environment and some are in memory. This mix of memory- and stimulus-based processes within consumer choice, is probably enhanced when choice strategies are constructed on the spot. The researchers conclude, that if the decision process is being built at the time of choice, some influence will exist. There will tend to be some information missing, some prior knowledge brought to bear, and some interactions between memory
and the stimulus information.

Studies which have examined the interaction between memory and choice have found effects of memory on choices and of choices on subsequent memory traces.

Biehal and Chakravarti (1982) placed subjects in conditions where they either learned information and then made choices, or made choices and then were asked to recall the information. Subjects who learned the information first tended to organise that information in memory by brand, and showed greater tendency to process information by brand when they made choices – than subjects who made choices first. On the other hand, the subject who made choices first, processed more by attribute and showed much greater attribute organization in memory than subjects who learned information first. Johnson and Russo (1981) found that the choice – first subjects also showed much better recall for the chosen brand than rejected brand.

Johnson and Russo (1981,1984) studied the effects of the type of decision task, judgement or choice on memory. Work in behavioural decision theory has emphasised that judgement and choice are not equivalent (Einhorn and Hogarth 1981). In a judgement task the subject is asked to make an overall evaluation of each alternative. In a choice task, the subject is asked to choose the alternative they most prefer. A judgement task encourages the subject to examine all of the information on an alternative, whereas a choice task allows the subject to be much more selective (e.g. some alternatives may be virtually ignored if they have a bad value on one attribute). Johnson and Russo show that prior knowledge is positively related to memory for information about alternatives for a judgement task, but that the subjects with the greatest prior knowledge show decreased memory for information about current alternatives in the choice task.
It can be seen from the foregoing that memory and choice show interactions in both directions. What is in memory can influence future choice processes, and current choice processes can affect subsequent memory.

The Effect of Recall and Recognition of Text:

There have been several studies carried out on the relationship between recall and recognition of text.

However, this review concentrates on studies and experiments which have investigated the effect of encoding processes and the recall of text, and discusses an experiment that people expecting recall and recognition employ different encoding processes.

Two experiments by Walker et al (1983) investigated the proposition that the amount of cognitive effort expended to encode information will be directly related to recall of that information.

While previous research has shown that amount of processing may affect recall, these studies have generally drawn on the notion of an elaborated memory representation to explain their results.

Although the original formulation of the levels-of-processing framework (Craik and Lockhart, 1972) has been the subject of considerable criticism (Braddeley, 1978; Nelson, 1977), revised versions of the model have been proposed that attribute differences in recall to various encoding activities. These versions can generally be divided into two groups. The elaboration model, proposed by Anderson and his colleagues (Anderson and Reder, 1979), claim that deeper processing at encoding results in the creation of a set of multiple propositions that facilitate recall of the information. The distinctiveness theory, advanced by Jacoby (Jacoby, Craik and Begg, 1979), predicts that deeper processing at encoding results in a more distinct memory representation that has a
greater probability of being recalled at time of retrieval. Walker et al (1983) outline both of these models (which will not be discussed in detail) and the results of the two experiments report the adequacy of the models to account for differences in the retention of prose.

In the study by Walker et al (1983), the amount of processing required to correctly interpret anaphoric relations was varied while the elaboration of the memory trace was held constant. These experiments employed a self-paced reading paradigm in which subjects read a series of short paragraphs and later were cued to recall the final sentence of each paragraph. It was found that recall was significantly improved when more processing was required to correctly interpret the anaphoric relationship expressed in the final sentence. These findings suggest that encoding processes can affect recall performance without elaboration of the memory representation.

Due note must be taken of the possibility for getting somewhat biased (unreal) answers, due to the interviewee being aware of the test procedure. It is interesting in this case to note the hypothesis tested by Schmidt (1983) that people expecting recall and recognition employ different encoding processes, this was tested in two experiments using prose materials.

In experiment 1, unrelated sentences were used, and in experiment 2, a short essay was used. The results indicated that a recall test expectancy led to greater sentence recall than a recognition test expectancy. No evidence was found to support the hypothesis that people expecting recall and recognition retained different types of information contained in sentences. In experiment 2, the effects of test expectancy were analysed as a function of the structural importance and rated comprehensibility of sentences. A main effect of test expectancy was found in sentence recall, replicating the
results of experiment 1. Also, people expecting recall tended to remember greater detail than did people expecting recognition. The results suggested that encoding processes vary as a function of test expectancy and that the appropriateness of encoding depends on the type of test received.

Transmitter and Receiver Effects of Communication:

In this field of consumer psychology there is an underlying question as to the extent of differences between message sent (transmitter) and message received and the consequences for the advertiser arising from these differences.

In their extensive research/study, Guerin and Innes (1989) referring to "cognitive tuning sets: anticipating the consequences of communication", compare the differences between message transmitted and the transmitter with the message received by the receiver. They set out to investigate the "prediction" that "transmitters would recognise differently to receivers." Guerin and Innes reviewed previous studies which had explicitly tested the idea of cognitive tuning sets.

According to Zajonc's (1960) terms there are a number of cognitive structures activated when transmitting and receiving. Zajonc suggested that if receivers expected to listen to someone present material against their own beliefs, then they would increase the unity of their cognitive organisation so as to resist persuasion.

Cohen (1961) presented transmitters and receivers with personality profiles that contained either high or low contradictory information. He found that this made no difference to the receivers, who were not trying to unify the material, but it did make a difference to transmitters. Transmitters produced less balanced summaries than receivers—that is, they polarized more. Cohen suggested that the receivers suspended judgement and held contradictory
information, whereas transmitters polarised their judgments and had less contradictory information in their impressions. There was also evidence that receivers wanted more additional information than transmitters.

Research by Brock and Fromkin (1968) confirmed the predictions that transmitter sets lead to a polarisation of opinions and impressions toward whatever was being transmitted and secondly that transmitters would want to listen to more supportive information than receivers but the transmitters tended to polarise their summaries towards the favourable or unfavourable impressions given.

Perhaps one of the strongest supporting evidence for the need for more extensive research into the gap between transmitter and receiver comes from a study by Harkins, Harvey, Keithly and Rich (1977).

Their study emphasis that "the difference between transmitter and receiver is that transmitters encode the material differently". They go on to state that if transmitters know they have to transmit the material, then they store it differently. If subjects store the information and only afterwards find that they have to repeat it, then the effect does not occur.

Further Harkins et al (1977) suggested that the transmitters watched harder and remembered better.

Several experiments are recorded by researchers, Hennigan, Cook and Gruder (1982) were interested in persistence of attitude change. They found that, transmitters and receivers believed the message initially and that the effect persisted for receivers but not for transmitters, and that thinking about the issue presented tended to polarise views.

Studies conducted by Higgans, McCann and Fondacaro (1982) indicated that receivers could be viewed as being there to evaluate the transmitters, albeit in an unclear fashion.
The "cluttering" problem (a number of advertisements shown together at a given break in television, in a paper etc.) for the advertiser and the psychologist is compounded by resistance to incorporate further information. A cognitive explanation suggests that subjects do not have the capacity to process and reprocess more material.

It is emphasised that motivational aspects underlie even the cognitive aspects (there will be more on this topic in a later section). Still many questions remain unanswered, e.g. why do transmitters produce more proarguments. Some suggestions are offered that it is some form of evaluation apprehension which drives the increased cognitive production of arguments and the effort towards unifying the material of the transmitter. Conversely the receivers do not have the same consequences to drive their cognitive processing of material.

It is suggested that receivers try to keep all of the information in mind and so, do not from a unified impression. The view is suggested that subjects can be motivated by the goals they perceive and process the material differently.

The key feature, it is suggested in these studies, is that it is ultimately the consequence of the communicative which determine the cognitive tuning effects.

The implications form these studies is that it has been shown that having to communicate information leads to several biases. An aspect worth recording is the statement by Freud that "it may help me not to forget to bear the reader in mind as I enter more deeply into my subject".

It is suggested that the extent of the need to consider the receiver's attitudes, background, environment and so on, should be further investigated if real progress is to be made by psychologists and advertisers in the field of effective communication. This view is supported by the previous mentioned researchers, and it is emphasised that focusing on the
anticipated consequences of communication overcomes many problems.

It is further suggested that future research should be looking at the consequences of communication which determine the way material is processed and delivered.

This supports the view that cognitive tuning can be beneficial in the study of communication and help towards a full psychological account of the process involved in communication.

It is suggested that as a result more research is needed in the area of testing the effectiveness of communication using proven systems of Pre-Testing.

2.1.2 Perceptual Approaches:

There have been numerous investigations into various models, theories and concepts underlying the relationship and importance of perception and consumer psychology in advertising.

However, in this study it is purposed to concentrate on research carried out on the following perceptual topics and the effect they have, on the psychological basis for advertising:

1) Global precedence in Attention and Decision.
2) Attention Switching between Perception and Memory.
3) The effect of exposure to advertisements.

1) Global Precedence in Attention and Decision:

Under the general heading of visual perception various theories have been investigated. The aspect of global precedence has been investigated under different components.

Woodworth (1954) noted the question "of whether the elements of a figure get together and build up a whole, or whether the whole figure emerges and organises the available elements".

Experimental psychology investigates the theory of whether processing of the overall structure precedes and
Miller (1981) investigates/reexamines recent experiments by Hoffman (1980), Kinchla and Wolfe (1979), Martin (1979) and Navon (1977), that support global precedence. Some results from these experiments do not support previous findings and show little support for global precedence in perception. However, it is stressed that the asymmetry between local and global information reported by Navon (1977) probably results from difficulty in suppressing information from the level that has more power to evoke a response.

It is suggested that the decision process is somehow combining information from the two levels of global target and local targets. Miller (1981). It is also suggested that a mechanism might exist to have information coming in almost twice as fast on trials with targets at both levels as on trials with targets at one level only, and so its decisions could be made much faster. A model was tested to show that both sources of information feed into a single decision maker at approximately the same time, though information from the global level could start slightly sooner or build up somewhat more rapidly than information from the local level. These researchers devised a strict separation between the two processes from both levels.

An analysis of results of experiments makes the perceptual global precedence hypothesis completely unattainable.

It is contended that attention processes, not visual information extraction processes, control the speed of response to different levels of structure within a form.
It is suggested that there is a difference in the ease with which attention can be directed to one level at the exclusion of the other. It is proposed that it is possible, within limits, to affect attention precedence, e.g. local "letters" would not influence responses to local letters. By virtue of its greater strength, the global channel activates decisions faster than the local channel. The finding that global precedence is observed over a wide range of absolute sizes (Kinchla and Wolfe, 1979) seems more consistent with an attentional than a perceptual effect.

It is suggested that a simple decision process can receive information from both levels at once.

It is admitted that there is an inherent difficulty in attributing effects of experimental variables to perceptual processes, as opposed to decision and to attentional processes.

Navon (1981) asks the question "Do Attention and Decision follow Perception" and comments on Miller’s (1981) view on global precedence.

The assumption underlying Miller’s belief that attentional global precedence and perceptual global precedence are two independent theoretical alternatives has been tested by Navon (1981).

The view of human information processing implied by Miller’s argument seems to be that visual perception transforms the retinal image into a more interval image space or representation, at which attention processes might selectively gaze, and on which decision processes operate. This according to Navon seems to represent prejudgment of some of the most difficult issues of psychology.

The interesting question as to how reasonable it is to regard decision or attention as distinct stages of processing is debated. It is further asked if interpreting sensory data is not part of perception, what is perception.
Attention is stated to be one of the most vague and equivocal concepts in psychology. It is stated that if "whatever transforms its potential perceptual effect into an actual one is called attention, then attention is part-and-parcel of perception". Navon (1977).

However, if it is hypothesised that visual schemata are addressed mainly by their global features. It would appear from the literature that there is not convincing evidence in favour of global precedence.

2) Attention Switching between Perception and Memory :

Weber, Burt and Noll (1986), conducted two experiments to explore the switching of attention between perception and memory.

In experiment 1, methodology and procedures were developed. It was demonstrated that attention switching is a time-consuming process. The results are consistent, therefore, with those of previous experiments in which time-consuming attention switches were demonstrated (Jersild, 1927; Treisman, 1960 and Weber et al, 1982). In experiment 2, item and control-process representation involved in attention switching was explored.

The results are consistent with capacity theories of attention which would predict that items stored share limited attentional capacity with control processes (e.g. Kahneman, 1973).

According to Kahneman's (1973) capacity theory, an allocation policy determines how much of one's available attentional capacity is directed to various activities involved in tasks. If the supply of attention does not meet task demands, the level of performance declines.

The results from the present investigation suggest that excessive capacity demands can also affect the processes which control the allocation tasks.
In summary, the results of this investigation carried out by Weber et al (1986) suggest that it takes time to switch or reallocate attention between perceptual and memorial inputs. The fact that switching time and errors increased as a function of list length suggests that the subroutines cannot be accessed quickly and efficiently when attentional capacity has reached its threshold.

Item load appears to affect control processes that set allocation policies as well as one’s ability to perform memory and/or perceptual tasks.

3) The Effect of exposure to Advertisements:

In an early article by Berg (1963) an enquiry into the effects of exposure to advertisements on subsequent perception of similar advertisements was carried out.

Berg’s study tests the hypothesis that forced exposure to advertising lowers the threshold for perceiving the advertisement.

The study demonstrated that forced exposure does increase perceptivity. This supporting the view that focus group type (group in depth interviews) of pre-testing - which operates forced exposure, is open to error due to viewing under forced exposure which does not simulate the natural viewing environment.

Questions persist regarding the effects of exposure. It is, for example, one matter to say that 800,000 readers have seen a particular issue of a magazine, and an entirely different matter to contend that through their exposure they have absorbed the desired message. Berg (1963).

It has been suggested that much advertising material is learning according to principles that hold for the memorisation of meaningless nonsense material. Krugman (1965).

Krugman’s (1965) contention is that much of advertising material is learned on a very low level of interest.
A key issue remains the question of the effects of continued exposure. Shall it be assumed, for instance, that continued exposure results in increased awareness?

However, in Berg’s (1963) study he tries to investigate this problem/question. A classic definition of "Attitude" holds this term to refer to "a tendency to respond to certain stimuli in a particular manner". Trasler (1962). The present study demonstrates that forced exposure to stimuli (familiarity) lowers the perceptual limen. This is one measure of attitude change, and it gains significance here because of the use of actual advertising materials, rather than less complex stimuli. Berg (1963).

As in all studies of attitude (which will be discussed in detail in the next section), the meaning of this particular form of attitudinal determination for other dimensions of behaviour remains at issue.

From this and similar investigations it may be assumed, for example, that the advertiser can increase "product awareness" through repetition. But the relationship between such increased perceptivity of the advertiser’s message and action upon it (buying) is a continuing question. Berg (1963).

This very summary above supports the view taken in this study is necessary to Pre-Test advertisements and hence, the interest in the hypothesis being investigated in this current study/experiment.
2.1.3 Motivational, Behavioural and Affective Approaches

This second orientation focuses on motivational and predispositional factors, for example, individual differences in values, personality, attitudes, involvement and cognitive-affective states. It is suggested that this section of the review will provide an insight into the "Why" of consumer behaviour.

The field of judgement and choice processes in consumer psychology has traditionally emphasised the formal and logical operations involved in consumer decision-making.

However, cognitive/perceptual studies of how consumers construct situations and frame problems (e.g. categorisation, availability and so on) sometimes overlook noncognitive factors that also help form the perceived reality that influences consumer decisions. For example, motivational explanations (e.g. personality or attitude) may not be invoked when cognitive explanations (e.g. easier retrieval of favorable outcomes) can be made to suffice. Research should address, according to Etzioni (1988) noncognitive personal and social factors that colour decisions or external pressures that constrain the options considered.

Levy (1969) maintains "the goods people buy are seen to have personal and social meanings in addition to their functions. Modern goods are recognised as psychological things, as symbolic of personal attributes, and goals, as symbolic of social patterns and strivings. In this sense, all commercial objects have a symbolic character, and making a purchase involves making an assessment, implicit or explicit, of this symbolism to decide whether or not it fits. Energy (or money) will be given when the symbols are appropriate ones and denied or given parsimoniously when they are not".

Consumers express their individual difference in the wide variety of products they buy. The question is whether people
with all their differences can be categorised into homogeneous groups.

**Personality:**

The study of personality is to attempt to make organised sense out of the complexities of human behaviour. Despite the familiarity with the term there are several definitions of it. Williams (1982).

"Personality is the dynamic organisation within the individual of those psychophysical systems that determine his characteristic behaviour and thought". Allport (1967).

"Personality is the system of individual attitudes, behaviours and values that an individual exhibits and that set him or her apart from others". Williams (1982).

"Personality represents the configuration of individual characteristics and ways of behaving which determines an individual's unique adjustment to his environment. Hilgard (1967).

**The Self Concept:**

The self concept is a narrower approach to the study of behaviour than the concept of personality. Each of us has a self-concept. We see ourselves as having certain abilities and attributes that we value or deplore. We manifest with pride those attributes we value, and often deny, or disguise, those characteristics for which we have low regard. The self-concept includes individuals' attitudes, feelings, perceptions and valuations of themselves as persons. Attitudes toward the self, like all attitudes, are learned. They emerge through experience with the environment and through interactions with other people. Runyon (1987).

Hayatawa (1963) contends that: "The basic purpose of all human activity is the perception, the maintenance, and the enhancement not of the self, but the self-concept, or symbolic self".
The cars we drive, the homes we live in, the way we dress and the products we use, convey something about ourselves to the people with whom we interact. Grubb and Grathwohl (1967) have suggested that a "meaningful way of understanding the role of goods as social tools is to regard them as symbols serving as a means of communication between an individual and his significant references". They also developed a qualitative model to clarify the relationship between self-theory and the use of goods as symbols by consumers.

This model is logically derived through the following seven steps:

1) An individual does have a self-concept of himself.
2) The self-concept is of value to him.
3) Because this self-concept is of value to him, an individual's behaviour will be directed toward the development and enhancement of his self-concept.
4) An individual self-concept is formed through the interaction process with parents, peers, teachers and significant others.
5) Goods serve as social symbols and therefore, are communication devices for the individual.
6) The use of these goods or symbols communicates meaning to the individual himself and to others, causing an impact on the interaction and/or the interaction process and, therefore and effect on the individual self-concept.
7) Therefore, the consuming behaviour of an individual will be directed towards the furthering and enhancing of his self-concept through the consumption of goods as symbols.

This model attempts to provide a theoretical base for understanding some aspects of personality and the self-concept in consumer behaviour. It is not argued that consumers self-
concept determine all consumer behaviour. It is only argued that the self-concept among other variables plays a part in influencing consumption patterns. Grubb et al (1967).

Attitudes

"Modern advertising has to learn to combine personal attitudes toward life with the material things embodying them. When we buy a new car, we also buy confidence in the future. Possessions are tangible expressions of our attitude toward life. It is important to understand what objects mean to us before we can market them or communicate about them". Dichter (1964).

An attitude is generally understood to refer to a predisposition to respond in a consistent manner to a stimulus, i.e. a tendency to act or behave in some predictable way. Attitudes are usually represented as being positive or negative, favorable or unfavorable to an object, idea or other entity. Foxall (1980). Bauer (1966) believes an attitude is viewed as an intervening variable posited to account for differences in response among individuals. "Attitudes are learned or acquired rather than inborn in the individual; they are established as a result of the person’s experimental and observation behaviour".

Attitude and Behavioural intention models

The most influential conceptualisation for more than the past decade has undoubtedly been Fishbein and Ajzen’s (1975) Theory of Reasoned Action. However, several challenges to their model have appeared.

Fishbein and Ajzen (1975, Ajzen and Fishbein 1980) claim that all effects on behavioural intentions are mediated by attitude toward the behaviour (Ab) and subjective norm (SN), and that all effects on behaviour are mediated by intentions. Hence, if one can show direct effects of some factor on behavioural intentions or behaviour, that result is
inconsistent with Fishbein and Ajzen’s theory.

Bentler and Speckart (1981) reported that prior behaviours affect intentions and present behaviour, and that attitude directly affects behaviour as well as having indirect affect through intentions. Bagozzi (1981, 1982) argues that Bentler and Speckart’s results are suspect because they used a self-report of behaviour and because the domains used (alcohol, marijuana, and hard drugs for example) may not be totally under volitional control. Bagozzi, using data on blood donation, found that attitudes influence behaviour only through intentions. However, past behaviour influenced current behaviour directly, and in the 1982 paper, expectancy-value judgments influenced intentions directly as well as indirectly through attitude.

Saltzer (1981) found the individual difference variables (weight, locus of control and value placed on health and appearance) influenced the strength of the relationship between behavioural intentions and behaviour for the domain of weight loss. However, it is not clear that weight loss is totally subject to volitional control. Fredricks and Dossett (1983) reported for class attendance data that prior behaviour directly affected intention and present behaviour, but that attitude affected behaviour only through intention.

Bettman (1986) maintains that these results do not provide a simple picture. The weight of evidence appears to be that attitude generally affects behaviour indirectly through intentions, in accord with Fishbein and Ajzen. However, there appears to be systematic direct affects of past behavior on intentions and/or current behaviour which are not consistent with the Fishbein and Ajzen approach. Bettman also states that a second area subject to some controversy pertains to the normative component of the Fishbein and Ajzen model.
Miniard and Cohen (1981) argue that the normative and attitudinal components are not clearly separated in the Fishbein-Ajzen approach and that some forms of influence could appear in both the attitudinal and normative components, thus leading to double counting in the model. Manipulations of variables intended to affect one component also affected the other in their study, so they conclude that the normative and attitudinal components have conceptual difficulties. Fishbein and Ajzen (1981) argue strongly the Miniard and Cohen results do not support such conclusions. Miniard and Cohen (1983) develop and test a model which attempts to divide the salient consequences at a particular point in time into normative and personal consequences. Manipulations generally affect their measures for these components in the proper way. However, they noted that separating the normative and personal components is likely to be very difficult.

Other researchers have also examined the normative and attitudinal components. Ryan (1982) finds complex interrelationships among normative and attitudinal measures. Burnkrant and Page (1982) find that normative and attitudinal components are correlated.

It can be seen from the foregoing results that there is a great deal of disagreement over the conceptualisation of the normative component, its measurement, and its relationship with the attitudinal component. It appears that achieving separability of the two components is unlikely. However, better theorising about the relationship between the two components under various conditions would be extremely valuable.

A third challenge to Fishbein and Ajzen concerns the conceptualisation and measurement of behavioural intentions. Warshaw et al (1986) extend the Fishbein and Ajzen conceptualisation to include other aspects of intentions. In particular, a model for the determination of intention when
choosing among several alternative behaviours was proposed. This model was further expanded to include intentions to pursue goals (outcomes not completely under volitional control), and distinguish the concepts of behavioural intention and behavioural prediction.

Other researchers have examined issues concerning the measurement of intentions. Warshaw (1980a,b) proposed that behavioural intention could be best predicted by measuring intentions, given certain contexts and the probabilities of those contexts, and then summing the corresponding products of intentions given contexts times the probabilities. Warshaw (1980b) found that his contextual measure provided better predictions than a standard single question measure. Miniard et al (1983) attempted to replicate and extend these findings, but did not find significant differences between the conditional contextual measure and standard direct measures of intentions. Warshaw (1980a) also proposes an alternative model of behavioural intentions that compare favourably to Fishbein and Ajzen's model.

In general, the Fishbein and Ajzen approach has stood up well to its challenges. The most serious issues are the role of prior behaviour in the model and specifying the particular relationships to be expected between the normative and attitudinal components under conditions.

Apart from being challenged the Fishbein and Ajzen (1975) model has also been adapted.

The Fishbein and Ajzen model was adapted to include nonfunctional (e.g., hedonic and value expressive) aspects of choice alternatives (Ahtola, 1985). Prakash (1986) identified terminal and instrumental values associated with population subgroups and linked these to consequences of product use and ownership. Researchers revisited the issue of including representations of past behaviour (e.g. habit) in behavioural-
intentions models to incorporate continuing effects of contextual factors not fully captured in stated intentions (McQuarrie and Langmeyer 1987). Behaviour intention models were also adapted for situations where pursuing an uncertain outcome or goal (e.g. dieting to lose weight) rather than performing a behaviour (eating less) is a policy objective (Warshaw and Droge 1986; Sheppard et al 1988). Perceived consequences of both success and failure for behaviours having uncertain outcomes may often need to be represented in such models.

Sheppard et al (1988) maintain despite conceptual and operational challenges the Fishbein and Ajzen model has been shown to possess strong predictive value.

Cognitive Message Reactions

Cognitive response approaches argue it is not the message itself that is important but rather thoughts, ideas, and reactions brought about by the message which mediate persuasion. Brook and Shavitt (1983).

An new approaches to cognitive message reactions have been the focus of research in consumer behaviour: Cacioppo and Petty (1984) propose the Elaboration Likelihood model.

The Elaboration Likelihood Model:

Cacioppo and Petty (1984; Petty and Cacioppo 1983, 1984; Petty, Cacioppo and Schumann 1983) have proposed the Elaboration Likelihood model (ELM) of attitude change. The elaboration likelihood of a communication situation is a function of the motivation and ability of the communication recipients. If conditions are such that people are motivated and able to process the communication message, elaboration likelihood is high and recipients will scrutinise the process message arguments. On the other hand, when elaboration likelihood is low for lack of motivation and/or lack of ability to process, recipients will form attitudes based not on processing of message arguments but on processing of simple
cues associated with the message (e.g. the source). The ELM predicts that cognitive responses related to careful message processing, such as counterarguments and support arguments, will occur more often under high elaboration likelihood. Such cognitive responses as source derogations or source support should occur under low elaboration likelihood.

Petty and Cacioppo argue there are two main routes to attitude change: the central route, where recipients diligently consider message arguments; and the peripheral route, where attitude change is based on positive or negative cues associated with the message. The central route would occur under high elaboration likelihood, while the peripheral route would be associated with low elaboration likelihood. Although they focus on these two models of attitude change, they note that these modes are positions on a continuous scale of elaboration likelihood. Attitude change resulting from the central route is felt to be more enduring and more predictive of future behaviour.

Various factors can affect elaboration likelihood. Elaboration likelihood will be greater under threat involvement (Petty et al 1983), greater need for cognition (Cacioppo and Petty 1981), less distraction (Petty et al 1976), and when the message is less quantitative (Yalch and Elmore-Yalch 1984). Hence, Cacioppo and Petty propose a contingent model of attitude change where different processes are invoked under different condition.

The Structural Approach to Attitudes:

Three structural components are thought to be common to all attitudes; cognitive, affective and behavioural.

**Cognitive Component:** The cognitive component of an attitude is composed of what we know or think about a phenomenon, such as a brand. This component includes
knowledge, beliefs, opinions, values and images that are held relative to the brand. Without the other dimensions, the cognitive component alone would simply fall into the realm of opinion and belief. Rosenberg (1960).

**Affective Component:** The heart of the attitude is the affective component. It distinguishes attitudes from beliefs and intentions. The affective component is an emotional construct representing how we feel about something (for example, our like or dislike of a brand). This component implies an additional attitude construct. Our feeling for or against a brand has both strength and direction. This dimension can be referred to as Valence. Krech et al (1962).

**Behavioural Component:** The behavioural component is the 'payoff' for the marketer. What a consumer does about knowledge and feelings toward a brand is most important to a firm. This component is manifested in both intentions to buy and actual purchases. There is an impetus for congruity among the components of attitude. A person will experience less dissonance if all components are in agreement. "When the affective and cognitive components of an attitude are mutually consistent the attitude is in a stable state; when they are inconsistent the attitude is in an unstable state and will undergo spontaneous reorganizing activity until such activity eventuates in either

(1) the attainment of affective, cognitive consistency or
(2) the placing of an irreconcilable inconsistency beyond the range of effectiveness". Rosenberg (1960).

**Cognitive and Affective Relations:**

Recent research has incorporated the direct and indirect impact of affect and emotion (marketer-initiated, contextual and consumer feeling states) on resulting evaluations (attitude judgments) and behaviour.
That affect and emotion are ongoing parts of the consumer experience (e.g., thinking about buying and using products, shopping itself) is well established (e.g., Holbrook, 1986b; Gardner, 1985a; Havlena and Holbrook, 1986). Cohen and Chakravarti (1990) and Cohen and Areni (1990) state that there is confusion caused by the use of the term "affect". It is used to refer both to evaluative judgments (e.g., good-bad, favourable-unfavourable) and to valence feelings states that can produce evaluatively tagged memory traces.

Many models and theories in this field assume cognitive precedence: cognitive -> affect -> choice. Some low involvement models differ, but still assume cognitive precedence: cognition -> behaviour -> affect.

However, the debate on the independence of cognitive and affective systems is a controversial topic. Researchers such as Zajonc (1980), Zajonc and Markus (1982) and Tsai (1985) dispute these sequences.

Zajonc (1980) argues that affect reactions to stimuli always occur and generally occur prior to cognition. Affect and cognition, he argues, are independent systems, and affect is often predominant. In Zajonc and Markus (1982) and Tsai (1985), the argument is also made that there are many cases where affective preferences precede cognitive appraisals.

There have been numerous criticisms about Zajonc's view. Janiszewski (1988), Obermiller (1985), and Anand et al (1988) maintain that though preconscious attitudes may form for selected stimuli and for tasks allowing hemispheric specialization, the two systems are probably not independent.

Several consumer researchers have argued for a contingent view of the extent of cognitive participation in choice. Bagozzi (1983) proposes that there are several circumstances under which affect could precede cognition (e.g., intense emotionality, high pressure communication). Batra and Ray
(1983) argue that under low involvement more exposure affect may occur prior to cognition. Cacioppo and petty (1981) note that electromyogram measures of muscular activity might be useful in testing the temporal sequencing of affect and cognition. Coyne (1982) maintain that affect and cognition will be extremely hard to separate.

The debate about cognitive or affective precedence, even if difficult to resolve, has been useful in focusing interest on the affective component in consumer behaviour. Bettman (1986).

Much needed effort has been devoted to understanding the role played by affect in consumer choice. Calder and Gruder (1988 working paper) manipulated positive and negative emotional states via hypnotic induction and retrieval of strong emotional experiences. Induced emotional states influenced subjects selection/use of objective information, biasing attitudes and enhancing recall of items with similar affective content. Although complex relationships were found among specific emotions, the results confirm that emotions can play a key role in consumer decisions. Holbrook and Batra (1987).

However, Holbrook and Hirschman (1982) and Hirschman and Holbrook (1982) have argued that affect, feeling and emotions should be the subject of more study in consumer research. They argue that the experimental view of consumer behaviour has been neglected to date. Nonverbal, hedonic, physiological and multisensory responses have been studied very little. While this emphasis appears to be appropriate and important, little work has yet been reported.

**Attitude - Behaviour Relations**

Miller and Tessar (1989) carried out a study concerning the moderating role of Affective-Cognitive consistency and thought on the Attitude-Behaviour relation.
To test this hypothesis, the affective-cognitive consistency if attitudes about analytic puzzles was measured.

Miller and Tessar conceptualised attitudes as containing an affective and a cognitive component and subsequent behaviours as being driven by one of these components.

It was hypothesised that if the affective and cognitive components are in good evaluative agreement (high affective-cognitive consistency), then thought emphasising either component would lead to a similar general evaluation that should relate to all behaviour in a similar manner. However, if the affective and cognitive components are not in agreement (low affective-cognitive consistency) then thought emphasising different components would lead to different general evaluations that relate deferentially to subsequent behaviour.

The participants were either affectively or cognitively focused prior to an evaluation and then played with puzzles under instrumental and consummatory conditions.

The affective-cognitive consistency hypothesis tested in this study received strong support. When there was a low affective-cognitive consistency a match between the attitude component emphasised by thought and the component driving behaviour resulted in higher evaluation-behaviour correlations than a mismatch between components. Alternatively, when there was high affective-cognitive consistency the match and mismatch effects disappeared.

In an attempt to rule out alternative explanations, Miller and Tessar (1989) examined the possibility that the experimental manipulations affected the participant's behaviour or evaluations in such a way as to artificially change attitude-behaviour consistency. For most of the variables examined (e.g. the amount of time spent playing with the puzzles) there were no differences between the experimental
conditions.

**The Functional Approach to Attitude:**

Attitudes perform several functions which enables us to better understand the reasons why people hold the attitudes they do. If we know the psychological needs that are met by holding attitudes, one is in a better position to predict when and how the attitude will change. The major functions attitudes perform can be stated in terms of their motivational basis. According to Katz (1960) there are essentially four functions which attitudes perform for the individual:

1. **The adjustment or utilitarian function:**
   Attitudes acquired to serve this function represent a means for reaching a desirable goal or avoiding an undesirable goal, and are developed according to their instrumentality in achieving reward or avoiding punishment. In this sense our attitudes become guides to behaviour that will satisfy our needs.

2. **The ego-defensive function:**
   Attitudes acquired in the service of protecting the individual’s ego from his own undesirable impulses serve this function. Mechanisms relating to ego-defensive attitudes include rationalization, projection and displacement discussed in the previous section.

3. **The value-expressive function:**
   Ego-defensive attitudes often have the function of preventing others from seeing the individual’s true nature and feelings. Value-expressive attitudes play the opposite role in that they function to communicate the individual’s central feelings, values and self-images to others. An individual may receive a great deal of ego-reinforcing reward from self-expression.
4. The knowledge function:

Individuals acquire knowledge to provide meaning and order for what would otherwise be a conglomeration of sensations in a chaotic environment. Consumers are not generally motivated to be active learners about products in general, but they do want to understand the products that are particularly relevant to them. Attitudes provide a framework for determining what information is important to learn.

The Theoretical Approach to Attitude Change:

Marketing strategy often calls for effecting attitude changes among consumers. The way in which attitudes may be changed are linked to the ways in which they are formed in the first place (for example modeling on high status people such as one’s parents). But the marketing strategist faces the problem of getting a consumer to abandon an old attitude and adopt a new one, and attitudes are often highly resistant to change.

Product attitudes are often very complex. In reality the feelings a person has toward a product or brand are likely to be composed of a number of related attitudes. Either several attitudes must be changed, or one central attitude must be identified and influenced. Many theories of attitude change have been advanced. Five of the most thoroughly developed and researched are examined here.

1. Consistency Theory:

An attitude is viewed as a favorable or unfavorable reaction to an attitude stimulus. Zimbardo et al (1977). Thus, attitude is the emotional affective reaction a consumer would have toward a product brand or store.

The attitude can be changed through communication by influencing consumer beliefs (the cognitive component), or consumer behaviour (the behavioural component). The theory contends that the individual seeks consistency among these components, and if one component shifts, there is pressure to
bring the other two into balance. A consumer's attitude might be changed by providing new information thereby changing beliefs; through emotional appeals or classical conditioning to influence the affective component; or by enticing the consumer to behave in new way, as through a free sample. Four processes are seen as determining the degree to which a consumer will be persuaded by communication; attention, comprehension, acceptance and retention. Before any communication can influence attitudes, the consumer's 'attention' must be gained. Uniqueness, loudness, movement, special offers and so forth represent ways by which marketers may gain attention. Once attention is gained, the consumer must 'comprehend' what is being said. Promotional appeals must be clear and geared for the target audience if attitudes are to be influenced. Even if a promotional message is perceived and understood, the audience must 'accept' the premise communicated. Acceptance is a function of the benefits (rewards) promised is relevant, worth changing attitude and behaviour for. Finally, the attitude or the information underlying the attitude must be 'retained' long enough for action to result when the opportunity arises. Advertisers use jingles, music, and slogans to make their messages more memorable. Zimbardo et al (1977).

2. Group dynamics Theory:

According to Hart et al (1975) the individual is seen as a social being, heavily dependent on other people for the knowledge that underlies attitude. This dependence means that groups to which one aspires or belong have a strong influence in shaping beliefs and attitudes. Under this theory the major force leading to changes in attitudes, beliefs and perceptions is the degree of discrepancy between and individuals attitude or behaviour and group norms.
The group dynamics approach emphasizes that attitude change occurs because of motivation arising from social needs. In other words what people do will depend on how much reward the group can give, their degree of dependence and their social power within the group.

3. **Cognitive Dissonance Theory**

The specific relationship between cognitive dissonance and attitude change will be discussed. Festinger (1957) contended that inconsistencies or discrepancies among the cognition (opinion, beliefs, knowledge) an individual holds create tension and psychological discomfort that he or she seeks to reduce. Dissonance is a function of the relationship between elements in the individual’s behaviour and forces in the internal or external environment. Thus, cognitive dissonance may lead an individual to change behaviour, beliefs and opinions or the external environment or the individuals perception of it. As the degree of dissonance increase, the pressure for attitude change will intensify. The magnitude of dissonance is a function of three conceptual variables; importance of the cognitive elements, ratio of dissonant to consonant elements and cognitive overlap. If conflicting cognition are related to needs of importance to the individual, the impetus to change is stronger. A commercial that says your wash is not as white as it might be may be greeted with a resounding "so what". On the other hand, an advertisement that illustrates a relevant need may readily stimulate the consumer. The overweight person may eagerly respond to an advertisement for a diet.

People do not hold just one or two cognition at a time. Consumers have hundreds of opinions and beliefs about products and stores. They store a multitude of facts from experience and observation. Any brand or product may be the focus of a large number of cognition. The degree of dissonance an
individual feels at a given time is a function of the number of
dissonant and consonant cognition existing at that time. "The
greater the ratio of dissonant to consonant elements, at a
given time, the greater the dissonance". Festinger (1957).

Festinger (1957) refers to Cognitive overlap as the
degree of similarity among attitude object or alternatives.
When two alternatives share a large number of features, they
have a high degree of cognitive overlap. The less two
alternatives have in common, the more dissonance is likely to
be aroused as a choice is made between them and the greater is
the pressure to alter the attitude toward one or both.
A consumer choosing among several brands of T.V. sets may
experience less dissonance than the consumer choosing between a
new T.V. set and a new freezer.

4. Attribution Theory:

One aspect of attribution theory attempts to explain the
ways in which one interprets the motives and actions of others.
Williams (1982). The theory deals with our perceptions of the
reasons for our own and other people's behaviour. It is a
cognitive theory containing no motivational constructs, such as
a need to reduce dissonance or group pressure toward
conformity. The potential causes for behaviour can be grouped
into situational (external and dispositional (internal factors.
A person representing a product may be perceived as selling it
for the money (situational) or because he or she is really sold
on the item and wants to share it with others (dispositional).
Attribution theory argues that people are generally more likely
to explain other people actions by dispositional factors
(intelligence, generosity, dishonesty and greed) rather than by
situational factors. Several factors will determine whether an
attribution is situational or dispositional. People are more
likely to make dispositional attributions when observed
behaviour is non-normative - that is, not characteristic of
what would be expected under usual conditions. A second factor involves seeing the same behaviour occurring in a wide variety of different situations over an extended number of time periods. Finally, dispositional explanations are likely to occur when the observer is unable to detect possible situational causes of behaviour. Williams (1982).

5. Social Learning Theory:

Social Learning theory argues that behaviour leads to consequences that feed back to the individual and influence attitudes and subsequent behaviour. This is the familiar instrumental conditioning that goes on constantly, rewarding and punishing behaviour and influencing attitudes. Essentially, this related to the instrumental attribute function. Positive attitudes are formed toward phenomena that reward behaviour, and as the reward diminishes or reverses, one experiences attitude change. Socially learned attitudes may occur through numerous modes, just as any sort of learning. These modes include direct experience, observation, reading and listening. In order for the consequences of our behaviour to influence attitudes, and individual must remember the consequences and expect it to occur again. Williams (1982).

Next in this section research on Motivational (want/relevance inducing) and Attitudinal (goal/benefit oriented, positively/negatively valence) properties of marketing or advertising stimuli, and interaction between these and motivational and attitudinal predispositions are investigated. This area of research is an example of the tendency to examine the process underlying consumer response in greater detail. Mitchell (1983a).

The Effect of Persuasion and Involvement:

Recent theorising in consumer psychology has emphasised contingent approaches to persuasion. The major contingency variable has been the degree of Involvement; however, some
approaches have also postulated contingencies based upon prior knowledge.

Several different theories have postulated differing persuasion processes under low and high involvement. As noted earlier, Cacioppo and Petty (1984) have proposed that persuasion occurs via diligent message processing under high involvement (the central route), or via positive or negative cues associated with the message under low involvement (the peripheral route).

Batra and Ray (1983) discuss three different processes of advertising effect, which they label the high involvement, low involvement and dissonance-attrition hierarchies. In the high involvement sequence, message processing may lead to belief change, then to attitude change, and finally to behaviour change. The attitude formed is thus cognitively based and enduring. In low involvement, messages create awareness and mere-exposure affect (Zajonc 1968), which then leads to behaviour, which can lead to more firmly held attitudes. The Batra and Ray conceptualisation appears to be quite compatible with that of Cacioppo and Petty. In both cases there is message processing under high involvement and use of a cue (e.g. frequency of exposure) under low involvement.

Deighton (1983) also proposes that advertisements may be processed in two ways: highly involved processing of the message, or low involvement mode he calls "schematic inquiry". Under this latter process, advertising provides a hypothesis about the advertised product which may be casually accepted, and confirmatory biases in search may tend to ensure confirmation of that hypothesis. Trial is limited to those products one expects to perform well, and Deighton cites research in social cognition (e.g. Lord et al 1979, Gilovich 1981) that supports his conceptions. Initial research in a consumer context (Deighton 1984) is also supportive.
While there seems to be some agreement about the basic nature of the different processes involved by high (message processing) versus low (nonmessage cues) involvement, there is not much agreement about the nature of involvement itself.

Mitchell (1981) defines involvement as an internal state variable with the motivational properties of direction and intensity.

Cohen (1983) describes involvement as a state of activation directed to some portion of the psychological field.

Finally, Greenwald and Leavitt (1984) describe four levels of involvement: preattention, focal attention, comprehension and elaboration. These levels are associated with allocation of increasing cognitive capacity and produce increasingly durable memory traces. Greenwald and Leavitt attempt to relate their conception to those of other researchers. Although the above conceptualisations appear to embody two slightly different notions of involvement, involvement as motivation (Mitchell, Cohen) and involvement as the degree of processing resulting from some level of motivation (Greenwald and Leavitt), the notions seem generally compatible.

The effect of attitude toward an advertisement:

Although the notion that a consumer's like or dislike of an advertisement might affect that individual's response to the advertised brand is not new (Lucas and Benson 1929, Silk and Vavra 1974), examination of the mediating role of attitude toward the advertisement (Aad) has been of more recent origin. Mitchell and Olson (1981) examined the effects of visual stimuli in advertisements for facial tissues and found that brand attitudes were not only a function of brand beliefs, but also of the advertisement. Shimp (1981) showed that an advertisement also affected behaviour.
MacKenzie and Lutz (1983) proposed four models of the relationship between an advertisement (Aad) and attitude toward the brand (Ab) itself. Their research supported the notion that, Aad -> Ab -> intentions.

Moore and Hutchinson (1983) examined both immediate and delayed effects and found the Aad and Ab were directly related immediately after exposure. However, after a one week delay, both positively and negatively evaluated advertisements had stronger Ab than neutral advertisements.

MacKenzie et al (1986) evaluated four views of how attitude toward the advertisement (Aad) mediates advertising effectiveness 1. Affect transfer - a one way casual flow from Aad to attitude toward the brand (Ab) due to low involvement, peripheral processing of advertisement execution elements, classical conditioning, or mood congruency;

2. Dual mediation - in addition to affect transfer, increased message acceptance due to a favourable Aad;

3. Reciprocal mediation - a two way flow between Aad and Ab reflecting people’s preference for balance in liking;

4. Independent influences - Aad and Ab separately determine purchase intention.

Cognitive responses to advertisements were assigned to advertisement cognition (e.g. source bolstering, negative advertisement execution) or brand cognition (e.g. counter or support argument) categories, and Aad and Ab were measured in terms of overall favourable/unfavourable reactions to each.

The dual mediation version of a structural equation model was judged best.

Reactions to advertisement execution (valence feelings, image associations usage experiences) may affect not only Aad but also Ab even under a brand-processing set according to Gardner (1985b). Gardner found that an Aad effect on Ab whether people were evaluating linguistic style or the brands
advertised.

However, Aad assessment is typically fraught with problems. Much depends on the measures used (e.g. Aad measures may pick up nonattribute aspects of the product portrayal) and on task instructions (e.g. subjects may tell researchers what they think of the advertisements in post-exposure Ab assessment because that's what they think the researcher is evaluating).

In another study, unrelated visual components of advertisements affected both brand and advertisement attitudes, in a manner consistent with evaluations of the photographs but dissociated from brand-attribute beliefs. Mitchell (1986a).

Clearly, advertising responses and subsequent attitudes toward the product and the advertisement are related in a complex fashion, and more work is needed to understand fully the automatic or reasoned "transfer of affect" or evaluation between Aad and Ab.

Edell and Burke (1984) support this view by maintaining that although there has been a reasonable amount of research, the process underlying the effects of Aad are still not well understood. They argue that examining the relationship between Aad and Ab over time provides leverage for distinguishing the various models proposed.

Visual Stimuli in Advertising:

There has been a great increase in research in how the visual stimuli in advertisements are processed. Such knowledge is important for policy concerns, as policy makers have become more concerned with the communication effects of the nonverbal portions of advertisements (Beales et al 1981).

Edell and Staelin (1983) directly examined the relationship between the visual and verbal components of an advertising message. They distinguish two cases: 1. the message is either totally verbal or is a "framed" picture (i.e. the verbal information is a restatement of the picture) and 2.
the message is an "unframed" picture (i.e. the verbal information does not relate the picture to the brand).

The study shows that framed picture and verbal messages elicit equivalent reactions. Unframed pictures, are characterised by fewer brand evaluative thoughts, fewer brand items recalled, and longer response times to questions about brand items. The Edell and Staelin (1983) results are an important demonstration that the degree of congruence between the visual and verbal components of a message has a major impact on the processing of the message.

Kisielius and Sternthal (1984) also examine the effect of visual and verbal stimuli. However, the results obtained differ from those of Edell and Staelin (1983). Kisielius and Sternthal find that verbal information alone is responded to more favourably the (a) verbal information accompanied by pictures in the "control" conditions of their three experiments; (b) verbal information with instructions to image ; and (c) verbal information with additional information about favourable alternatives. The results support their availability-valence model. The reason for the difference between the results and those of Edell and Staelin (1983) is not clear.

One possibility may be that the pictures in Kisielius and Sternthal's experiment were not "framed" according to Edell and Staelin's terms. That is, it appears from the description of the stimuli that the verbal and pictorial components were only partially related in Kisielius and Sternthal's experiments. If true, this explanation for the difference in results reemphasises the importance of the congruence between the visual and verbal components.

Childers and Houston (1984) consider the effect of verbal (words only) and visual (picture plus words) advertising stimuli on recall. They find that for immediate recall, verbal stimuli perform as well as visual stimuli under semantic
processing (instructions to focus on the information content of the advertisement). Under sensory processing (instructions to focus on appearance), however, visual stimuli superior recall. When delayed recall (after two days) was tested, visual stimuli were better recalled for both types of processing, although this effect was more pronounced for sensory processing. Hence, Childers and Houston argue that the relative memorability of visual and verbal advertising material depends on the motivation and capability of the audience to engage in semantic processing.

Other work has also examined the effect of visual stimuli on responses. Percy and Rossiter (1983) report several studies where use of concrete words in an advertisement leads to more favourable responses. The effects of picture size on response varied across two studies. In one study, greater picture size led to more favourable response. In a second, size had an effect only for colour pictures, not for black and white.

Despite the importance of the issue of visual processing, relatively little empirical work has been done. This is an area of research that deserves much more emphasis. In addition, the effects of stimuli in other sensory mode (taste, smell, touch) have been subject to even less research (Holbrook 1983). There is a major need for research on the effects of nonverbal stimuli on consumer judgments.
This section of the literature review relates to the testing systems and techniques for testing the effectiveness of advertisements.

Market research in general can be described under three headings; Qualitative, Motivational and Quantitative.

Accepting that Qualitative research is usually exploratory or diagnostic being more impressionistic rather than definitive, it is reasonable to place Advertising market research under this heading.

Sampson (1969) suggests that Motivation or Motivational research is not synonymous with qualitative research. He goes on to state that the concept "Motive" is a complex one in the field of Psychology. Motivation explains "Why" specific behaviours take place and accordingly Advertising research can fall under this heading also.

"The first and most important thing to be said about motives is that everybody has a lot of them, and that nobody has quite the same mixture as anybody else". Gellerman (1963). This makes the task of the market researcher all the more difficult.

Dealing with the more specific area of Advertising research, Lovell (1967) points out how subjective this area of research really is "Advertising researchers have known to touch the extremes of confidence and despair. Assurances have been given from time to time that a particular technique, interpreter or experiment, has proved beyond reasonable doubt to provide utterly reliable indications of Advertising effectiveness. This has applied to Pre-Tests and Post-Tests alike". But Lovell contends, "no sooner has the new sun appeared over the horizon than clouds of doubt have blotted it out."
There is then a reaction, which can be summed up in the words by Peat and DeVos as a statement of "Murphy's Law: If something can go wrong with advertising research, it will".

Lovell (1967) asks the question; why cannot the research world develop, agree, and validate set procedures for advertising research? Lovell maintains that the result is in progress, up to a point. To expect a complete answer, however, is unrealistic.

Why this should be so, is important. Formalisation of advertising research is difficult because:

(A) Advertising itself works in different ways — or achieves a range of effects with varying degrees of emphasis (as seen in the foregoing sections).

(B) The marketing context within which advertising is expected to work is itself variable — between brands and products and over time.

(C) The demands placed on advertising research vary, according to the interest of the parties concerned.

(D) The relevance of certain survey data (whether collected in a Pre-Test or in a campaign evaluation study) to end results of advertising is a matter of dispute.

In an attempt to further analyse and systematise advertising research and theory, Lovell (1967) deals with the stepwise models of advertising. He outlines A.I.D.A. (Attention, Interest, Desire, and Action) and states what AIDA suggests is that, advertising works including each of the four effects in sequence. Reference is also made to DAGMAR, Colley (1961). It suggests that the steps up which advertising was expected to take the consumer correspond to Awareness, Comprehension, Conviction and Action.

Lovell (1967) does, however, state the big problem is that stepwise models such as the above (and more) of this kind of model do not take time and experience into account.
He concludes by saying "in our present state of knowledge, there a particular theory should be regarded as central to all or even most advertising research. There are, in fact, good reasons why only a very flexible theory could be regarded as allowing for many different cases".

2.2.1 Testing Advertisements

Stewart-Hunter (1989) comments that, "Whatever the theoretical or practical objections advanced by the agency as a matter of policy, or by the individual planner in response to a particular brief, almost all of us will at some time find ourselves involved in a pre-testing study".

Corstjens (1990) in relation to pre-testing maintains, "The idea is to use research, often of several different types, in order to develop a 'portrait' of the advertisement under examination. As the portrait becomes more complete, it becomes more possible to make an informed judgement. The aim of the research is to understand how the advertisement is working, what is working, what isn't and whether the advertisement can be improved in some way".

Stewart-Hunter (1989) postulates the following definitions of pre-testing:

Research to evaluate the likely effectiveness of a finished advertisement prior to exposure. This definition distinguishes between research on finished advertisements and research on rough advertisements (generally called creative development research); and between research prior to exposure and that done during or after exposure (often called post-testing).

Research to check specific issues, generally impact and communication, rather than to evaluate the appropriateness of the creative idea or provide guidance on its development. A more controversial definition since the distinction between the idea, its communication and impact can be regarded as
overly mechanistic.

"Advertisements designed in particular ways to achieve certain predefined aims, and the objectives of advertising research should be designed in relation to these specific aims".

It is in relation to this simple and non-controversial proposition that the theoretical problems of pre-testing emerge. Stewart-Hunter (1989).

Stewart-Hunter (1989) goes on to try and explain what is meant by 'Certain pre-defined aims'.

Suggesting that at its most direct level, an advertisement is designed to gain the attention and involvement of the target audience, and they are intended to extract a certain message from the advertisement. This message is designed to affect their existing predispositions in such a way that their intentions may be altered in favour of the advertiser. Given the circumstances of a particular market, this intention has the potential to be translated into a particular action. Stewart-Hunter (1989) also maintains that, by observation, it is believed that a great deal of advertising works in a non-rational or even unconscious way. If that is so, how does someone know what their intention is until faced with the need to make a decision? Even if they do 'know', does one have the right way to ask them about it or do they have the ability to particular? What happens if they see another competitive commercial after they have been exposed to ours? How long does it take for attitude to change? How do we take account of the duration and frequency of the advertising?

Many of these problems surround all pre-testing objectives, but are especially acute when attempting to predict the effects of advertising or when attempting to measure something that probably happens some time after the measurement was taken". Stewart-Hunter (1989).
Hedges (1969) questions whether research at the creative development stage is strictly testing at all and prefers to regard it as a (very important and necessary) way of 'studying consumers in order to gain some better understanding of the way they are likely to react to stimuli of different kinds, the stimuli being advertisements of advertising ideas'. He takes this view in order to emphasise that 'there is no kind of reliable advertising quality control procedures to which proposed advertisements can be submitted with a view to filtering out the duds and passing only the winners'.

Potter and Lovell (1975), Stewart-Hunter (1985) and Corstjens (1990) suggest that pre-testing can obtain reactions against impact, recall, involvement, communication, persuasion and attitudes toward an advertisement (or advertising campaign), in the light of an understanding of how the particular market works and how this particular advertising campaign is intended to influence people's behaviour in it.

2.3.0 Pre-testing techniques

So far, the discussion has concentrated on pre-testing objectives - in order to gain some better understanding of the way consumers are likely to react to stimuli of different brands. However, according to Stewart-Hunter (1989) there are important issues beyond just whether an advertisement has an acceptable level of impact or message communication. If the advertisement seems to be achieving these levels, it is usually helpful to understand why. Even more significantly if the advertisement appears defiant in some way; it is essential to be able to pinpoint the reasons. If they are relatively minor reasons, perhaps they can be dealt with before the air-date. If the problems are more intractable this understanding needs to be built into any future creative
brief.

It is stated that Pre-Testing may include any situation in which a deliberately restricted proportion of the target audience is exposed to the advertising.

"Methods of carrying out pre-testing advertising usually involve giving the selected test group of people an opportunity to compare the advertisement(s) being tested against others". Wilmshurst (1985).

2.3.1 Techniques of Pre-Testing Television:

(A) Theatre Tests

Informants are invited to a studio or cinema ostensibly (to quote from Potter and Lovell) 'to give their opinions of pre-release films'. Interspersed in the programme are TV commercials and these are assessed by questionnaires. The programme may last for two or three hours, so that to some extent it is possible to measure 'attitude shifts' as a result of seeing the commercials. Since many people's reactions can be tested to several commercials in one sitting, this can be a very economic way of obtaining quantitative reactions. However, getting the right sample of people to attend can be difficult and it can be argued that viewing commercials on a large screen with many other people is an artificial situation. Wilmshurst (1985).

The interview was administered centrally by a 'compare' with respondents self-completing a questionnaire. Generally, the questionnaire would cover brand and advertisement recall (from a reel of five or more commercials) and some simple message communication questions.

An added refinement was the use of an electronic dial (or 'Clapometer') to indicate the degree of interest experienced throughout the test commercial. Persuasion scores figured significantly, usually with a hidden pre-exposure brand preference being elicited at the recruitment stage and a
further brand preference question asked at the end of the interview session. Stewart-Hunter (1989).

(B) Hall Tests

Here the commercials are screened (typically with videotape on TV screens) to smaller numbers of people who are invited in from the street into, for example, a church hall or a room in a hotel at short notice. Sampling is easier and interviewing more easily controlled (because there are fewer people at a time) but the duration is normally only 20 minutes or so, which is the maximum people can be persuaded to ‘take off’ from their shopping etc. Wilmshurst (1985).

(C) Clucas

"Whereas the typical theatre test took an entirely holistic (even black-box) approach to pre-testing, the Clucas technique attempts to look at a commercial in a bit-by-bit atomistic way". Stewart-Hunter (1989).

Stewart-Hunter (1989) maintained that the underlying theory was that any commercial is a series of separate (but linked) devices, each with its own particular purpose in terms of attracting attention, generating involvement, gaining sympathy or communicating a message.

The first step was for the agency to predefine exactly what each small section of commercial was trying to achieve. In the research, the respondents were shown the commercial and then asked to:

Underline on a copy of the script what they remembered having seen and heard.

What they liked and disliked.

To indicate what each section was communicating to them about the product.

Each of these elements was then graphed with time on the x axis and percentage response on the y axis, which
demonstrated how attention, involvement and communication waxed and waned throughout the commercial. By overlaying these graphs on one another the researcher would then attempt to demonstrate the relationship between the various elements and to identify where any problem areas lay.

Whether or not television commercials really do work in this way, it certainly is not the way that most creative people design them and thus technique was always extremely difficult for agency people to work with.

(D) Twenty Four Hour Recall

Another technique which is summarized below by Stewart-Hunter (1989) is called the twenty-four-hour recall.

This approach, in widespread use in the United States, is relatively rare in the UK except among some of the major US-owned packaged good companies. Like theatre testing, it is a generic name for a number of specific techniques based on the on-air exposure of a test commercial. By showing the commercial in a realistic way in the home environment, twenty-four-hour recall attempts to overcome some of the major pitfalls encountered in the unrealistic 'hot-house' research environment.

The sample is either recruited in advance or after the test exposure. If recruited in advance, the sample is asked to watch the programme in which the commercial is to be shown. At this point a pre-exposure brand preference question is asked which is then repeated when respondents are reinterviewed the day after the commercial has been shown. In this way a persuasion shift measure can be added to the other recall questions. In other techniques, the sample is recruited the day after the commercial has been shown, and qualifies on the basis of claiming to have watched the programme (or time slot) in which the commercial was aired. A
brand preference question will normally be asked, but since no ‘shift’ can be measured, this and other measures can only be evaluated against a normative data bank.

This is obviously a very expensive technique involving not only fully finished film but media costs as well, though these are usually minimized by showing the commercial in off-peak times in a restricted area. These days almost all interviewing is conducted by telephone.

The proponents of twenty-four-hour recall believe that this technique offers the most realistic appraisal of how effective a commercial will be in the real world. Much of the interpretation is made on the basis of comparisons with normative data and the heavy users of the technique will tend to have many years’ worth of data in identical product fields against which they can make their judgments.

Critics of twenty-four-hour recall have a number of other problems:

It is a very expensive study to mount and this is exacerbated by the huge contact sample required to identify enough people who can remember seeing the test commercial.

There are many criticisms related to the quality of data yielding by twenty-four-hour recall. Even among those remembering the advertisement, the content recall is usually very superficial, which means that both its valuative and diagnostic ability is limited. Inevitably this is a technique that puts more emphasis on crude numbers than it does on the more qualitative aspects of effectiveness.

The technique assumes that all commercials work in the same way, requiring only one showing to achieve a level of impact and recall. Stewart-Hunter (1989).

(E) Impact and Communication Testing

The last test to be discussed is again summarized by Stewart-Hunter (1989) and called Impact and Communication
Testing. "As a result of all the theoretical and practical problems associated with pre-testing, most clients and agencies (and thus research companies) tend to favour simple impact and communication tests.

Although such studies are by no means free of problems, they do have the advantage of being flexible, enough to take account of the requirements of differing market categories, brands and advertising styles. Although some kind of normative assessment may often be present, the study is usually complete in itself and the interpretation is generally made by taking an overall view of all the data and its internal relationships. Stewart-Hunter (1989).

The Typical Impact and Communication Test will be a central location (or hall test) study, recruiting its sample prior invitation (relatively rare) or from passers-by in the adjacent streets and shopping centers. The sample can be as tightly defined as required, though of course too obvious a recruitment questionnaire may give prior warning to the respondents about the topic of the study, with detrimental effects on the impact question.

Once inside the location, the respondents will be shown the reel of commercials to establish advertisement and brand recall levels (impact). The number of commercials in the reel is a subject of some debate.

Five commercials is the general rule (roughly replicating the number in a commercial break) but some practitioners argue that this makes it too easy for respondents to recall all of them, regardless of their relative success at gaining attention. It is certainly true that in a reel of first test commercials, it is unusual for any commercial to be recalled by less than 60 per cent. Increasingly, therefore, research companies are recommending that the reel should consist of seven or even ten commercials.
The composition of the reel is worthy of considerable discussion as the precise selection will determine the interpretative context for the test commercial. Most people seem to argue that all the commercials should be aimed at a broadly similar audience to the test commercial, otherwise the later will stand out by default. Beyond that, they should ideally be selected to provide a range of likely impact levels, against which the test commercial can be compared. However, interpretation is extremely hard unless some kind of experience (on the researcher's behalf) or normative data can be applied.

This is why many clients who do a lot of pre-testing tend to use a common reel across all their tests in the same product field, which they update from time-to-time. This provides the combined advantages of a stable context and a range of test scores that can be compared with the one in hand. Some agencies put their own house reel together, though this can be uncomfortable experience as, by definition, one of the agency's clients always has to come at the bottom!

In some cases, especially where there is a lot of competitive advertising, the reel may be composed only of competitive commercials. While I can see the attractions to the client of comparing his impact score with that of his competitors, in reality those competitive commercials will never compete side by side in a break. Furthermore, the fact that they are all, say lager commercials, will make it easier for respondents to recall all the commercials.

A word should be said about animatics here. By definition impact testing on animatics is difficult because they are often devoid of all the production values that make a commercial attention-getting. However, if such a comparative impact test is judged essential, that it is important that the remainder of the reel is composed of other animatics, which
almost certainly means that the choice will be limited. If you have any choice at all, try to vary the style and pace of them, because watching a reel of five or more animatics can be a very boring experience.

Stewart-Hunter (1989) goes on to briefly describe the techniques for pre-testing radio, press, posters and rough material (animatics).

Lovell (1967) suggests once the test is chosen, if appropriate, the place to carry out the experiment/test need to be chosen. He suggests:

- a theatre (or large hall) in which large audiences can be exposed to the commercial;
- a room in a studio or agency, allowing use of permanent equipment and special features, e.g. videotape recording of a group discussion in progress;
- a room in a private house, to which respondents are invited;
- a mobile unit (test van);
- respondents' own house, using easily portable equipment (e.g. VCR).

Lovell (1967) reminds researchers of the aspect of bias and stresses the importance of subjectivity in many testing methods (and places). He further points out what happens at a test can depend on the kind or interview situation and questions favoured by the researcher who is organising the test, finally it can also depend on the degree of flexibility with which the test is approached. (This point should be taken into account for all types of Pre-testing)

Twyman (1971, 1973) reviews television media research and concentrates on the measurement aspects of television which are an aid to its commercial use as an advertising medium. These aspects include television advertising conditions in the U.K., measurement of T.V. set ownership, station reception, viewing
habits, T.V. exposure (opportunities to see). Weight of viewing audience measurements in time segments, programs and advertisements. Interviewing on a day-after recall approach. Seven day aided recall, meter recording of set switching, T.V. diaries, observation techniques e.g. cameras can be used with a television set to take pictures of the viewing audience and the screen itself via a mirror.

2.3.2 Techniques for pre-testing Radio

The fact that media budgets for radio are considerably lower than those for television and other media probably explains why relatively little quantified pre-testing of radio commercials appears to be done. However, if pre-testing is required, few methodological problems arise since radio can be treated in exactly the same way as television. It is theoretically as possible to conduct a twenty-four-hour recall study on a radio commercial, as it is on a television commercial though all the same interpretative problems exist. Some form of impact and communication test will be the more usual choice.

2.3.3 Techniques for Pre-testing Print

Pre-testing print is rather more difficult, if some form of impact measure is required. The normal way of doing this is to insert the test advertisement into a mock-up magazine, composed of other advertisements and editorial. Generally this is done using a folder with clear plastic sleeves – hence the name ‘folder-test’. The interview procedure would then normally follow the direction outlined above under impact and communication testing. ‘Reading and noting’ is a rather different technique, in which the interviewer takes the respondent through the magazine asking them to say what they remember noticing. This technique is generally used for post-testing and advertisement in situ.
Other such techniques in Pre-Testing print advertisements are coupon response, use of a tachistoscope and consumer retail audit (post testing).

In general very little confidence is expressed in relation to any of the foregoing.

2.3.4 Techniques for Pre-testing Posters

Again, the poster pre-test will usually be based on the impact and communication test format, though the impact measure should be designed to reflect the special way people experience the poster medium. Ideally, the poster should be seen in situ, thus allowing for the scale of the image to be apparent. This can be done (but with some difficulty) by photographically superimposing the test poster over a photograph of an existing site. The test poster can then be shown with others to gain some kind of comparative impact measure. Whether the poster is shown solo or in a 'reel', it should only be shown for a few seconds, again to reflect the generally fleeting view that the passer-by gains. Communication can be examined by this technique or simply by using miniature proofs, but again the poster should only be on view for a few seconds.

2.3.5 Techniques for Pre-testing Rough Material

As far as rough radio, press or posters are concerned, the broad impact and communication procedure can be used, though comparative impact testing will always be difficult unless one is prepared to go the cost of reducing competitive materials to a similar rough finish. Stewart-Hunter (1989).

Steiner (1963) maintains that observations of viewers reported represent the most detailed attempt to study what happens when people view commercials. Krugman (1968) has attempted to extend this further into studying respondents thinking about commercials while viewing.
Arguably, the major advertising function of audience research is to enable predictions to be made about future ratings so that the best time may be bought (for television or radio advertising and so on) or the best place be booked (for print or poster advertising and so on).

A possible trend in research requirements would be an increasing emphasis on prediction rather than the other research roles, if, through computerisation, it becomes easier to assess the pay-off of alternative research systems in terms of time-buying efficiency. Worcester and Downhan (1978).

Worcester and Downhan (1978) maintain that future developments with implications for advertising media research are likely to arise from changes in:
- the structure of media,
- the marketing of products,
- methods of buying and selling media,
- research methodology,
- the economics of research.

Despite containing much detail, it was intended to be reasonably instructive in each of the techniques covered, however, much remains unanswered about the testing for advertising effectiveness, and it is suggested that research needs to be carried out in validating and testing the different techniques.

2.4.0 Testing Systems in Advertising

The research and Planning Department of the J. Walter Thompson U.S.A (1983) carried out a review of advertising (copy) testing techniques and services.

In addition to detailing many testing systems being operated in the U.S.A., which are summarised in appendix 6, there is a section outlining the principles agreed resulting from the shared views of "PACT" agencies (Positioning advertising copy testing) on the fundamental principles
underlying a good (copy) testing system. This was supported over two years, by the top research professionals of the advertising industry. It is suggested that compliance with the PACT principles lends a high degree of validity to such qualifying systems.

It is suggested that it would be instructive for future research students to be aware of the PACT principles in this review:

1. A good copy testing system provides measurement which are relevant to the objective of the advertising.

2. A good copy testing system is one which requires agreement about how the results will be used in advance of each specific test.

3. A good copy testing system provides multiple measurements, because single measurements are generally inadequate to assess the performance of an advertisement.

4. A good copy test system is based on a model of human response to communications, the reception of a stimulus, the comprehension of the stimulus and the response to the stimulus.

5. A good copy testing system allows for consideration to whether the advertising stimulus should be exposed more than once.

6. A good copy testing system recognises that the more finished a piece of copy is, the more soundly it can be evaluated and requires, as a minimum, that alternative executions be tested in the same degree of finish.

7. A good copy testing system provides controls to avoid the biasing effects of the exposure context.

8. A good copy testing system is one that takes into account basic considerations of sample definition.

9. A good copy testing system is one that can demonstrate reliability and validity.
In the references to the background and details of the alternative testing systems it is emphasised that the brief evaluative comments about each system are based on its adherence to the PACT guidelines/principles. (More on this section later).

A discussion of various physiological techniques also appear in appendix 6. Some of them are still in the experimental stage and not commercially available, e.g. brain wave measurement. Some are no longer in use, e.g. pupil dilation. Some are offered as a standard or an optional measure by certain services and are so indicated in the methodological descriptions.

A sample of the systems listed in Thompson’s (1983) review of advertising copy testing techniques and services are reviewed in appendix 6.

As stated earlier Pact has a number of principles, however it would be beneficial to elaborate on the principle that states:

A good copy testing system is based on a model of human response to Communications - the reception of a stimulus, the comprehension of the stimuli and the response to the stimulus.

PACT agencies view advertising as performing on several levels. To succeed, an advertisement must have an effect:

* on the eye, on the ear: It must be received (Reception)
* on the mind: It must be understood (Comprehension)
* on the "heart": It must make an impression (Response)

It therefore follows that a good copy testing system should answer a number of question. Listed below are examples of the kinds of questions relevant to these communications issues. The order of the listing does not relate to priority of importance.
Priorities will vary depending on the objectives of the specific advertising being tested.

Reception:
- Did the advertising "get through"?
- Did it catch the consumer's attention?
- Was it remembered?
- Did it catch his/her eye? His/her ear?

Comprehension:
- Was the advertising understood?
- Did the consumer "get" the message?
- Was the message identified with the brand?
- Was anything confusing or unclear?

Response:
- Did the consumer accept the proposition?
- Did the advertising affect attitudes toward the brand?
- Did the consumer think or "feel" differently about the brand after exposure?
- Did the advertising affect perceptions of the brand?
- Did the advertising alter perceptions of the set of competing brands?
- Did the consumer respond to direct action appeals?

Another area of response measurement relates to executional elements. PACT agencies agree that it is useful to obtain responses to:

Executional Diagnostics: Questioning about consumers' reactions to the advertising execution (e.g. perceived differentiation from other advertising, reactions to music, to key phrases, to presenters or characters, to story elements, etc) can provide insight about the strengths and weaknesses of the advertising and why it performed as it did.

PACT agencies use different measures to address the issue in these four areas. However, they all are based on the some fundamental understanding of the Communications process.
The Present System

In an article reporting a presentation to the advertising research foundation 1987, the originator of the system examined in this study, Weinblatt (1987) discusses, "new criterion measurement tools and how they work with current diagnostic measurements". Weinblatt maintains that "while diagnostic tools are exceptionally useful in helping to understand "why" certain commercials, advertisements, and package designs perform in a certain way, it is important to first establish evaluative measurements and procedures to find out whether or not the advertisements succeeded in reaching their intended goals in the first place".

Weinblatt (1987) further suggests criterion measurements are the way to evaluate "real world" (actual market situation) behaviour. He also suggests diagnostic instruments can help us explain "why" of the particular behaviour.

According to Weinblatt (1987), in terms of pre-testing print advertisements (subject of this experiment), the following could be considered criterion measurements:

* voluntary advertisement readership
* pre-post catalogue selection
* brand name recall
* main message recall
* attribute rating
* expressed purchase intent and why
* expressed likes and dislikes and why
* involvement
* change in imagery
* stopping power

The diagnostic measurements for print pre-testing are:
* eye movement tracking
* forced exposure expressed likes and dislikes
* forced exposure expressed purchase intent
The system used in this present study comprised three parts, and is intended by Weinblatt to conform to the above criteria. However, these criteria and diagnostic instrumentation remain as yet unproven in a scientific methodology.

At this point a description of the system proposed by Weinblatt and examined in this study is described,

The system comprised three parts:

1. The intended purpose of the Catalogue Selection test, was to measure the extent of respondent’s perception of one brand versus another, before and after the viewing of the advertisements within the experiment.

2. The eye movement recorder system was intended to:
   A. Expose respondents to the test advertisement and other control advertisements, for a certain length of time.
   B. To measure and record the length of time respondent’s eye focused on individual components of the experimental advertisements.

   According to Weinblatt an eye movement recorder system could for example, record that certain key lines of copy were being ignored, and that this was the reason for a lack of communication. However, this effectiveness of the eye movement recorder system remains to be shown.

3. The questionnaire is intended to measure respondent’s recall to the test advertisement, based on the stimulus presented (within the eye movement recorder system) and the components of those advertisements. The open ended probing of specific likes and dislikes may - according to Weinblatt - uncover a problem that could not be measured through direct questions relating to recall or change in imagery.

   The questionnaire poses a series of questions in relation to the test advertisement.
1. Respondent's recall of the test advertisement.
2. Respondent's behavioural intention — arising from exposure to the advertisement.
3. Respondent's preference and commitment to the experimental advertisement.

It is clear from the foregoing that Weinblatt is of the view that this system provides a basis for pre-testing of advertisements for effectiveness in communication.

It is also clear that the components of his system relate to at least some of the issues identified in the review of literature presented in chapter 2.

It would be unrealistic to expect the system designed by Weinblatt to cover exactly those identical issues identified by many separate studies reviewed in the literature.

Nevertheless a close examination of this literature, and the experiments outlined in it, reveal that the system can be shown to relate closely to some issues, slightly to others, and not at all to yet others.

An examination of the literature in relation to each separate component of Weinblatt's system supports this analysis.

For example, the catalogue selection by measuring consumer’s perception of one brand versus another, is a method of controlling for the effects of prior knowledge (Bettman 1986, Cohen and Chakravarti 1990, p13), of memory of advertising stimuli (Lichtenstein and Srull 1985, Hayes-Roth 1982, p16), of persuasion and involvement (Batra and Ray 1983, Deighton 1983, p48).

On the other hand Weinblatt’s system ignores for example the issues raised by Lynch and Srull (1982) relating to the effect of memory on decision-making. For a more detailed analysis of other deficiencies in the Weinblatt system see chapter 5.
The eye movement recorder system, if it is to explore important issues raised in the literature, should measure topics such as, Global precedence (Miller 1981, Navon 1977, p23), the relationship between attention and perception (Kahneman 1973, Weber et al 1986, p26) and the effect of exposure to advertisements (Krugman 1965, Berg 1963, p27). Also the effect of persuasion and involvement (Cohen 1983, Greenwald and Leavitt 1984, p47), and visual stimuli in advertising (Kisielius and Sternthal 1984, p52).

An examination of the eye movement recorder system suggests that it may well be too simple an apparatus to fully explore these important issues. It could perhaps determine the respondent's attention to specific aspects of the advertisements, but little else.

The questionnaire is designed by Weinblatt to measure respondent's recall, behavioural intentions, and their preferences, and commitment to the experimental advertisement.

However, it would be useful to establish a direct relationship between the issues identified in the literature, (and summarised below), and those which Weinblatt proposes to measure.

Recall and recognition of text (Walker et al 1983, p18), transmitter and receiver effects of communication (Guerin and Innes 1989, p20), memory on visual or advertising stimuli (Johnson and Russo 1984, p15), appear to be covered by aspects of the questionnaire. So also are attitudes, including cognitive, affective and behavioural relations (Miller and Tessar 1986, p41), functional (Zimbardo 1977, p43), structural (Rosenberg 1960, p38), and theoretical approaches (Festinger 1957, p45).

Nevertheless, though the issues raised in the experimental literature referred to above appear to have influenced the design of the questionnaire, some of the precise
questions in the questionnaire do not relate precisely to the findings of research reviewed in the present study.

Other issues referred to in the literature were either partially ignored or forgotten by Weinblatt while constructing the questionnaire, for example, prior knowledge (Bettman 1986, Cohen and Chakravarti 1990, Kiel and Layton 1991 and Brucks 1985, p15) and personality and the self concept (Grubb and Grathwohl 1967, Hayatawa 1963, p31).

Section 2.1.0 in the literature review identifies issues of importance in pre-testing advertisements. Section 2.2.0 in the literature describes actual operating systems of pre-testing advertisements including the present one.

In adopting the Weinblatt system to test the hypothesis of the study the researcher's preliminary evaluation of the system indicated that it was neither perfect, nor indeed any more defective than any other system currently available. Hence it was decided to use this system in this study.
CHAPTER 3

METHODOLOGY

3.1.0 Objective of the study: That a given Advertisement can be Pre-Tested to predict the effectiveness of the communication intended in the Advertisement. An experiment would be conducted to establish if a given Pre-testing System can measure effectiveness in advertisements.

Specific Objectives: The experimental advertisements chosen were those of a Financial Institution (name withheld on request).

Each of the three experimental advertisements had the same basic layout, incorporating a headline, a picture, small print and a logo (see app.5).

The aim was to evaluate the communicative effectiveness of these three experimental advertisements for savings on behalf of the Institution by:

- Determining if the experimental advertisements captured the attention of the respondents.
- Communicating the intended product messages of the experimental advertisement.
- Generating a change in intention to purchase the experimental product.

3.2.1 The Present Study:

The Pre-Testing is a hybrid system of evaluating communication effectiveness in advertising, and was designed by Lee Weinblatt (Psychologist/Sociologist) in the U.S.A.

It is a hybrid system because it contains components which are cognitive, affective and behavioural.

(These components are discussed in detail later in this section).

Weinblatt takes the view that a hybrid system such as this is likely to be effective precisely because it contains
3.2.1 Description of Sample:

The target audience for this study consisted of 78 people selected from three market segments: Census Classification A, B, and C1—known as the experimental group.

The Target Audience was distributed as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34 yr olds</td>
<td>19%</td>
</tr>
<tr>
<td>45-60 yr olds</td>
<td>36%</td>
</tr>
<tr>
<td>self-employed</td>
<td>45%</td>
</tr>
</tbody>
</table>

| Total             | 100%       |

Locations: Dublin and Rural.

Each of the respondents went through a Screening Process. They were each asked certain questions to ensure that they met the criteria of the "Specific Target Audience" corresponding to the advertisement being tested. (See appendix 1).

3.2.2 Functions of the instruments used in the Pre-Pre-Testing system.

There were three "instruments" used: A) Catalogue Selection, B) Eye Movement Recorder, and C) Questionnaire.

3.2.3 Catalogue Selection Test:

A pre and post catalogue selection test were used. Each of the respondents were asked to look through a catalogue, which was compiled by the interviewer, consisting of a picture of the test product and six products of other selected financial institutions.

These acted as experimental controls. The respondents were asked to give their 1st and 2nd choices from all the products displayed (pre catalogue selection test). This response was recorded on a score sheet. The catalogue was then put aside until the end of the interview, and the respondents were once again asked their preference (post catalogue
selection test). Again their responses were recorded on a score sheet.

The purpose of this Catalogue selection test is to measure the extent before and after the viewing of the advertisements within the experiment of respondents perception of one brand versus another.

3.2.4 The Eye Movement Recorder System:

The Eye Movement Recorder System is a patented diagnostic system, developed and used by "Pre-Testing Inc" U.S.A.

This testing apparatus is an arrangement for monitoring the eye movements of a viewer exposed to a given visual stimulus, such as an advertisement displayed on a screen. Analysis of such eye movements supplies information about the extent of the viewer’s focus of attention to each portion of the advertisement under consideration, for example the top, bottom or centre of the advertisement.

The apparatus operates as follows: One camera is linked with a light source to detect eye movements indicated by a light beam deflected off the viewer’s cornea. Another camera is placed parallel to the screen and in front of the viewer. A right-angle lens directs light from the screen into the camera. The outputs of the two cameras are combined to superimpose the viewer’s eye movements on the test advertisements displayed on the screen. A running time starting with the instant the advertisement is exposed to the viewer is also combined with the eye movement and screen presentations.

With the use of this system it is possible to observe the Focus of Attention on a given advertisement. That is, to view the precise location, time of viewing and readership of text, of a given advertisement or parts thereof. The Eye Movement Recorder System records voluntary attention of the respondent (a remote control unit is provided).
This is intended to measure the extent to which the viewers of advertisements look at notices and concentrate, in a voluntary way, on the different parts of the advertisement in the natural advertising environment.

(The apparatus of the Eye Movement Recorder System is shown in figure 1).

Procedure

Each one of the respondents is taken to a studio where the Eye Movement Recorder System is set up. In order to reduce bias other products or advertisements are chosen, in accordance with the concept being tested. Projection slides are made of each of the advertisements. In addition to the projection slides, focus slides are also made and included. Focus slides are preliminary slides inserted into the beginning of each of the experimental slides, in order to establish the respondents normal focus.

The respondent are asked to sit, as comfortably as possible, maintaining their head in a relatively fixed position on the chin rest in front of the projection screen. The light source is positioned diagonally so that a beam of light rests on the respondent's left eye. The respondent is then asked to focus on the "x" of the focus slide.

The "eye"camera's function is a means for monitoring the viewer's eye movements in response to each visual stimulus (advertisement). The camera's lens must be level with the respondent's pupil. The experimenter uses the x,y,z. gears to locate the aforementioned eye movements. The "x" gear enables the "eye" camera to move up and down. The "y" gear enables the "eye" camera to go backwards or forwards - in turn increasing or decreasing the image or reflection on the pupil in size. The "z" gear enables the "eye" camera to go to the left or the right side of the respondent's eye.
The x.y.z. gears not only facilitates the movement of the "eye" camera but its focusing as well. Once the camera is positioned and the image located, it is necessary to reduce the image in size so that it fits in the centre of the "x" on the focus slide. (usually 1cm in diameter).

The video camera's function is to film the visual stimuli (advertisements) being displayed. The video camera and the "eye" camera are connected to the "gen" lock - which superimposes the two images and displays them onto the monitor. The timing module (Timer) is attached to the lens of the video camera, and provides a record of the time spent by the viewer, from once the visual stimulus is displayed on the screen.

The respondents are informed that they are about to see a series of pictures in slide form and can spend as much, or as little time as they wish on viewing each slide or part thereof. To advance to the next slide, the respondent simply presses the remote control button of the slide projector. The slides are arranged such that the focus routine is carried out after the viewing of each individual slide.

At this point in the experimental procedure, the experimenter asks the respondent to look at each of the letters on the focus slide:

w and then back to the x
s and then back to the x
r and then back to the x
b and then back to the x.

The experimenter adjusts accordingly.

(Further information on this detailed mechanism of the system is available in appendix 1).

It is the purpose of the Eye Movement Recorder test to:

1) Expose respondents to the test advertisement and other control advertisements, for a certain length of time.
2) To measure and record the length of time the respondents eye focuses on individual components of the experimental advertisements.

3.2.5 Questionnaire:

Following the completion of the Eye Movement Recorder Test, the respondent is then asked to administer the third part of the test, namely to complete a questionnaire, the final phase of the evaluating process. The questionnaire is a test based on the stimulus presented in the Eye Movement Recorder Test, it is intended to measure respondent's recall of specific advertisements and specific components of those advertisements.

The questionnaire lists a series of questions in relation to the test advertisements:

1) Respondent's recall of the experimental advertisements.
2) Respondent's behavioural intention - arising from exposure to the experimental advertisements.
3) Respondent's preference and commitment to the experimental advertisements.

The aforementioned questions are addressed/measured by using the following measurements from the questionnaire:

- Diagnostic analysis - the eye movement recorder analysis.
- Recall of experimental advertisement (brand name recall).
- Misidentification/confusion of experimental advertisement.
- Recall of the main message in the experimental advertisement.
- Respondents preference for specific aspects of the experimental advertisement (by attribute rating).
- Behavioural intention to purchase.
- Reason for behavioural intention.
- Respondents overall preference/rating of the experimental advertisement.
CHAPTER 4

RESULTS

4.1.0 Test 1: Catalogue Selection Test

The data was collected and presented in table form (see table 1) to measure the extent of respondents' perception of one brand versus another (see table 1).

4.2.0 Test 2: Eye Movement Recorder System

An analysis of variance was carried out using a software programme called "Genstat" to see if a significant difference existed between the length of time the respondents' eyes focused on individual components of the experimental and control advertisements (see Table 2).

A further test was administered, called "A Duncan's Multiple Range Test", to see where (if any) did the difference lie (see Table 3, App.3). Statistically significant differences between variables were calculated at the point .05 level (*), at the point .01 level (**), or at the point .001 level (***)

In addition, the Eye Movement Recorder results of the experimental advertisements were further analysed and summarised under four headings: Headline, Illustration, Small Print, Logo (these are the four main sections of the experimental advertisements, see Table 4).

4.3.0 Test 3: The Questionnaire

The raw data, from the questionnaires were analysed using a software programme called SAS. This analysis included:

1) Anova tests
2) Chi Squares
3) Percentage tables

The above analysis was carried out to measure:

1) Respondents' recall of the experimental advertisements.
2) Respondents' behavioural intention, arising from exposure to the experimental advertisements.
3) Respondents preference and commitment to the experimental advertisements (See App 4 & Tables 5-19).

Statistically significant differences between variables were calculated at the point .05 level (*), at the point .01 level (**), or at the point .001 level (***)
TEST 1: CATALOGUE SELECTION TEST.

Table 1

Catalogue Selection Choice

<table>
<thead>
<tr>
<th>Financial Institutions</th>
<th>Pre selection</th>
<th>Post selection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st Ch.</td>
<td>2nd Ch.</td>
</tr>
<tr>
<td>A</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>B</td>
<td>23%</td>
<td>18%</td>
</tr>
<tr>
<td>C</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>D</td>
<td>13%</td>
<td>18%</td>
</tr>
<tr>
<td>*E</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td>F</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>G</td>
<td>3%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Note. *E = Test Institution  
Ch = Choice

Table 1 reports the results of the extent of the respondents' perception of the experimental advertisement versus the control advertisements shown. The control advertisements A and B received 1st and 2nd preference respectively, in both pre and post selection. The experimental advertisement was under the 50 percentile (.5), however there was a slight change in favour of the experimental institution when post selection was administered - 1% increase in 1st Choice, and 3% in 2nd Choice preference.
TEST 2: THE EYE MOVEMENT RECORDER TEST

Table 2

Analysis of Variance between the experimental and control advertisements in terms of the percent of time respondents spent looking at the advertisements.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Sums of Squares</th>
<th>Mean Squares</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertisements</td>
<td>11</td>
<td>2542.18</td>
<td>231.11</td>
<td>15.28</td>
<td>.001</td>
</tr>
<tr>
<td>Residual</td>
<td>900</td>
<td>13611.03</td>
<td>15.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>911</td>
<td>16153.21</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F = 15.28, df = 11, *** P < .001

Table 2 shows that there is a significant difference at the point .001 level between the experimental and control advertisements in terms of the percent of time respondents spent looking at the advertisements.
## TEST 2: THE EYE MOVEMENT RECORDER TEST

### Table 3

Percent of time respondents dwelt on the experimental and control advertisements

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ad.3</td>
<td>11.2</td>
</tr>
<tr>
<td>ad.1</td>
<td>11.0</td>
</tr>
<tr>
<td>ad.8</td>
<td>9.7</td>
</tr>
<tr>
<td>ad.2</td>
<td>9.1 *</td>
</tr>
<tr>
<td>ad.12</td>
<td>9.1</td>
</tr>
<tr>
<td>ad.10</td>
<td>8.8</td>
</tr>
<tr>
<td>ad.5</td>
<td>8.2</td>
</tr>
<tr>
<td>ad.6</td>
<td>7.5 *</td>
</tr>
<tr>
<td>ad.9</td>
<td>6.8</td>
</tr>
<tr>
<td>ad.7</td>
<td>6.6</td>
</tr>
<tr>
<td>ad.11</td>
<td>6.6 *</td>
</tr>
<tr>
<td>ad.4</td>
<td>5.9</td>
</tr>
</tbody>
</table>

*Note - Ad2, Ad6 and Ad11 are the experimental advertisements respectively.
Table 3 presents the percent of time respondents dwelt on the experimental and control advertisements. From this table a "Duncan's Multiple Range" test, carried out to see where (if any) did the difference between the means of the advertisements lie. A standard difference between 2 means of 0.63 had to occur before any difference could be regarded as significant. The Duncan's multiple range test showed that were there is a significant difference between some advertisements, there is no significant difference between the three test advertisements (See Appendix 3).
TEST 2: EYE MOVEMENT RECORDER TEST: Experimental Advertisements

Table 4

Length of time respondent's eye focused on main sections of the experimental advertisements

<table>
<thead>
<tr>
<th></th>
<th>Headline</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AD1</td>
<td>AD2</td>
</tr>
<tr>
<td>Initial Focus of Attention</td>
<td>75 13 23</td>
<td>9 87 77</td>
</tr>
<tr>
<td>Ultimate Focus of Attention</td>
<td>36 17 23</td>
<td>26 54 50</td>
</tr>
<tr>
<td>Text Comprehension</td>
<td>71 70 80</td>
<td>0 0 0</td>
</tr>
<tr>
<td>Overall Focus of Attention</td>
<td>38 31 40</td>
<td>21 38 36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Small Print</th>
<th>Logo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AD1</td>
<td>AD2</td>
</tr>
<tr>
<td>Initial Focus of Attention</td>
<td>16  0  0</td>
<td>0   --  --</td>
</tr>
<tr>
<td>Ultimate Focus of Attention</td>
<td>32  29 27</td>
<td>6   --  --</td>
</tr>
<tr>
<td>Text Comprehension</td>
<td>26  26 18</td>
<td>3   4  2</td>
</tr>
<tr>
<td>Overall Focus of Attention</td>
<td>32  21 17</td>
<td>9   9  7</td>
</tr>
</tbody>
</table>

Note - The percentage for the four components of each advertisement equal 100% for each measure.
Advertisement 1 received 75% initial focus of attention on its headline, in comparison to 13% advertisement 2 and 23% advertisement 3; however, text comprehension of the headline was highest for advertisement 3, in addition, the headline received the highest overall focus of attention. Advertisement 2 scored highest in all, initial focus of attention, ultimate focus of attention and overall focus of attention, regarding the Illustration. The illustration focus of advertisement 1 was very low relative to the other two advertisements. The small print in advertisement 3 did get the lowest percentage score regarding text comprehension and overall focus of attention; however relative to its content it could be said that advertisement 3 received greatest attention. Text comprehension and overall focus of attention of the logo received very poor results for all three advertisements, with only a slight variation in each. The results show that the three advertisements vary in focus of attention, text comprehension and impact. We now proceed to examine the recall of the experimental advertisements message in relation to these specific findings.
**TEST 3: THE QUESTIONNAIRE ANALYSIS (Table 5 to 19)**

Table 5

Specific recall responses to the experimental advertisements

<table>
<thead>
<tr>
<th></th>
<th>Recalled</th>
<th>Not Recalled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad.1</td>
<td>5</td>
<td>95</td>
</tr>
<tr>
<td>Ad.2</td>
<td>18</td>
<td>82</td>
</tr>
<tr>
<td>Ad.3</td>
<td>46</td>
<td>54</td>
</tr>
</tbody>
</table>

N = 78

To test for significance a Chi Square was carried out.

\[ \chi^2_{\text{obs}} = 38.46, \quad df = 2, \quad *** \quad P < .001 \]

There was a significant difference between the subjects responses in recalling advertisements at the point .001 level. This is clearly seen from table 5 where Ad.3 shows a much greater recall than Ad.1 and Ad.2 (See Appendix 4 & App.Q2).
In the next section of the questionnaire respondents were asked to indicate their perception of the main message contained in the experimental advertisements using open-ended questions.

Table 6

<table>
<thead>
<tr>
<th>Main message recall</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidentiality</td>
<td>45</td>
</tr>
<tr>
<td>Service</td>
<td>26</td>
</tr>
<tr>
<td>Good Interest Rates</td>
<td>6</td>
</tr>
<tr>
<td>Security</td>
<td>5</td>
</tr>
<tr>
<td>Savings</td>
<td>4</td>
</tr>
<tr>
<td>Blank</td>
<td>14</td>
</tr>
</tbody>
</table>

(See App.2, Q3)

The main message recalled by respondents was confidentiality (45%) and service (26%), savings only receiving 4%.
Table 7

Main message recall for the three experimental advertisements

<table>
<thead>
<tr>
<th>1st Advertisement</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings</td>
<td>36</td>
</tr>
<tr>
<td>Personal Benefits</td>
<td>10</td>
</tr>
<tr>
<td>Security</td>
<td>5</td>
</tr>
<tr>
<td>Competitive Interest rates</td>
<td>4</td>
</tr>
<tr>
<td>Wide Range of Options</td>
<td>3</td>
</tr>
<tr>
<td>Don't Know</td>
<td>23</td>
</tr>
<tr>
<td>Others</td>
<td>19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Advertisement</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual service</td>
<td>52</td>
</tr>
<tr>
<td>Range of options</td>
<td>17</td>
</tr>
<tr>
<td>Confusing</td>
<td>9</td>
</tr>
<tr>
<td>Don't Know</td>
<td>22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Advertisement</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidentiality</td>
<td>55</td>
</tr>
<tr>
<td>Range of options</td>
<td>12</td>
</tr>
<tr>
<td>Security</td>
<td>6</td>
</tr>
<tr>
<td>Don't Know</td>
<td>27</td>
</tr>
</tbody>
</table>
In the 1st Advertisement savings scored the highest recall (36%), individual service received 52% recall for advertisement 2, and finally the 3rd advertisement scored 55% for confidentiality. In all three advertisements 23%, 22%, and 27% respectively could not recall any thing about the main message(s) in the experimental advertisements. (See App.2, Q4)

We now proceed to the next part of the questionnaire were respondents were asked to give their overall preference for specific aspects of the three experimental advertisements.
Table 8 shows 96% of respondents agreed that the experimental advertisements showed the experimental Institution as being secure/safe, convenience and accessibility scored 88%, while 46% only agreed the experimental Institution was suitable for investment and 36% for cost of investment. (See App.2, Q5)
Table 9

**Impact of the experimental advertisements on respondents' behavioural intention to save with the experimental Institution**

<table>
<thead>
<tr>
<th></th>
<th>Will Save</th>
<th>Neutral</th>
<th>Will Not Save</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad.1</td>
<td>15</td>
<td>15</td>
<td>70</td>
</tr>
<tr>
<td>Ad.2</td>
<td>26</td>
<td>19</td>
<td>55</td>
</tr>
<tr>
<td>Ad.3</td>
<td>54</td>
<td>19</td>
<td>27</td>
</tr>
</tbody>
</table>

N = 78

To test for significance a Chi Square was carried out.

\[ X_{obs} = 33.21, \text{ df} = 4, *** P < .001 \]

There was a significant difference between the advertisements responses at the point .001 level, this is clearly seen from the table where Ad.3 shows a more positive response than Ad.1 and Ad.2 (See Appendix 4 & App.2, Q6)

Having asked the Respondents their behavioural intention to save with the experimental institution, this section of the questionnaire used open-ended questions, allowing respondents to use their own terminology to give their reasons.

The following phrases are an abbreviation of the respondents own terminology:

1) Why they will save, see Table 10.
2) Why they might/might not save, see Table 11.
3) Why they will not save, see Table 12 (See App.2, Q7)
Table 10

Why save with the experimental Institution

<table>
<thead>
<tr>
<th>Why they will save having seen Ad.1</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Advert</td>
<td>27</td>
</tr>
<tr>
<td>Encouraging</td>
<td>27</td>
</tr>
<tr>
<td>Attention Grabbing</td>
<td>19</td>
</tr>
<tr>
<td>Good Prospects</td>
<td>9</td>
</tr>
<tr>
<td>Dependable</td>
<td>9</td>
</tr>
<tr>
<td>Past Experience</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Why they will save having seen Ad.2</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Advert</td>
<td>30</td>
</tr>
<tr>
<td>Different Needs</td>
<td>30</td>
</tr>
<tr>
<td>Clear Cut Image</td>
<td>20</td>
</tr>
<tr>
<td>Different to other Banks</td>
<td>5</td>
</tr>
<tr>
<td>Catchy</td>
<td>5</td>
</tr>
<tr>
<td>Important Message</td>
<td>5</td>
</tr>
<tr>
<td>Convincing</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Why they will save having seen Ad.3</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidential</td>
<td>39</td>
</tr>
<tr>
<td>To the Point</td>
<td>20</td>
</tr>
<tr>
<td>Good Text/Layout</td>
<td>15</td>
</tr>
<tr>
<td>Attention Grabbing</td>
<td>10</td>
</tr>
<tr>
<td>Security</td>
<td>5</td>
</tr>
<tr>
<td>Humour</td>
<td>5</td>
</tr>
<tr>
<td>Positive Air</td>
<td>2</td>
</tr>
<tr>
<td>Solid Citizen</td>
<td>2</td>
</tr>
<tr>
<td>Makes Sense</td>
<td>2</td>
</tr>
</tbody>
</table>
27% of Respondents would save with the experimental institution, having seen advertisement 1, because they thought it was a good advertisement, but only 9% having seen the experimental advertisement thought the experimental institution had good prospects.

30% of respondents would save with the experimental institution, having seen advertisement 2, because they thought it was a good advertisement, only 5% found the message important.

Confidentiality, (the main message) in the 3rd experimental advertisement scored 39%, however, security only scored 5%.
Table 11

Why might/might not save with the experimental Institution

Why they might/might not save having seen Ad.1

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boring Headline</td>
<td>23</td>
</tr>
<tr>
<td>Not Convincing</td>
<td>23</td>
</tr>
<tr>
<td>Confusing</td>
<td>15</td>
</tr>
<tr>
<td>Savings Idea</td>
<td>15</td>
</tr>
<tr>
<td>Strong Statement</td>
<td>8</td>
</tr>
<tr>
<td>Does Not Relate</td>
<td>8</td>
</tr>
<tr>
<td>Waffle</td>
<td>8</td>
</tr>
</tbody>
</table>
(Table 11 Cont'd)

<table>
<thead>
<tr>
<th>Why they might/might not save having seen Ad.2</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Appealing</td>
<td>44</td>
</tr>
<tr>
<td>No Message</td>
<td>13</td>
</tr>
<tr>
<td>Clever Ad</td>
<td>13</td>
</tr>
<tr>
<td>Art on Ad</td>
<td>6</td>
</tr>
<tr>
<td>Interesting</td>
<td>6</td>
</tr>
<tr>
<td>Secure</td>
<td>6</td>
</tr>
<tr>
<td>Same as Others</td>
<td>6</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Why they might/might not save having seen Ad.3</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grabs Attention</td>
<td>24</td>
</tr>
<tr>
<td>Not Related</td>
<td>13</td>
</tr>
<tr>
<td>More Information</td>
<td>13</td>
</tr>
<tr>
<td>Thought Provoking</td>
<td>13</td>
</tr>
<tr>
<td>Confidential</td>
<td>13</td>
</tr>
<tr>
<td>Unimpressive</td>
<td>6</td>
</tr>
<tr>
<td>Nothing New</td>
<td>6</td>
</tr>
<tr>
<td>Slow to Change</td>
<td>6</td>
</tr>
<tr>
<td>Range of Options</td>
<td>6</td>
</tr>
</tbody>
</table>

23% of the respondents were uncertain of saving with the experimental institution because they found advertisement 1 (headline) boring, a further 23% found the experimental advertisement (1) was not convincing.

44% were uncertain of saving because advertisement 2 was not appealing and only 6% thought the experimental advertisement was interesting.

24% of respondents found advertisement 3 did not hold their attention, 13% could not relate to the advertisement.
Table 12

Why not save with the experimental Institution

Why they will not save having seen Ad.1

<table>
<thead>
<tr>
<th>Reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Information</td>
<td>30</td>
</tr>
<tr>
<td>Unattractive</td>
<td>27</td>
</tr>
<tr>
<td>Bland</td>
<td>16</td>
</tr>
<tr>
<td>Meaningless</td>
<td>11</td>
</tr>
<tr>
<td>Confusion</td>
<td>9</td>
</tr>
<tr>
<td>Layout</td>
<td>4</td>
</tr>
<tr>
<td>Low Interest Rates</td>
<td>3</td>
</tr>
</tbody>
</table>

Why they will not save having seen Ad.2

<table>
<thead>
<tr>
<th>Reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimpressive</td>
<td>33</td>
</tr>
<tr>
<td>Bad Advertisement</td>
<td>17</td>
</tr>
<tr>
<td>Confusing/No Point</td>
<td>17</td>
</tr>
<tr>
<td>No Information</td>
<td>14</td>
</tr>
<tr>
<td>Too Yuppie</td>
<td>12</td>
</tr>
<tr>
<td>Not Believable</td>
<td>5</td>
</tr>
<tr>
<td>Low Interest Rates</td>
<td>2</td>
</tr>
</tbody>
</table>
(Table 12 cont’d)

Why they will not save having seen Ad.3

<table>
<thead>
<tr>
<th>Reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Appeal</td>
<td>27</td>
</tr>
<tr>
<td>Not Convincing</td>
<td>22</td>
</tr>
<tr>
<td>No Message</td>
<td>14</td>
</tr>
<tr>
<td>Low Interest Rate</td>
<td>9</td>
</tr>
<tr>
<td>Confidentiality Unimportant</td>
<td>9</td>
</tr>
<tr>
<td>No Comparison</td>
<td>5</td>
</tr>
<tr>
<td>Stupid</td>
<td>5</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>9</td>
</tr>
</tbody>
</table>

Having seen advertisement 1 30% found it did not give sufficient information and 27% did not find this experimental advertisement attractive.

33% of respondents were unimpressed with experimental advertisement 2, 17% thought it a bad advertisement and a further 17% found it confusing.

27% of respondents did not find experimental advertisement 3 appealing and 22% were not convinced by it.
Table 13

Reasons given by respondents for their behavioural intention, arising from their exposure to the experimental advertisements.

<table>
<thead>
<tr>
<th></th>
<th>Like</th>
<th>Neutral</th>
<th>Dislike</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad.1</td>
<td>29</td>
<td>39</td>
<td>32</td>
</tr>
<tr>
<td>Ad.2</td>
<td>41</td>
<td>39</td>
<td>20</td>
</tr>
<tr>
<td>Ad.3</td>
<td>63</td>
<td>28</td>
<td>9</td>
</tr>
</tbody>
</table>

N = 78

To test for significance a Chi Square was carried out.

$X_{obs} = 21.66$, df = 4, *** P < .001

There was a significant difference between the respondents' responses at the point .001 level, this is seen from the table where Ad.3 shows a more positive response than Ad.1 and Ad.2 (See Appendix 4 & App.2, Q8)

After the respondents were asked to express their attitudes towards the experimental advertisements, they were then asked using open-ended questions, to give their reasons why. The following phrases are an abbreviation of the respondents' own terminology.

1) What they liked about the advert - See Table 14.
2) What they disliked about the advert - See Table 15.
3) What they found confusing about the advert - See Table 16. (See App.2, Q's 9, 10, 11)
Table 14

What the Respondents liked about the experimental advertisements.

What did you like about the 1st Advertisement?

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wording</td>
<td>23</td>
</tr>
<tr>
<td>Silver Cloud</td>
<td>16</td>
</tr>
<tr>
<td>Good Ad</td>
<td>6</td>
</tr>
<tr>
<td>Good Heading</td>
<td>5</td>
</tr>
<tr>
<td>Big Print</td>
<td>4</td>
</tr>
<tr>
<td>Impression/Feeling</td>
<td>3</td>
</tr>
<tr>
<td>Layout</td>
<td>1</td>
</tr>
<tr>
<td>nothing</td>
<td>42</td>
</tr>
</tbody>
</table>
(Table 14 Cont’d)

<table>
<thead>
<tr>
<th>What did you like about the 2nd Advertisement?</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
</tr>
<tr>
<td>Image</td>
</tr>
<tr>
<td>26</td>
</tr>
<tr>
<td>Simplicity</td>
</tr>
<tr>
<td>13</td>
</tr>
<tr>
<td>Good Ad</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>Wording</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>Different Needs</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>nothing</td>
</tr>
<tr>
<td>38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What did you like about the 3rd Advertisement?</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
</tr>
<tr>
<td>Wording</td>
</tr>
<tr>
<td>49</td>
</tr>
<tr>
<td>Subtle</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>Picture</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>Layout</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>Everything</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>Tells About Bank</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>nothing</td>
</tr>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

23% of respondents liked the wording in experimental advertisement 1, but only 5% liked the headline.

The image in experimental advertisement 2 scored 26% while the wording only scored 8%.

For experimental advertisement 3, 49% of respondents liked the wording and only 3% did not like the advertisement.

42%, 38% and 16% of respondents liked "nothing" about the three experimental advertisements 1, 2, and 3 respectively.
Table 15
What the Respondents disliked about the experimental advertisements

What was disliked about the 1st Advertisement?

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Print</td>
<td>17</td>
</tr>
<tr>
<td>No Information</td>
<td>15</td>
</tr>
<tr>
<td>Dull/Bland</td>
<td>12</td>
</tr>
<tr>
<td>Bad Picture</td>
<td>10</td>
</tr>
<tr>
<td>Poor Concept</td>
<td>9</td>
</tr>
<tr>
<td>Confusing</td>
<td>8</td>
</tr>
<tr>
<td>nothing</td>
<td>29</td>
</tr>
</tbody>
</table>

What was disliked about the 2nd Advertisement?

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too Yuppie</td>
<td>13</td>
</tr>
<tr>
<td>Small Print</td>
<td>8</td>
</tr>
<tr>
<td>Ineffective</td>
<td>8</td>
</tr>
<tr>
<td>Unclear Message</td>
<td>6</td>
</tr>
<tr>
<td>Dull</td>
<td>5</td>
</tr>
<tr>
<td>No Facts</td>
<td>2</td>
</tr>
<tr>
<td>Stupid</td>
<td>2</td>
</tr>
<tr>
<td>Everything</td>
<td>3</td>
</tr>
<tr>
<td>Not Specific</td>
<td>3</td>
</tr>
<tr>
<td>nothing</td>
<td>50</td>
</tr>
</tbody>
</table>
What was disliked about the 3rd Advertisement?

<table>
<thead>
<tr>
<th>%</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Bad Picture</td>
</tr>
<tr>
<td>9</td>
<td>Layout</td>
</tr>
<tr>
<td>8</td>
<td>Poor Message</td>
</tr>
<tr>
<td>3</td>
<td>Lacks Credibility</td>
</tr>
<tr>
<td>3</td>
<td>Lack Colour</td>
</tr>
<tr>
<td>3</td>
<td>No Facts</td>
</tr>
<tr>
<td>56</td>
<td>Nothing</td>
</tr>
</tbody>
</table>

17% of respondents did not like the small print in experimental advertisement 1 and 15% found there was no information in the advertisement. Only 29% disliked "nothing" about the advertisement.

13% of respondents could not relate to experimental advertisement 2 (too yuppie) and 50%. 50% of respondents liked the advertisement.

18% of respondents thought the picture was bad but 56% of respondents found "nothing" they disliked about the advertisement.
Table 16
What the Respondents found confusing about the experimental advertisements

What was confusing about the 1st Advertisement?

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everything</td>
<td>10</td>
</tr>
<tr>
<td>Too small</td>
<td>8</td>
</tr>
<tr>
<td>Ambiguous</td>
<td>5</td>
</tr>
<tr>
<td>Uninformative</td>
<td>5</td>
</tr>
<tr>
<td>Long-winded</td>
<td>3</td>
</tr>
<tr>
<td>Doubtful</td>
<td>1</td>
</tr>
<tr>
<td>Like Insurance Ad</td>
<td>1</td>
</tr>
<tr>
<td>Nothing</td>
<td>67</td>
</tr>
</tbody>
</table>

What was confusing about the 2nd Advertisement?

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everything</td>
<td>18</td>
</tr>
<tr>
<td>Text too small</td>
<td>3</td>
</tr>
<tr>
<td>Uninteresting</td>
<td>1</td>
</tr>
<tr>
<td>No Message</td>
<td>1</td>
</tr>
<tr>
<td>Picture</td>
<td>1</td>
</tr>
<tr>
<td>No Detail</td>
<td>1</td>
</tr>
<tr>
<td>nothing</td>
<td>75</td>
</tr>
</tbody>
</table>
What was confusing about the 3rd Advertisement?

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>3</td>
</tr>
<tr>
<td>Everything</td>
<td>3</td>
</tr>
<tr>
<td>Small Text</td>
<td>1</td>
</tr>
<tr>
<td>Heading</td>
<td>1</td>
</tr>
<tr>
<td>Logo too Small</td>
<td>1</td>
</tr>
<tr>
<td>Not Believable</td>
<td>1</td>
</tr>
<tr>
<td>nothing</td>
<td>90</td>
</tr>
</tbody>
</table>

In all three of the experimental advertisements a high percentage of respondents found "nothing" confusing, 67% advertisement 1, 75% advertisement 2 and 90% advertisement 3.
Table 17

Friedman’s Anova results for differences between three experimental advertisements for each descriptor.

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD 1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>3 Ads</td>
</tr>
<tr>
<td>Seen this ad before</td>
<td>16 19 12</td>
<td>1 4 6</td>
<td>83 77 82</td>
<td>NS</td>
</tr>
<tr>
<td>Good place to save</td>
<td>23 28 58</td>
<td>19 21 15</td>
<td>58 51 27</td>
<td>.001</td>
</tr>
<tr>
<td>Look forward to seeing ad again</td>
<td>19 25 52</td>
<td>10 9 15</td>
<td>71 62 33</td>
<td>.001</td>
</tr>
<tr>
<td>Learned something new</td>
<td>9 11 23</td>
<td>8 9 19</td>
<td>83 80 57</td>
<td>.05</td>
</tr>
<tr>
<td>Liked picture</td>
<td>40 56 60</td>
<td>9 14 15</td>
<td>51 30 25</td>
<td>.01</td>
</tr>
<tr>
<td>Ad doesn’t relate to savings habits</td>
<td>57 58 40</td>
<td>24 23 33</td>
<td>19 19 27</td>
<td>NS</td>
</tr>
<tr>
<td>Liked style/text</td>
<td>40 60 72</td>
<td>17 10 15</td>
<td>43 30 13</td>
<td>.001</td>
</tr>
</tbody>
</table>

As seen from the overall results above advertisement 3 scored highest in almost all descriptors. (See App.4 & App.2, Q12)
<table>
<thead>
<tr>
<th></th>
<th>Convenience</th>
<th>Advertising</th>
<th>Opening Hours</th>
<th>Tax Confidentiality</th>
<th>Personal Service</th>
<th>High Interest Rates</th>
<th>Security</th>
<th>Opinion of Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Yes</td>
<td>80</td>
<td>27</td>
<td>75</td>
<td>68</td>
<td>90</td>
<td>91</td>
<td>94</td>
<td>92</td>
</tr>
<tr>
<td>% No</td>
<td>20</td>
<td>73</td>
<td>25</td>
<td>32</td>
<td>10</td>
<td>9</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

(See App. 2, Q13)

The results from table 19 indicate that security (94%), high interest rate (91%) and personal service (90%) greatly influence the respondents choice of place in which to save.
Table 19

Indicates the respondents top three choices, of what influences their choice of place in which to save.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience</td>
<td>23%</td>
</tr>
<tr>
<td>Advertising</td>
<td>0%</td>
</tr>
<tr>
<td>Opening Hours</td>
<td>5%</td>
</tr>
<tr>
<td>Tax Confidentiality</td>
<td>8%</td>
</tr>
<tr>
<td>Personal Service</td>
<td>10%</td>
</tr>
<tr>
<td>High Interest Rates</td>
<td>39%</td>
</tr>
<tr>
<td>Security</td>
<td>15%</td>
</tr>
<tr>
<td>Opinion of Others</td>
<td>0%</td>
</tr>
</tbody>
</table>

(See App. 2, Q14)
RESULTS OVERVIEW

1. Catalogue Selection Test:
This test established the relative position of the test advertisements according to respondents in relation to six other control advertisements. The results of this test also indicate little shift in perception regarding the experimental product on second viewing by the respondent (post selection). See table 1.

2. The eye movement recorder system test:
An analysis of variance test indicated a significant difference between the experimental and control advertisements, (table 2). A further test showed that no significant difference between the means of the experimental advertisements existed but that a significant difference did exist between them and the control advertisements, (table 3). Further analysis of the eye movement recorder system test showed that a variation in focus of attention, text comprehension and impact existed, (table 4).

3. The Questionnaire:
The questionnaire results showed that one of the three experimental advertisements was recalled significantly better than the other two, (table 5). The results showed the main messages recalled were "confidentiality" and "service", (table 6). The results also showed that respondents preference for specific aspects of the experimental advertisements were mainly to do with "security", "convenience" and "easier access" of the experimental financial institution. With regard to behavioural intention, the results showed that respondents were influenced to save in line with the intended
message of the advertisements more by advertisement 3 than by any other advertisement (1 or 2), (table 9 & 13).

Friedman's anova results indicated that advertisement 3 scored highest for almost all descriptors given by respondents, (table 17).

In relation to information reported by respondents on the questionnaire on their choice of saving institution results showed that "security", "high interest rates" and "personal service" are the strongest influences on saving intention.
CHAPTER 5
Discussion

An Overview:

The purpose of this study was to examine the technique of Pre-Testing advertisements for effectiveness, and to establish a psychological basis for such Pre-Testing.

The hypothesis states that a given advertisement can be pre-tested to predict the effectiveness of communication intended by the advertisement. An experiment is conducted to see if a given pre-testing system can measure effectiveness in advertisements.

This effectiveness was measured by the extent to which the advertisement:

1) Captured the attention of the respondents
2) Communicated the intended message(s) to the respondents
3) Generated a change in intention to purchase.

The three experimental advertisements are tested on a sample of the target audience (See to p76, ch.3). The respondents were given three tests:

1) Catalogue Selection Test
2) Focus of Attention using an Eye Movement Recorder Test
3) Completion of a Questionnaire (See p76, ch.3).

Results showed significant differences between the effectiveness of the three experimental advertisements - See tables 20 and 21 for a summary of the more significant results.

Advertisements 1 and 2 failed to communicate the intended message(s) and thus advertisements 1 and 2 could be classified as ineffective. The third advertisement was effective. The system used, therefore, was shown to distinguish between the effectiveness of different advertisements.
Table 20  Comparison of Positive Responses Between The Three Experimental Advertisements

(Refer to Tables 5,13,9;Ch 4)
Table 21

Sample of Results for Descriptors tested showing Positive Differences between Three Experimental Advertisements

(Refer to table 17: ch 4)
Therefore, it could be said that the hypothesis was supported and the effectiveness of the advertisements predicted.

The key emphasis must be on establishing whether the consumer decodes the communication in the manner intended by the sender, and providing a scientifically based Pre-Testing system which could prove of importance for Advertising, Research and Psychology.
CHAPTER 5
Discussion

Hypothesis:

This study investigated the following hypothesis;

That a given advertisement can be pre-tested to predict the effectiveness of the communication intended in the advertisement.

Experiment:

An experiment was conducted to see if a given Pre-Testing system can measure effectiveness in advertisements.

The following discussion evaluates the hypothesis and presents implications for further research.

As described in the methods section, three tests were undertaken:

Test 1. A catalogue selection;
Test 2. Focus of attention using; An Eye Movement Recorder System and;
Test 3. Completion of a questionnaire.

This system is designed to work, utilising these three tests and accordingly, more accurately predict the extent of effectiveness of an advertisement.

The results, at this point, will be discussed under each test separately.

TEST 1: CATALOGUE SELECTION.

The data was analysed with a view to using the results as one measure of the consumers perception of the experimental product/brand versus other products/brands.

As described in chapter 3, methodology, p75 a pre and post catalogue selection test were used.

The purpose of this catalogue selection test was to measure the extent of respondents perception of one brand versus another, before and after the viewing of the advertisements within the experiment.
Six other financial institutions were included in the test, in order to reduce bias. The results of the test institution are discussed here.

The results in table 1 show respondents choice/preference between the various financial institutions and the test institution’s place in that comparison.

This test has been shown to distinguish between respondents awareness of the seven different financial institutions. The range of awareness is 23% to 3%.

The test institution ranked 5th out of seven places, for first and second choice.

This first test in this sector indicates the status of the product advertised at a point prior to the viewing of the advertisement.

In this test it is intended to establish the extent to which consumer choice is based on judgement or decision processes, or on memory. The relative influence of recalled attributes versus prior evaluations in memory - based judgments supporting the above has received attention Lichtenstein and Srull, 1985,. (refer to p16, chap.2). The relationship between memory and decision processes is also studied by various researchers , Lynch and Srull,1982; Bettman, 1979; and Hayes-Roth,1982. (refer to p16, chap.2).

In the second catalogue selection test (post viewing), where differences occur between the pre and post viewing selection, the results show the first and second choice after viewing the advertisements. For the test institution the 1st choice increased from 12% to 13% and 2nd choice from 14% to 17%

A slight shift occurred in favour of the experimental (advertised) Institution after viewing the advertisements (As indicated above or see Table 1). However, the results suggests that overall, there is a positive feeling towards the
Institution, and change/improvement can, and will take place, under certain conditions. The results also indicated that it is not from memory alone, but from stimulus based processes, this is supported by Bettman 1979 and Hayes-Roth 1982. There was a positive shift in perception with regard to confidentiality, convenience, as well as easy access to one's money. However, in other more important aspects there was no shift.

On the other hand these results also indicate that no significant change takes place in respondents perceptions in post viewing, 12% to 13% - 1st choice and 14% to 17% - 2nd choice.

The catalogue selection test does not take into account preconceived ideas about the product. Unless the advertisement is very strong it will not cause an immediate change in attitude, preference or behaviour.

Another weakness of the test might be said to be that it ignores the self-concept or ego-threat involved in admitting to a change in preference in the presence of the same interviewer.

It could also be argued that the exposure time for viewing the advertisements was insufficient to cause a change in the respondent's preference.

The shift or lack of it could also be explained by the realisation that memory and decision processes interact, as reported by Lynch and Srull (1982). If the new stimulus is not strong enough to cause a shift in attitude or/and behaviour, the memory based choices will prevail.

Recent theoretical speculation in consumer psychology has emphasised contingent approaches to persuasion. One of the major contingency variables has been the degree of "Involvement" (refer to p48, chap. 2).

Several different theories have postulated differing persuasion processes under low and high involvement (Batra and Ray, 1983; Zajonc, 1968; Deighton, 1983) (p48, ch.2).
Cacioppo and Petty (1984) have proposed that persuasion occurs via diligent message processing under high involvement, (the central route), or via positive or negative cues associated with the message under low involvement (the peripheral route).

In this present study it is suggested that an important factor in the search for persuasive methods is the testing of consumer choices and pre-testing of reactions to certain messages which are intended to be communicated. This may be accomplished with a sample of the intended target audience, especially when tested under conditions most closely resembling the natural everyday advertising/viewing environment.

The above points suggest that the Catalogue Selection Test needs further research and development.

**TEST 2: EYE MOVEMENT RECORDER SYSTEM.**

This testing apparatus is an arrangement for monitoring the eye movements of a viewer exposed to a given visual stimulus, such as an advertisement displayed on a screen. Analysis of such eye movements supplies information about the extent of the viewer's focus of attention to each portion of the advertisement under consideration, e.g. top, bottom of center of the advertisement.

It is the purpose of the eye movement recorder test to

1) Expose respondents to the test advertisement and other control advertisements, for a certain length of time.

2) To measure and record the length of time the respondents eye focused on individual components of the experimental advertisements.

In this study, an analysis of variance was carried out in test 2. Results showed in table 2 that a significant difference exists between the experimental and control advertisements in terms of the percent of time people spent looking at the slide advertisements (at the .001 level).
It is clear from these results that some advertisements attract more attention than others.

A further test was carried out called a Duncan’s Multiple Range Test, to see where (if any) did the difference lie between advertisements. There was a difference between the experimental advertisements, however, this difference was not statistically significant (See Table 3).

In addition the eye movement recorder results of the experimental advertisements were further analysed and summarised under four headings, headline, illustration, small print and logo (See table 4, chap.4 and p87, chap.5 for discussion).

These results raise the question of global precedence in attention and decision. The literature would indicate that previous researcher’s have not been able to agree on the influence of global precedence in attention and decision (refer to p23, chap 2).

Experimental psychology investigates the theory of whether processing of the overall structure precedes and determines the processing of the components ; or vice versa.

Woodworth (1954) asked the question "whether the elements of a figure get together and build up a whole, or whether the whole figure emerges and organises the available elements".

Miller (1981) does not support the view regarding global precedence as held by Hoffman (1980), Kinchla and Wofle (1979), Martin (1979) and Navon (1977).

Miller (1981) holds that an analysis of results of experiments makes the perceptual global precedence hypothesis completely untenable.

The foregoing will be referred to again as we discuss the findings of this test (test 2).

However attracting attention alone is no guarantee that the intended message is being communicated. The actual word or
picture attracting attention may mean something very different than what was intended. It may be an irritant, humourous or even a distraction, and consequently the information gleaned from this particular analysis can only be studied in conjunction with other results obtained relative to the same advertisements.

It is suggested by Miller (1981) that the decision-process is somehow combining information from the two levels of global targets and local targets.

The results obtained using the Eye Movement Recorder do not support this view.

In this study, the eye movement recorder did succeed in establishing a significant difference among the experimental and control advertisements on the time spent looking at the advertisements. What is important here is to further probe with the respondents what actually is causing the variation in time spent on one or other, and what message is the respondent taking in.

A record of overall time spent looking at an advertisement is a first step. A record of the division of time spent on looking at the experimental advertisements as between the top, the middle and the bottom, or other sections of the advertisements follows.

It must also be pointed out that where there were no significant difference between advertisements in terms of the percent of time people spend looking at them. There still can be a difference in communication effectiveness when subjected to further tests, as indeed is the case in relation to the experimental advertisements 1, 2 and 3. The results showed that the three experimental advertisements varied in effectiveness of the communication of the intended message.

These results raise the question of the role and extent of involvement in an advertisement.

In this task the results were interpreted as follows:

In this study, the eye movement recorder system was used to expose respondents to the experimental and control advertisements, for a certain length of time. Also, to measure and record the length of time respondents' eye focused on individual components of the experimental and control advertisements. Using this information it was possible to pinpoint the focus of attention. The extent to which viewers of advertisements can be measured, as can whether the message was actually being read or just glanced at (text comprehension).

It is possible to determine whether the message was read or not, but readership (text comprehension), like focus of attention, does not show that the intended message has been communicated (i.e. the difference between what was intended and what was received). A structured questionnaire helps in this aspect.

In this study, Task 3 deals with the questionnaire aspect.

First Test Advertisement:

The first advertisement's headline gained most of the attention, (initial focus of attention 75% and ultimate focus of attention 63%). The illustration focus was low relative to the other two advertisements (advertisements 2 and 3), with its initial focus of attention at 9% and ultimate focus of attention 26%. The small print text comprehension was low relative to advertisement 3. The recall of advertisement was low relative to advertisement 2 and 3.
The foregoing suggests that the headline was confusing, the picture was not relevant, and the small print was difficult, being either too small or had too many words. In all, the advertisement was a bad and/or poor communication.

Attention is to be one of the most vague equivocal concepts in psychology, (Navon, 1977) and indeed the relationship between attention and perception is not definitive.

As seen from the results, the small print text comprehension was low relative to the illustration. This suggests that excessive capacity demands on attention can affect the processes in the mind which control the allocation of attention tasks.

According to Kahneman’s (1973) capacity theory, an allocation policy determines how much of ones available attentional capacity is directed to various activities involved in tasks. If the supply of attention does not meet task demands, the level of performance declines (refer to p26, ch.2).

Weber et al (1986) suggest that to switch or reallocate attention is a time consuming process. When the attentional capacity has reached its threshold it can result in an affect on ones ability to perform memory and/or perceptual tasks (refer p26, ch.2).

Second Test Advertisement :

The second advertisement’s headline got least attention, (initial focus of attention 13% and ultimate focus of attention 17%). The illustration focus was very high with the initial focus of attention at 87% and ultimate focus of attention at 54%. The small print was very low, (initial focus of attention at zero and ultimate focus of attention 29%). Recall of this advertisement was poor relative to advertisement 3 but better than advertisement 1, despite the fact that the focus of attention was greatest on the illustration.
This finding suggests that the illustration was puzzling and when one considers the recall, the illustration must have been confusing or too difficult. This further suggests that the text comprehension suffered as a result of over concentration on the picture, neglecting the message in the small print and practically ignoring the headline. Therefore the "message" was lost, ignored or not understood. All in all this advertisement proved to be less than effective.

This finding ties in with the questions raised by Berg (1963) regarding the effects of exposure to advertisements (refer to p27, ch.2).

It is, for example, one matter to say that 800,000 readers have seen a particular issue of a magazine, and an entirely different matter to contend that through their exposure they have absorbed the desired message.

It has been suggested that much advertising material is learning according to principles that hold for the memorisation of meaningless nonsense material (Krugman, 1965). Krugman's contention is that much of advertising material is learned on a very low level of interest (refer to p27, ch.2).

**Third Test Advertisement:**

The third advertisement's headline got reasonable attention with its initial focus of attention at 23% and ultimate focus of attention at 23%. The illustration got high attention, initial focus of attention 77% and ultimate focus of attention 50%. The small print relative to its content versus the other two advertisements got greatest attention. Text comprehension of the heading was highest for this advertisement. In addition, the headline also received the highest focus of attention. Recall was the highest for this advertisement over 1 and 2.

This result suggests that the headline was simple,
meaningful, easily understood, and that the picture was clear and had a clear message (memorable, meaningful and relevant). The small print was read. It must be noted that it contained only a few single words generally reinforcing the headline and picture. All in all, the results suggests that advertisement 3 was the most effective advertisement.

Theoretical conclusion from the eye movement recorder;

The conclusion that can be drawn from the results of the use of the eye movement recorder system, when taken in conjunction with the results of the questionnaire, is that the eye movement recorder system is a good diagnostic tool. It is effective in pin pointing the focus of attention on individual components of any given advertisement and consequently producing useful information as to why some advertisements are weak and some strong communicators. These results can be further investigated by the use of the questionnaire.

It is important to refer again to the gaps that exist or can exist between the theory, the application of the theory of communicating/advertising and, the actual end result (i.e. the reception of the communication via the advertisement).

The above, as the literature suggests results from one or more of the inhibiting factors affecting the human being in the direct reception of the message as intended.

The hypothesis presented in this study is that it is possible to predict the effectiveness, or extent of effectiveness of an advertisement under normal viewing environment, and consequently taking into account the inhibiting factors normally attending mankind in every day living circumstances.

While the application of the theory of advertising/communication was no doubt intended in the concept, and processing of each of the three advertisements, two advertisements did not work well.
The reception of the message, or interpretation, was significantly different for each advertisement when the sample of the target audience was systematically questioned.

Berg (1963) contends, that the advertiser can increase product awareness through repetition. But the relationship between such increased perceptivity of the advertisers message and action upon it (buying) is a continuing question.

This study highlights the need for further extensive research, on the application and development of the eye movement recorder system as a diagnostic instrument forming part of an overall system.

TEST 3: QUESTIONNAIRE.

A. Recall

When respondents in this study were asked to recall the financial institution's advertisements, the results show clearly that advertisement 3 was substantially more memorable than advertisement 2 or 1 (advertisement 3 being recalled by 48% of the respondents). The next best advertisement from a recall point of view was advertisement 2 with 18% of the respondents instantly recalling the advertisement. The lowest recall was noted for advertisement 1, with only 5% of the respondents instantly recalling it.

There have been several studies carried out on the relationship between recall and recognition of text.

Two experiments by Walker et al (1983) investigated the proposition, that the amount of cognitive effort expended to encode information will be directly related to the recall of that information (refer to p18, ch.2).

Differences in opinion exist between the original formulation of the levels of processing framework, Craik and Lockhart (1972), and the revised models of this framework, Breddlely (1978) and, Nelson (1977) and Anderson and Reder.
(1979), refer to pl8, ch.2. These revised models have proposed attribute differences in recall to various encoding activities. Anderson and Reder (1979) claim that deeper processing at encoding, results in the creation of a set of multiple propositions that facilitate recall of the information.

The distinctiveness theory, advanced by Jacoby (Jacoby and Craik, 1979; Jacoby, Craik and Begg, 1979) (refer to p 18 ch.2) predicts that deeper encoding processing at encoding results in a more distinct memory representation has a greater probability of being recalled at time of retrieval.

The distinctiveness theory, however, is not likely to be the case in this study as the three advertisements were shown and received in the same set of circumstances and at the same time. Consequently, it is suggested that it is reasonable to assume that the attitude with which the respondent approached the viewing was relatively speaking, constant.

The above leaves one to conclude that the difference in results came about because of an actual difference in effectiveness of communication between the three advertisements.

Due note must be taken of the possibility for getting somewhat biased (unreal) answers, due to the interviewee being aware of the test procedure. It is interesting to note the hypothesis tested by Schmidt (1983) that people expecting recall and recognition employ different encoding processes (refer to p19, ch.2).

The results reported by Schmidt (1983) (refer to p19, ch.2) suggested that encoding processes vary as a function of test expectancy, and that the appropriateness of encoding depends on the type of test received.

This finding raises the question of the weakness of focus groups as a pre-test method. Focus groups present the test advertisements to the respondents at the initial stage of the
test procedure and have wide ranges of discussions - group discussions, about the test advertisement presented, in the method examined in this study however, the respondents are not initially aware which of the advertisements is the experimental one and hence the possibility of getting bias answers is reduced.

In this study, following voluntary viewing, the respondents were told which of the advertisements was the test/experimental advertisement - forced viewing.

The results indicated a significant difference between the advertisement responses (Advertisement 3 had a greater recall than advertisements 1 and 2), (It is worth noting that the responses were obtained on questioning following voluntary attention).

This voluntary approach is advantageous in a testing system, in that advertisements are normally seen or not seen, recalled or not recalled following voluntary attention in the "real world" situation (actual market situation). So advertisement 3 under equal conditions and, seen by the respondents individually, as against in a focus group situation, qualified as being effective under one of the major criteria and objectives for an effective advertisement.

Correspondingly, advertisement 1 at the other end of the scale failed under the heading of recall, gaining attention and involvement. It is suggested that this advertisement when considered under this heading could not be regarded as an effective advertisement. The first steps in the process of communication in this advertisement (e.g. source, transmitter, exposure, awareness and so on) were ineffective. Consequently, even from this aspect alone, it is most unlikely that this advertisement could be deemed effective.

The questionnaire in general terms, is similar to the outline of the questionnaire referred to by Wilmshurst (1985)
and includes dichotomous, multiple choice and open ended questions. The author agrees with Wilmshurst (1985) that open ended questions are indeed slow and difficult to analyse but that they do allow the possibility of more complete answers.

In the field of consumer psychology, there is an underlying question as to the extent of differences between message sent (transmitter) and message received, and the consequences for the advertiser arising from these differences (refer to p20, ch.2). Studies have been carried out by a number of researchers including Guerin and Innes (1989), Zajonc (1960), Cohen (1961) and Brock and Fromkin (1968).

One supporting piece of evidence for the need for more extensive research into the gap between transmitter and receiver comes from the study by Harkins, Harvey, Keithly and Rich (1977). Their study emphasis that the difference between transmitter and receiver is that transmitters encode the material differently, refer to p21, ch.2. The results of this study/experiment reinforces this need for more extensive research.

The type of system employed in this study would seem to be more in line with the view of Wilmshurst (1985), who refers to the problems relating to the use of discussion groups under qualitative research. He indicates his confidence in an alternative to the group discussion method (i.e. to use larger numbers and proper statistical procedures, and careful examination of the resulting percentages). This study has carried out the latter approach.

This study places much emphasis on the role of communication in advertising. This emphasis on communication creates its own demand for a review of the communication process.

The studies conducted by Higgans, McCann and Fondacoro
(1982) show that, the key feature, is that it is ultimately the consequences of the communication which determine the cognitive tuning effects (refer to p21, ch.2).

The implication from these studies is that it has been shown that having to communicate leads to several possible biases.

These results suggest that the extent of the need to consider the receiver's attitudes, background, environment and so on, should be further investigated if real progress is to be made by psychologists, and advertisers, in the field of effective communication and it is emphasised that focusing on the anticipated consequences of communication overcomes many problems later.

It is further suggested that future research should be looking at the consequences of communication which determine the way material is processed and delivered and received.

Advertisement 2, had indicated poor recall (18%), gained little attention and involvement. In a competitive situation such as the one obtaining in current marketing/advertising environment, it is most unlikely that this advertisement would communicate the intended message effectively.

Brook and Shavitt (1983) referring to cognitive response approaches maintain that it is not the message itself that is important but rather thoughts, ideas, and reactions brought about by the message which mediate persuasion.

Looking at recall overall, in this study two out of three advertisements were found to be wanting in relation to this first criterion (i.e. recall) on the road to effective advertising. This conclusion is reached on the basis of ineffective communication under the heading of attention, instant recall and involvement. With the system used in this study, additional useful information is acquired in relation to advertisement 1, and 2, as gleaned from the answers to Question
In contrast, in the recall system this, additional information is not available, (i.e. the responses to questions why the respondents for example, liked or disliked the advertisements are recorded in answers to these questions). This information can be of substantial benefit to an advertiser/advertising agency when developing further concepts on communication with a similar target audience.

Question 3 can be regarded as the key question in relation to communicative effect. Here one measures the perception as per respondents, of the message(s) intended to be communicated by the Institution through the advertisements (See Table 6).

The institution intended, as the main message, to communicate to the target audience that it was a Savings Institution with the emphasis on Savings. It is to be noted, taking the three advertisements combined, that only 4% of respondents received that message through viewing of the advertisements. This of course is a most unsatisfactory outcome and consequently one would have to conclude that the principal message intended to be communicated was lost on the viewers, and consequently the communication (message) was ineffective in delivering this number one priority.

The “cluttering” problem (a number of advertisements shown at a given break in television, printed in a newspaper etc) for the advertiser and the psychologist is compounded by resistance to incorporate further information. A cognitive explanation suggests that subjects do not have the capacity to process and reprocess more material (refer to p21, ch.2).

When respondents were questioned as to whether they got the message (i.e. that the institution had a wide range of options to meet individual needs) as was intended to be communicated by the advertisement, only 26% of the respondents 6 to 11 (See Appendix 2).
received such a message.
Again one must conclude that the communication/advertisement failed to deliver on the second objective of the advertiser.

When respondents were questioned as to their perception of the financial institution's products (i.e. tax confidential) 45% of the respondents responded positively. However, it must be noted that it was not clear as to the extent to which the tax aspect of the "tax confidentiality" was communicated and believed.

Further probing of this vital area of main message recall, respondents were asked a similar question in relation to each of the three advertisements taken individually (See Question 4 Appendix 2 and Table 7).

Concerning advertisement 1, the priority message of a savings institution was not communicated. The second aspect, (i.e. communicating a wide range of options to meet individual needs), was also not communicated. The third message intended to be communicated, (i.e. the institution as being tax confidential), was again not communicated.

The second advertisement also did not communicate, to any reasonable extent, the intended message of the institution as a savings institution. The second message intended to be communicated, was well communicated, with 52% of the respondents picking up on that message. The third message was not communicated.

Finally, in the third advertisement the respondents did not receive the intended communication of the institution being a savings institutions or having a wide range of options. This advertisement did however, score well in communicating the intended message of confidentiality, in that 55% of the respondents received that message.

The target audience here were not activated by these advertisements. It is clear, that to be effective, the
advertisement needs to activate the audience.

It can be suggested that as this is the age when people are better known as "sophisticated consumers" it is necessary to recognise the consumer as "an active participator in communicating".

B. Product Preference

In Question 5 using a Likert scale, respondents were asked to rate a list of attributes when considering financial institutions (Company X).

Before discussing the answers given to these questions, it is proposed to set down the priority attributes as seen by the respondents when asked to list their priorities (see Table 18). The top three attributes, as indicated by the respondents, were, (1) high interest rates, (2) convenience, and (3) security. Now when looking at the answers to Question 5 (See Appendix 2) and considering the ratings for the top three attributes as preferred by the respondents (See Question 13, 14 Appendix 2), the financial institution scored 69% as a savings institution. However, when asked a further question regarding the institution as suitable for investment, only 46% of the respondents agreed.

This finding indicates a division in the minds of the respondents as between savings (i.e. saving for a rainy day, holiday and so on), and investing large sums for the sake of investment.

This is borne out by the emphasis given to competitive interest rates paid on investments - which in fact is seen as the number one priority for a place in which to invest money. The respondents giving their views on this financial institution gave the institution a somewhat low score of only 42% (that is seeing the institution as having low competitive interest rates which is the prime consideration of the respondent).
The second priority, as per the sample chosen, is convenience/accessibility, and here 88% of the respondents agreed that the institution provides this convenience and accessibility. Next when questioned on the third priority, that is security/safety, the financial institution was rated very highly (96%).

These results could possibly be based on the relationship between memory, prior knowledge and experience, as referred to by Johnson and Russo, 1984; Bettman, 1986 and; Cohen and Chakravarti, 1990.

It is interesting to note that the overall image of the financial institution in relation to its being a savings institution, is less than 50%. The image in relation to confidentiality and providing a wide range of savings options to meet individual needs scores well, at approximately 60 - 62%. The results give a clear message to the advertiser, in that there is room for improvement of its image as a savings institution. The advertisement tested did not in fact succeed in improving that image and accordingly, if the institution wishes to communicate that message as a top priority, changes need to be made to the advertisement.

Katz (1960) emphasises that "if we know the psychological needs that are met by holding attitudes, one is in a better position to predict when, and how, the attitude will change". Accordingly, it seems necessary to establish the basis to bring about a required change in attitude (i.e, by researching the psychological needs and influences of the target audience).

The whole question of change in attitudes and the necessary components to effectively change attitudes in a positive manner has been the subject of various studies.

One reason for the failure to communicate the intended message, (as evidenced by the scores attributed to the statements concerning the financial institution in Question 5),
is likely to be, as Zimbardo (1977), refer to p43, ch.2, pointed out that it is necessary in addition to gaining attention, that the recipient must comprehend what is being said. He goes on to elaborate this point, suggesting that even if the intended message is perceived, and understood, the audience needs to accept the premise communicated. So the message has to be relevant, believable and meaningful, to the point that the benefits promised were likely to change attitude behaviour. This, the advertisement did not achieve.

From here on the discussion is based on questions following forced viewing, using life size copy of the advertisement.

Williams (1982) calls involuntary attention and describes it as a stimulus which intrudes upon consumers conscientious even though they do not want it to do so.

It is suggested that in a forced viewing system the dangers of relying totally on replies to questions, following involuntary attention, are likely to lead to incorrect conclusions, when compared to the actual response when the advertisement is seen in normal viewing environment and the respondent questioned following normal viewing i.e voluntary attention.

It follows that the advertiser must engage in research to determine whether the desired meanings are being communicated by advertising. This view expressed by Williams (1982) supports the need for testing (pre-testing) the advertisements (communications).

C. Behavioural Intentions

In Question 6 and 7, the respondents were asked for their "purchase intent and why" (Measuring Behavioural Intention of Respondents, see Appendix 2, Tables 9 to 12). Corstjens (1990) when discussing Persuasion (i.e.intent to purchase) claims that persuasion measures often indicate the advertising
strategy rather than the creative approach. Corstjens goes on to say that to diagnose, and improve an advertisement, it is essential to understand why it is or it is not persuasive, which usually means what the advertisement is communicating and how.

Having test advertisement 1 in mind when questioned as to the respondents purchase intent, only 15% of the respondents indicated that they will save with the financial institution. This left 85% of the respondents indicating a negative response (i.e. might/might not save with the financial institution, See Table 9).

In this study, the reasons given as to why the respondents say they will not save (resulting from their idea of the communication received from the advertisement) include the following: boring headline, not convincing, confusing, does not relate, waffle, no information, unattractive and so on (See Tables 11 and 12).

However, of the 15% of the respondents who indicated that they will be influenced to save, stated it was a good advertisement, encouraging and attention grabbing (See Table 10).

Responding to Question 6 and 7 relating to test advertisement 2, only 26% of the respondents indicated they will save with the financial institution (See Table 9). They give reasons relating to the advertisement as a good advert, different needs, clear cut image (See Table 10). 74% of the respondents indicated that they would not be influenced by the advertisement. They found the advertisement unimpressive, confusing, had no point and was not appealing (See Tables 11 and 12).

As seen from the above the desired behavioural change was not achieved for advertisement 1 and 2. It must be noted that respondents had the opportunity to see these advertisements at
least twice within a ten minute period, which can be regarded as very high frequency relative to normal viewing in practice.

When questioned regarding advertisement 3 on Question 6 and 7, 54% of the respondents indicated that they were influenced by this advertisement (See Table 9). Reasons given for being influenced by the advertisement included confidentiality (39%), to the point (20%), good text/layout (15%) (See Table 10). 46% of the respondents responded that they would not be influenced by the advertisement to save with the financial institution. Words used in support of this negative response included - no appeal (29%), not convincing (22%), does not grab attention (24%) (See Tables 11 and 12).

Overall, there was a significant difference between the advertisements responses. Clearly, advertisement 3 showed a more positive response than advertisement 1 and 2.

It can be seen from these results that advertisement 1 and 2 do not offer much hope of achieving the objectives set for them, (that is, to communicate the intended messages and to influence the target audience to save with this institution) as was the primary marketing objective.

Advertisement 3 offers some possibility since the communication can be regarded as effective in relation to the respondents saving with the financial institution. However, it must be pointed out that as mentioned earlier, the institution itself was not highly regarded as a Savings Institution. These latter results prompt many questions regarding attitudes. The literature points out that the three structural components thought to be common to all attitudes are: Cognitive, Affective and Behavioural (refer to p38, ch.2).

Definitions of these components has been given by Rosenberg (1960) and Krech et al (1962). It is pointed out by Rosenberg (1960) that the cognitive component includes
knowledge, beliefs, opinions, values and images that are held relative to the brand or company (refer to p38, ch.2).

According to Krech et al (1962) the affective component distinguishes attitudes from beliefs and intentions.

The behavioural component is said to be the "payoff" for the marketer (refer to p38, ch.2).

Consequently, it is probably only in a changed marketing environment (that is, where the institution could be seen to be, and indeed believed to be, a good place in which to save), that more of the target audience could be influenced by this advertisement (i.e. to switch to the financial institution to place their savings).

What is clear from the results of these two questions (6 and 7) is that advertisement 1 and 2 do not communicate effectively and advertisement 3 could be said to have been low to average in effectiveness (that is in communicating the intended message(s) to the given target audience).

For the most part, the respondents were not motivated. The advertisement did not influence the arousal, direction and persistence of behaviour. It is also clear that advertisements 1, and 2, did not establish, or support needs in the minds of the respondents, and therefore they were not motivated. This is in line with Corstjens (1990) who states "only if people perceive needs, can they be motivated".

Following questions to the respondents as to whether they will or will not save and why, the respondents were asked about the advertisements, asking them whether they liked the advertisements, disliked them or what they found confusing about them (See Appendix 2, Question 8).

Stewart-Hunter (1989) states that the measure of attitudes is one step on from communication and one step back from persuasion. Its main value is for checking communication, but also that the communication is indeed pushing the
respondents in the right direction towards persuasion. She believes that attitude change may be a subtle way of investigating communication.

Taking the answers for the three advertisements rated separately, the author found that in the case of advertisement 1, 29% of the respondents indicated that they liked the advertisement. 71% either disliked it or were neutral about it (See Table 13). The respondents (29%) who liked this advertisement described it as having good wording, silver cloud, positive, as aspects which appeal to them. (See Table 14). The respondents gave as reasons for disliking the advertisement as small print, no information, and ambiguous (See Tables 15 and 16).

Responding to the same questions relating to the second advertisement, 41% of the respondents indicated that they liked the advertisement while 59% either disliked it or were neutral. Reasons given for liking the advertisement included image, simplicity, and good advertisements (See Table 14). Responses relating to the negative attitude of the advertisement included "too yuppie", small print, "everything" (See Tables 15 and 16).

In reply to these questions regarding advertisement 3, 63% of the respondents expressed a liking for the advertisement while 37% either disliked it or were neutral about it (See Table 13). Reasons given for liking the advertisement included good wording, subtle and the "hush" (confidential) image (See Table 14). Reasons given for disliking or being neutral about this advertisement included bad picture, layout and negative (See Tables 15 and 16).

As seen from the above responses many reasons were given for the high percentage of negative attitudes. It could be that some of these reasons were actually excuses, reminding one of the Cognitive Dissonance Theory where Festinger (1957), (refer to p45, ch.2) contended that "inconsistencies or
discrepancies among the cognition (opinion, beliefs, knowledge) an individual holds, create tension and psychological discomfort, that he or she seeks to reduce".

However, in this study overall there was a significant difference between the advertisements responses (See Table 13).

It is obvious that conflicts and contradictions, in the minds of the target audience sample, played a large role in confusing the intended message even to the point of it being lost (i.e. disliked).

This analysis of human behaviour is also supported by Corstjens (1990) when she states that "people exhibit contradictions and can react differently in different situations or on different days". Corstjen notes that "it is not for nothing that people are informally referred to as individuals".

The results suggest that a testing system needs to incorporate in it the facility to interview/question the respondents individually (on a one to one basis) as in the comprehensive structured system used in this study.

The next question of the questionnaire seeks to establish the respondents opinion in relation to certain descriptors used to describe the institution's advertisements (See Appendix 2, Question 12). Again the respondents were asked to score their responses on likert scale.

In response to the first descriptor, there was no significant difference as to whether the advertisements had, or had not, been seen before. In reply to the second descriptor (i.e. that the advertisement gave a good feeling about the financial institution as a place to save), there was a significant difference between the three advertisements. The major difference being that advertisement 3 provoked a much more positive response (58%) as against advertisement 2 or 1, (28% and 23% respectively; See Table 17).
Similarly, when responding to the third descriptor (i.e. that respondents looked forward to seeing the advertisement again), there was a significant difference between the three advertisements. Again, as with the previous statement advertisement 3, provoked a high positive response (52%), as against a negative response relating to advertisement 2 (25%) and advertisement 1 (19%) (See Table 17).

For the 4th descriptor (i.e. whether the respondents learned something new from the advertisements), there was a significant difference between the three advertisements. While the difference was not as great as with the previous two descriptors, it is noteworthy that advertisement 3 scored the highest (23%), while advertisement 2 and 1 were lower (11% and 9% respectively) (See Table 17).

In response to the 5th descriptor posed (i.e. "liked the picture"), there was a significant difference in favour of advertisement 3 (60%) 56% of the respondents agreed with the descriptor relative to advertisement 2 and 40% agreed relative to advertisement 1.

Concerning the descriptor that, the advertisement does not relate to me or my savings habits, no significant differences were obtained. In terms of the third advertisement, 40% of the respondents agreed with the statement. In relation to advertisement 2 and 1 the results were almost identical (58% advertisement 2 and 57% advertisement 1 agreed with the statement) (See Table 17). (It is noted that this particular descriptor seemed to cause confusion arising from the negative way in which it was worded).

In the last descriptor (i.e. liked style/text) there was a significant different between the advertisements. Once more advertisement 3, proved positive in that 72% of the respondents liked the style/text as against 60% liking the style/text in
The purpose of the advertisement was no doubt to attempt to establish attitudes - positive attitudes, in relation to the financial institution.

It was found by Miller and Tessar (1986) that attitudes were conceptualised as containing an affective and a cognitive component and subsequent behaviours as being driven by one (or all) of these components (refer to p41, ch.2).

The literature has many records of work carried out on the functional approach to attitudes (refer to p42, ch.2).

To depend on just one theory is, at best risky, when one considers the differences in human beings, and in the environment in which they live and view the message. Consequently, even if there is a positive attitude created, as indicated by the answers to Question 12, there is no guarantee that it would lead to predictable behaviour.

Deighton (1983), (refer to p48, ch.2) proposes that advertisements may be processed in two ways: highly involved processing of the message, or a low involvement mode he calls "schematic inquiry". Under this latter process, advertising provides a hypothesis about the advertised product which may be casually accepted, and confirmatory biases in search may tend to ensure confirmation of that hypothesis.

Greenwald and Leavitt (1984) describe four levels of involvement: preattention, focal attention, comprehension and elaboration (refer to p49, ch.2).

This underlines again the need for a Pre-Testing, which explores the many aspects of the respondent's attitudes, and behaviour, or likely behaviour resulting from the viewing. This study reinforces the above view.

Because of the radically changed (more difficult) advertising environment, it seems necessary for researchers to
go back to square one, and to conduct new exhaustive research into the basis for effective advertising in the present environment.

Overall, it can be seen in this study that for five out of the seven descriptors, there was a significant difference between the three advertisements (see table 17).

The final two questions can be taken together because Question 14 is really an extension of Question 13, (i.e. that is rating the respondents priorities on a list of preferences which they hold as a place in which to save (invest their savings; See Appendix 2 - Q13, and Q14 and tables 18 and 19 Chapter 4).

The results reinforce the emerging picture that advertisement 3 was performing well in comparison to advertisement 2, and 1. Looking at the descriptors used to describe the advertisements, and the reactions by the respondents to these phrases (relative to the three advertisements), it can be noted that advertisement 3 (in addition to all the other positives already recorded in this discussion) is strengthened by the fact that it is clear that the advertisement was relevant, and induced a high level of involvement between the advertisement and the respondents, and also had a high level of impact on the respondents.

Reflecting on the creative process that was intended to be incorporated into the advertisement to be communicated to the target audience, and on the resultant failure to do so, in advertisement 1, and 2, one is forced to question whether the creative people involved fully appreciate that people are different from one another, and in present circumstances, the fact that there is a need to pre-test.

Further support is obtained from Hayathawa (1963), refer to p30,ch.2. In his contention "the basic purpose of all human activity is the perception, the maintenance, and the
enhancement not of the self, but of the self-concept or symbolic self". This statement is actually supporting the need to pre-test advertisements (communication) against the "self-concept" (refer to p30, ch.2).

Grubb and Grathwohl (1967), (refer to p31, ch.2) in suggesting a qualitative model to clarify the relationship between the self theory, and the use of goods as symbols by consumers, emphasises the theoretical base for understanding some aspects of consumer behaviour. This raises the question of the need to check the communication against, or in association with, the self-concept on a sample of the target audience. The fact that advertisement 1 and 2, failed so seriously to communicate, suggests that the concept was not checked prior to advertising.

The more one looks at these results the more one is forced to question why two out of three advertisements failed under the heading effective (refer to p6, ch.2).

**Further Research Possibilities:**

Levy (1986) believes that "our immediate purpose in studying advertising and consumer psychology is to satisfy our professional goals of making advertising more effective".

From the results of this study, it can be seen that two out of the three advertisements tested were in fact ineffective. This finding is in line with Levy’s (1986) view regarding the real purpose of advertising.

Recognising this prospect, Henderson-Britt (1978) suggests that "anything that can be done to develop better understanding of what happens psychologically to an individual at the moment of confrontation with an advertisement, a sales message, or any other marketing communication, is significant for further development of more creative and more effective marketing than at present".
A thread running through the literature suggests the view that despite best efforts to apply the theory of the psychology of consumer behaviour, the theory of communication, and the theory of advertising, the reception of the intended message depends very much on the receiver.

It can be suggested therefore, that the emphasis regarding testing, pre-testing must be on the measurement of the reception of the intended message(s) by the target audience.

Arising from this, it is suggested that it might be opportune to distinguish between measuring the effects of advertising, and measuring the effectiveness of the communication via the advertisements.

It is further suggested that proper pre-testing, based on a well researched study, helps to avoid or reduce this failure to effectively advertise. When referring to testing advertisements Stewart-Hunter (1989) comments that "whatever the theoretical or practical objections advanced by the agency as a matter of policy, or by the individual planner, in response to a particular brief, almost all of us, will at some time find ourselves involved in a Pre-testing study".

It is hoped that this thesis will stimulate reflection, and action, leading to the undertaking of further research into the emerging aspect of advertising on what Wilmshurst (1985) called "The Era of Pre-Testing".

It is suggested that further research be carried out with a view to validating, from a psychological point of view, the effectiveness of systems for measuring the effectiveness of advertisements. Which in turn could lead to a greater psychologically based input into the content of advertisements.

Clearly, this study is far from definitive. Until further research provides firm empirical support for the findings of the study, the results may be viewed as intriguing,
and exciting, in terms of providing stepping stones for further research.

Despite the importance of the issue of visual processing, relatively little empirical work has been done. This is an area of research that deserves much more emphasis. In addition, the effects of stimuli in other sensory modes (taste, smell, touch) have been subject to even less research. Holbrook (1983) agrees with this view and states there is a major need for research on the effects of nonverbal stimuli on consumer judgement.

The need for this suggested research is strengthened by the stark reality of the uncertainty as to whether the consumer decodes the message in the manner intended by the sender.

Wilmshurst (1985) maintains that all, or most of the theories, statements, and effects, made in the foregoing sections (which represents varying ways of looking at how advertising seems to work), have not yet reached the status of a scientific approach. That is to say, it is rarely possible to use any of the theories as a means of predicting exactly what will happen as a result of a particular advertising approach.

However, one of the most influential conceptualisations or theories involving behaviour is that of Fishbein and Ajzen (1975, 1980) and their "Theory of Reasoned Action".

"Generally speaking the theory is based on the assumption that human beings are usually quite rational and make systematic use of the information available to them. We do not subscribe to the view that human social behaviour is controlled by unconscious motives, or overpowering desires, nor do we believe that it can be characterised as capricious or thoughtless. Rather we believe that people consider the implications of their actions before they decide to engage or not in a given behaviour". (Ajzen and Fishbein (1980)).
Despite conceptual and operational challenges and adaptations by various researchers (refer to p32, ch2) the Fishbein and Ajzen model (see figure 2) has been shown to have strong predictive value.

A further study might consider if the Fishbein and Ajzen model could be helpful in applying a theoretical framework to consumer behaviour. Figure 3 is an attempt to illustrate this possibility within the present study. See figure 3.

Clearly some variables are measurable, some are not in the present study, but perhaps this could provide a framework for further more comprehensive research to extend our understanding of the correlates of consumer behaviour.
Arising from this study, which must be regarded as preliminary, further research is needed toward a new focus on psychology based research, into the specific area of testing the effectiveness of advertising.

There is a need for:

- The development of a fully comprehension and valid instrument to measure the effectiveness of communication in advertisements.
- Studies of the relationship between effective communication and effective advertising.
- The development of a means of ensuring close correspondence between the message delivered and the message received.
- Researching the psychology involved in decoding messages directed at human beings.
While the hypothesis was supported in the present study, the instrument used to pre-test needs to be further developed, refined and validated.

For example, while the catalogue selection attempts to measure consumer's perception of one brand versus another it seems to ignore the measurement of psychological variables which should influence respondents choice such as the dependency of memory-based choices upon retrieval cues in the choice environment, Lynch and Srull (1982).

Another weakness of the test might be said to be that it ignores the self-concept or ego-threat in admitting to a change in preference in the presence of the same interviewer.

The eye movement recorder system needs to be developed to make it possible to analyse both cognitive and perceptual effects on attention to aspects of the experimental advertisements. A more advanced system could explore the extent to which was the respondent was affected by the concept of global precedence. The weaknesses in the system tested would suggest the need to explain further the psychological link between communication and advertising, and how an eye movement recorder system can best assist in this development. Issues also identified relate to shortcomings regarding the ease of handling of the equipment, and difficulty in controlling the video recording of the focus of attention of the eye. There are also difficulties in maintaining control of the slides presented in the experiment.

The questionnaire needs to be developed in order to address such issues as the effect of prior knowledge, personality and the self-concept of the respondents on their behavioural intentions.

Nevertheless, though some of the issues identified in the literature appear to have influenced the design of the questionnaire, some of the questions in the questionnaire do
not relate precisely to the findings of research reviewed in the present study.

Aspects of the questionnaire needing further research include, a sharpening up of the arrangement of questions in the questionnaire, the repetition of some questions and their precise location, the precise wording to be used for best advantage, and the development of additional questions to investigate those areas of research omitted.

Further research is necessary to validate or refine a valid system, and to lead to the development of a system with which it would be possible to pre-test accurately the effectiveness of advertisements.
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Appendix 1

Screening Questionnaire

Q1A Self employed: Yes ( ) No ( ) Terminate
Q1B Age group: A: 25 - 34 ( ) B: 45 - 60 ( )

Q2 What is your current occupation:

..........................

A ( ) C2 ( ) Terminate
B ( ) DE ( ) "
C1 ( ) F ( )

Q3 Do you or does anyone in your household work for any of the following:

Yes No
An Advertising Agency ............1............1 (T)
A Market research firm ............2............2 (T)
A Public Insurance company ............3............3 (T)
An Insurance company ............4............4 (T)
A Financial Institution ............5............5 (T)

Q4 In the past six months have you been interviewed for a media programme study. Yes ( ) Terminate No ( )

Q5A Have you had any Savings transactions in the last 12 months. Yes ( ) No ( ) Terminate

Q5B Are you planning any Savings transactions in the next 12 months. Yes ( ) No ( ) Terminate

Q6 Would you be prepared to do an interview, yes ( ) No ( ).
Appendix 2

QUESTIONNAIRE

Q.1 Focus of attention:
1. ........................................... 2. ...........................................
3. ........................................... 4. ...........................................
5. ........................................... 6. ...........................................
7. ........................................... 8. ...........................................
9. ........................................... 10. .............................................
11. ........................................... 12. ...........................................

Q2. In the slides you just saw, a number of advertisements were shown for company X.
Please tell me, in any order you wish, which of the advertisements can you instantly recall.
........................................... 1
........................................... 2
........................................... 3

Q3. Keeping in mind company X advertisements, you recalled can you please tell me what you think was the main message (concept) of the advertisements.
........................................... 1
........................................... 2
........................................... 3

Q4.1 Please tell me as much as you can remember about Company X 1st named advertisement.
.................................................................
.................................................................

Q4.2 Please tell me as much as you can remember about Company X 2nd named advertisement.
.................................................................
.................................................................
Q4.3 Please tell me as much as you can remember about Company X 3rd named advertisement.


 Q5. (Hand card Q7).

Please rate Company X on the following scales from 1 to 7. 7 means you "agree strongly" and 1 means you "disagree strongly". Please tell me how you would rate Company X on the following statements. The more you agree that the statement describes Company X the higher the number you would give. If you disagree strongly that the statement describes Company X the lower the number you would give. Please remember you can use any number between 1 and 7. Name number which most accurately reflects your opinion. Remember there are no right or wrong answers - it is your own opinions we are interested in.
(Q5. Cont’d)

<table>
<thead>
<tr>
<th></th>
<th>AGREE</th>
<th>DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VS</td>
<td>S</td>
</tr>
<tr>
<td>Security/Safety</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Tax confidentiality</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Convenience/Accessibility</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>(more branches)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to other services</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Competitive interest rates</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Wide range of savings options</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Recognised savings Institutions.</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Suitable for investment</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Easier access to your money</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Specific individual needs met</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Cost of investment</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td>7 6 5 4 3 2 1</td>
<td></td>
</tr>
</tbody>
</table>

**LEGEND**

VS = Very Strongly
S = Strongly
P = Partly
N = Neutral
Note to Interviewer

Present advertisements again and ask Q6 to Q14.

(Following forced viewing for the remainder of questionnaire.

Q6.1 (Hand card Q8.1)
Based on the impression you get from the advertisement you just saw, if you had money to save would you be likely to save with Company X.

(Record below)

Definitely will save with Company X 5
Probably will save with Company X 4
Might or will not save with Company X 2
Probably will not save with Company X 2
Definitely will not save with Company X 1

Q7.1 Why do you say that? (Probe until unproductive).

(5.4) (3) (2.1)

Q8.1 (Hand Card Q10.1)
Thinking back to Company X for advertisement which one of these phases best describes your overall reaction to the advertisement.

I like it very much 5
I like it 4
I neither like it nor dislike it 3
I dislike it 2
I dislike it very much 1

Q9.1 What if anything did you particularly like about Company X advertisement? (Probe until unproductive).
Q10.1 What, if anything, did you particularly dislike about Company X advertisement? (Probe until unproductive).

Q11.1 What, if anything did you find confusing or hard to understand about Company X advertisement? (Probe until unproductive).

Q12.1 (Hand card Q14.1)
I'll read you some phrases which other people might use to describe Company X advertisement you saw. As I read each one, please tell me the extent to which you agree or disagree with each phrase.

<table>
<thead>
<tr>
<th>AGREE</th>
<th>DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>SW</td>
</tr>
<tr>
<td>I have seen this advert before</td>
<td>5</td>
</tr>
<tr>
<td>This advertisement gave me a good feeling about the financial institution as a place to save</td>
<td>5</td>
</tr>
<tr>
<td>This is an advert I would look forward to seeing again.</td>
<td>5</td>
</tr>
<tr>
<td>I learned something new from the advert</td>
<td>5</td>
</tr>
<tr>
<td>I liked the picture</td>
<td>5</td>
</tr>
<tr>
<td>The advertisement doesn't relate to me or my saving habits</td>
<td>5</td>
</tr>
<tr>
<td>I liked the style/text</td>
<td>5</td>
</tr>
</tbody>
</table>

**LEGEND**

ST = Strongly
SW = Somewhat
ST = Neutral
Based on the impression you get from the advertisement you just saw, if you had money to save would you be likely to save with Company X.

(Record below)

Definitely will save with Company X 5
Probably will save with Company X 4
Might or will not save with Company X 2
Probably will not save with Company X 2
Definitely will not save with Company X 1

Q7.2 Why do you say that? (Probe until unproductive).

Q8.2 Thinking back to Company X for advertisement which one of these phases best describes your overall reaction to the advertisement.

I like it very much 5
I like it 4
I neither like it nor dislike it 3
I dislike it 2
I dislike it very much 1

Q9.2 What if anything did you particularly like about Company X advertisement? (Probe until unproductive).

Q10.2 What, if anything, did you particularly dislike about Company X advertisement? (Probe until unproductive).
Q11.2 What, if anything did you find confusing or hard to understand about Company X advertisement? (Probe until unproductive).

Q12.2 (Hand card Q14.2)
I’ll read you some phrases which other people might use to describe Company X advertisement you saw. As I read each one, please tell me the extent to which you agree or disagree with each phrase.

<table>
<thead>
<tr>
<th>AGREE</th>
<th>DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>SW</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>I have seen this advert before</td>
<td>5</td>
</tr>
<tr>
<td>This advertisement gave me a good feeling about the financial institution as a place to save</td>
<td>5</td>
</tr>
<tr>
<td>This is an advert I would look forward to seeing again.</td>
<td>5</td>
</tr>
<tr>
<td>I learned something new from the advert</td>
<td>5</td>
</tr>
<tr>
<td>I liked the picture</td>
<td>5</td>
</tr>
<tr>
<td>The advertisement doesn’t relate to me or my saving habits</td>
<td>5</td>
</tr>
<tr>
<td>I liked the style/text</td>
<td>5</td>
</tr>
</tbody>
</table>

**LEGEND**

ST = Strongly
SW = Somewhat
ST = Neutral
Base your impression you get from the advertisement you just saw, if you had money to save would you be likely to save with Company X.

(Record below)

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
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<tbody>
<tr>
<td>Definitely will save with Company X</td>
<td>5</td>
</tr>
<tr>
<td>Probably will save with Company X</td>
<td>4</td>
</tr>
<tr>
<td>Might or will not save with Company X</td>
<td>2</td>
</tr>
<tr>
<td>Probably will not save with Company X</td>
<td>2</td>
</tr>
<tr>
<td>Definitely will not save with Company X</td>
<td>1</td>
</tr>
</tbody>
</table>

Q7.3 Why do you say that? (Probe until unproductive).

Q8.3 Thinking back to Company X for advertisement which one of these phases best describes your overall reaction to the advertisement.

<table>
<thead>
<tr>
<th>Reaction</th>
<th>Count</th>
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<tbody>
<tr>
<td>I like it very much</td>
<td>5</td>
</tr>
<tr>
<td>I like it</td>
<td>4</td>
</tr>
<tr>
<td>I neither like it nor dislike it</td>
<td>3</td>
</tr>
<tr>
<td>I dislike it</td>
<td>2</td>
</tr>
<tr>
<td>I dislike it very much</td>
<td>1</td>
</tr>
</tbody>
</table>

Q9.3 What if anything did you particularly like about Company X advertisement? (Probe until unproductive).

Q10.3 What, if anything, did you particularly dislike about Company X advertisement? (Probe until unproductive).
Q11.3 What, if anything did you find confusing or hard to understand about Company X advertisement? (Probe until unproductive).

Q12.3 (Hand card Q14.3)
I’ll read you some phrases which other people might use to describe Company X advertisement you saw. As I read each one, please tell me the extent to which you agree or disagree with each phrase.

<table>
<thead>
<tr>
<th>AGREE</th>
<th>DISAGREE</th>
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<tbody>
<tr>
<td>ST</td>
<td>SW</td>
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<table>
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<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have seen this advert before</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>This advertisement gave me a good feeling about the financial institution as a place to save</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>This is an advert I would look forward to seeing again.</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>I learned something new from the advert</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>I liked the picture</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>The advertisement doesn’t relate to me or my saving habits</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>I liked the style/text</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

**LEGEND**
- **ST** = Strongly
- **SW** = Somewhat
- **ST** = Neutral
Q13  What influences your choice of place in which to save?

Convenience  1
Advertising  2
Opening hours  3
Tax confidentiality  4
Personal service  5
High interest rates  6
Security  7
Opinion of others  8

Q14. Of those that influence you please indicate your top three:

1.  
2.  
3.  

**Duncan's Multiple Range Test**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A3</td>
<td>11.2</td>
</tr>
<tr>
<td>A1</td>
<td>11.0</td>
</tr>
<tr>
<td>A8</td>
<td>9.7</td>
</tr>
<tr>
<td>A2</td>
<td>9.1</td>
</tr>
<tr>
<td>A12</td>
<td>9.1</td>
</tr>
<tr>
<td>A10</td>
<td>8.8</td>
</tr>
<tr>
<td>A5</td>
<td>8.2</td>
</tr>
<tr>
<td>A6</td>
<td>7.5</td>
</tr>
<tr>
<td>A9</td>
<td>6.3</td>
</tr>
<tr>
<td>A7</td>
<td>6.6</td>
</tr>
<tr>
<td>A11</td>
<td>6.6</td>
</tr>
<tr>
<td>A4</td>
<td>5.9</td>
</tr>
</tbody>
</table>

* Test Advertisements

**No. of Means for Range being tested**

<table>
<thead>
<tr>
<th></th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>2.77</td>
<td>2.92</td>
<td>3.02</td>
<td>3.09</td>
<td>3.15</td>
<td>3.19</td>
<td>3.23</td>
<td>3.26</td>
<td>3.29</td>
<td>3.31</td>
<td>3.34</td>
</tr>
<tr>
<td>1%</td>
<td>3.64</td>
<td>3.80</td>
<td>3.90</td>
<td>3.98</td>
<td>4.04</td>
<td>4.09</td>
<td>4.14</td>
<td>4.17</td>
<td>4.20</td>
<td>4.23</td>
<td>4.25</td>
</tr>
</tbody>
</table>

**S.E.D.** = Standard Error of the difference between the means = 0.631

**S.E.** of an advertisements mean = $\frac{0.631}{1.414} = 0.446$
Q2. Specific Recall Responses to the Financial Institution Advertisements.

Chi Square

<table>
<thead>
<tr>
<th></th>
<th>Recalled</th>
<th>Not Recalled</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad1</td>
<td>4</td>
<td>74</td>
<td>78</td>
</tr>
<tr>
<td>Ad2</td>
<td>14</td>
<td>64</td>
<td>78</td>
</tr>
<tr>
<td>Ad3</td>
<td>36</td>
<td>42</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>180</td>
<td>234</td>
</tr>
</tbody>
</table>

\[ \chi^2_{obs} = \sum \frac{(o - e)^2}{e} \]

1. \[ E_1 = \frac{RT \times CT}{ST} \]

\[ E_1 = \frac{78 \times 54}{234} = 18 \]
\[ E_2 = \frac{78 \times 180}{234} = 60 \]
\[ E_3 = \frac{78 \times 54}{234} = 18 \]
\[ E_4 = \frac{78 \times 180}{234} = 60 \]
2. \[ \chi^2_{\text{obs}} = \sum \frac{(o - e)^2}{e} \]

\[ = \frac{(4 - 18)^2}{18} + \frac{(74 - 60)^2}{60} + \frac{(14 - 18)^2}{18} + \frac{(64 - 60)^2}{60} \]

\[ + \frac{(36 - 18)^2}{18} + \frac{(42 - 60)^2}{60} \]

\[ = 10.8 + 3.2 + 0.8 + 0.26 + 18 + 5.4 \]

\[ \chi^2_{\text{obs}} = 38.46 \]

\[ \text{Df} = (R - 1)(C - 1) \]

\[ = 2 \]

\[ P = < .001 \]

There is a significant difference at the .001 level.
Q6. How likely are you to save with the Financial Institution?

### Chi Square

<table>
<thead>
<tr>
<th></th>
<th>Will Save</th>
<th>Neutral</th>
<th>Will Not Save</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad1</td>
<td>12</td>
<td>12</td>
<td>54</td>
<td>78</td>
</tr>
<tr>
<td>Ad2</td>
<td>20</td>
<td>15</td>
<td>43</td>
<td>78</td>
</tr>
<tr>
<td>Ad3</td>
<td>42</td>
<td>15</td>
<td>21</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>74</td>
<td>42</td>
<td>118</td>
<td>234</td>
</tr>
</tbody>
</table>

\[
\chi^2_{obs} = \sum \frac{(o - e)^2}{e}
\]

1. \( E = \frac{RT \times CT}{ST} \)

- \( E_1 = \frac{78 \times 74}{234} = 25 \)
- \( E_2 = \frac{78 \times 42}{234} = 14 \)
- \( E_3 = \frac{78 \times 118}{234} = 39 \)
- \( E_4 = \frac{78 \times 74}{234} = 25 \)
- \( E_5 = \frac{78 \times 42}{234} = 14 \)
- \( E_6 = \frac{78 \times 118}{234} = 39 \)
- \( E_7 = \frac{78 \times 74}{234} = 25 \)
- \( E_8 = \frac{78 \times 42}{234} = 14 \)
- \( E_9 = \frac{78 \times 118}{234} = 39 \)
2. $\chi^2_{obs} = \Sigma \frac{(o - e)^2}{e}$

$$= \frac{(12 - 25)^2}{25} + \frac{(12 - 14)^2}{14} + \frac{(54 - 39)^2}{39} + \frac{(20 - 25)^2}{25}$$

$$+ \frac{(15 - 14)^2}{14} + \frac{(43 - 39)^2}{39} + \frac{(42 - 25)^2}{25} + \frac{(15 - 14)^2}{14}$$

$$+ \frac{(21 - 39)^2}{39}$$

$$= 6.76 + 0.28 + 5.76 + 1 + 0.07 + 0.441 + 11.56 + 0.07 + 8.30$$

$\chi^2_{obs} = 33.21$

Df $= (R - 1)(C - 1)$

$= 4$

P $< .001$

$\chi^2_{obs} = 33.21$, Df $= 4,$

There is a significant difference at the .001 level(***)
Q8. Do you like the Financial Institution Advertisements?

<table>
<thead>
<tr>
<th></th>
<th>Like</th>
<th>Neutral</th>
<th>Dislike</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad1</td>
<td>23</td>
<td>30</td>
<td>25</td>
<td>78</td>
</tr>
<tr>
<td>Ad2</td>
<td>32</td>
<td>30</td>
<td>16</td>
<td>78</td>
</tr>
<tr>
<td>Ad3</td>
<td>49</td>
<td>22</td>
<td>7</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>104</td>
<td>82</td>
<td>48</td>
<td>234</td>
</tr>
</tbody>
</table>

\[ \chi^2_{\text{obs}} = \frac{\sum (o - e)^2}{e} \]

1. \[ E = \frac{RT \times CT}{ST} \]

\[ E_1 = \frac{78 \times 104}{234} = 35 \]
\[ E_2 = \frac{78 \times 82}{234} = 27 \]
\[ E_3 = \frac{78 \times 48}{234} = 16 \]
\[ E_4 = \frac{78 \times 104}{234} = 35 \]
\[ E_5 = \frac{78 \times 82}{234} = 27 \]
\[ E_6 = \frac{78 \times 48}{234} = 16 \]
\[ E_7 = \frac{78 \times 104}{234} = 35 \]
\[ E_8 = \frac{78 \times 82}{234} = 27 \]
\[ E_9 = \frac{78 \times 48}{234} = 16 \]
2. \( \chi^2_{\text{obs}} = \sum \frac{(o - e)^2}{e} \)

\[
\begin{align*}
&= \frac{(123 - 35)^2}{35} + \frac{(30 - 27)^2}{27} + \frac{(25 - 16)^2}{16} + \frac{(32 - 35)^2}{35} \\
&\quad + \frac{(30 - 27)^2}{27} + \frac{(16 - 16)^2}{16} + \frac{(49 - 35)^2}{35} + \frac{(22 - 27)^2}{27} \\
&\quad + \frac{(7 - 16)^2}{16}
\end{align*}
\]

\[= 4.11 + 0.33 + 5.06 + 0.25 + 0.33 + 0.56 + 0.92 + 5.06\]

\[\chi^2_{\text{obs}} = 21.66\]

\[\text{Df} = (R - 1)(C - 1)\]

\[= 4\]

\[P = < .001\]

\[\chi^2_{\text{obs}} = 21.66, \quad \text{Df} = 4, \quad *** < .001\]

There is a significant difference at the .001 level(***).
Q12. - A

\[ R_1 = 157.5 \]
\[ R_2 = 148.5 \]
\[ R = 162 \]
\[ n^3 = 78 \]
\[ k = 3 \]

\[ \chi^2 = \frac{12}{nk(K + 1)} \sum (R_i^2) - 3n(k + 1) \]

\[ = \frac{12}{78 \times 3 \times 4} (157.5^2 + 148.5^2 + 162^2) - 3 \times 78 \times 4 \]

\[ = \frac{1}{78} (24806.25 + 2205205 + 26244) - 936 \]

\[ = \frac{1}{78} (73102.5) - 936 \]

\[ = \frac{1}{78} (72166.5) = 937.2 - 936 \]

\[ = 1.21 \]

\[ df = (k - 1) \]

\[ = 2 \]

\[ \chi^2 = 1.21, \ df = 2, \ p > .05 \]

There is no significant difference.
Q12. - B

\[ R_1 = 177 \]
\[ R_2 = 165 \]
\[ R_3 = 126 \]
\[ n = 78 \]
\[ k = 3 \]

\[
\chi^2 = \frac{12}{nk(K + 1)} \sum_{i=1}^{k} \frac{R_i^2}{n_k(K + 1)} - 3n(k + 1)
\]

\[
= \frac{12}{78 \times 3 \times 4} \left( 177^2 + 165^2 + 126^2 \right) - 3 \times 78 \times 4
\]

\[
= \frac{1}{78} \left( 31329 + 27225 + 15876 \right) - 936
\]

\[
= \frac{1}{78} \left( 74430 \right) - 936
\]

\[
= 18.23
\]

\[
\text{df} = (k - 1)
\]

\[
.05 = 5.99
\]

\[
.01 = 9.21
\]

\[
.001 = 13.82
\]

\[
\chi^2 = 18.23, \text{ df } = 2, ***p < .001
\]

There is a significance at the point .001 level(***)
Q12. $\chi^2 = \frac{12}{nk(K + 1)} \sum^3 Ri^2 - 3n(k + 1)
\begin{align*}
\chi^2 &= \frac{12}{78 \times 3 \times 4} \left( 183^2 + 159.5^2 + 125.5^2 \right) - 3 \times 78 \times 4 \\
&= \frac{1}{78} \left( 33489 + 25440.25 + 15750.25 \right) - 936 \\
&= \frac{1}{78} \left( 74679.5 \right) - 936 \\
&= 21.42
\end{align*}

\text{df} = (k - 1) \\
.05 = 5.99 \\
.01 = 9.21 \\
.001 = 13.82

\chi^2 = 21.42, \quad \text{df} = 2, \quad ***p < .001

There is a significant difference at the point .001 level(***)
Q12. - D

$R_1 = 175$

$R_2 = 151.5$

$R_3 = 141.5$

$n = 78$

$k = 3$

\[ \chi^2 = \frac{12}{nk(K + 1)} \sum^3_{i=1} R_i^2 - 3n(k + 1) \]

\[ = \frac{12}{78 \times 3 \times 4} \left( 175^2 + 151.5^2 + 141.5^2 \right) - 3 \times 78 \times 4 \]

\[ = \frac{1}{78} \left( 30625 + 22952.5 + 20022.25 \right) - 936 \]

\[ = \frac{1}{78} \left( 73599.75 \right) - 936 \]

\[ = 7.58 \]

\[ df = (k - 1) \]

\[ .05 = 5.99 \]

\[ .01 = 9.21 \]

\[ .001 = 13.82 \]

\[ \chi^2 = 7.58, \quad df = 2, \quad *p < .05 \]

There is a significant difference at the .05 level(*)
Q12. \[ \chi^2 = \frac{12}{nk(K+1)} \sum (R_i^2 - 3n(k+1)) \]

\[
= \frac{12}{78 \times 3 \times 4} (147.5^2 + 149.5^2 + 171^2) - 3 \times 78 \times 4
\]

\[
= \frac{1}{78} (21756.25 + 22350.25 + 29241) - 936
\]

\[
= \frac{1}{78} (73347.5) - 936
\]

\[
= 4.35
\]

\[ \text{df} = (k - 1) \]

\[
.05 = 5.99
\]

\[
.01 = 9.21
\]

\[
.001 = 13.82
\]

\[ \chi^2 = 4.35, \text{ df } = 2, p > .05^* \]

There is no significant difference.
Q12. - G

\[ R_1 = 190.5 \]
\[ R_2 = 146 \]
\[ R_3 = 131.5 \]
\[ n = 78 \]
\[ k = 3 \]

\[ \chi^2 = \frac{12}{nk(K + 1)} \sum Ri^2 - 3n(k + 1) \]

\[ = \frac{12}{78 \times 3 \times 4} \left( 190.5^2 + 146^2 + 131.5^2 \right) - 3 \times 78 \times 4 \]

\[ = \frac{1}{78} \left( 36290.25 + 21316 + 17292.25 \right) - 936 \]

\[ = \frac{1}{78} (74898.5) - 936 \]

\[ = 24.23 \]

\[ \text{df} = (k - 1) \]

\[ .05 = 5.99 \]
\[ .01 = 9.21 \]
\[ .001 = 13.82 \]

\[ \chi^2 = 24.23, \text{ df} = 2, ***p < .001 \]

There is a significant difference at the .001 level(***)
The Advertising Research Service (ARS) data/information provided:

**Standard Data**
* 72-hour recall - attention and message recall
* Overall Persuasion - "Fair share score" based on pre versus post exposure brand preference shifts and calculated via a formula that takes into account, category brand loyalty level, number of brands in the category and brand share of the test brand.

**Diagnostic Data**
* Customised diagnostics are available as an option. They generally administered on the evening following the recall and persuasion test on a different sample.
* Diagnostic questions are asked after one exposure to the test commercial toward the end of the standard test.
* Brand perception measures may be included, however the diagnostic interview is limited to 10 minutes.

**Pros**
* Constant program environment
* Abundant normative data on recall and persuasion
* Excellent "hygiene controls" on data generated.

**Cons**
* Reliance on "fair share score" as summary measure of response to advertising: not always relevant to specific advertising objectives.
* Recall and persuasion sample size too small to permit target sample analysis which is not provided.
* Diagnostic data obtained at separate test: disallows cross-analysis with recall and persuasion.
* Single exposure to test commercial, unnatural group viewing.
* Very limited choice of test locations.

The Animatic Communications Study —TV, data/information provided:

**Standard**

* Copy recall
* Main idea playback (recall of the main message)
* Brand perceptions — rating scale on extent to which each of 25-30 statements describe advertised brand
* Purchase interest
* Like/Dislikes
* Credibility

**Optional**

* Other customised diagnostics

**Pro**

* Multiple measures
* Two exposures
* Suitable for exploratory copy development

**Cons**

* Very small sample size, limited to women in standard tests
* Single market
* No attention measure
* Quite expensive for sample size and only one market

Associates for research in Behaviour, INC. (ARBOR) offers two copy testing services:

* Motivated Learning Score Potential (MLSP)
* The Strategy Test

ARBOR data/information provided:

**Standard data for MLSP**

* Copy playback analysed in terms of what the advertising communicates, what messages it teaches and what it miscommunicates.

**Standard data for Strategy Test**
* Copy playback - messages communicated / not communicated
* Positioning uniqueness measurement and overall strategy evaluation.
* Product interest
* Belief profile analysis
* Adjective check list
* Optional data: Pre-post constant sum measurement of purchase intent

**MSLP Pros**
* Evaluates message comprehension against objectives
* Target sample
* Offers choice of test cities

**MLSP Cons**
* Is only a communication test

**Strategy Test Pros**
* Multiple measurements
* Target sample
* Offers choice of test cities

**Strategy Test Cons**
* Exposure mechanics and measurements limit its relevance and applicability to copy testing objectives
* Is basically a concept test design
* Claims that the Strategy Test can help resolve the following issues are equally questionable: does the strategy effectively position the product, and does the advertising effectively execute the positioning.

Burke Marketing Research, INC. offers three types of TV copy Testing, DAR (day after recall), RCT (rough commercial testing) and Clucas.

Burke data/information provided for day-after recall:
finished commercials and rough commercial recall: rough
commercials.

**Standard data**

- 24-hour recall: attention (how many recall seeing), related recall (claim to have seen and can play back at least on correct audio or visual element), total content recalled and verbatim recall.

**Pros**

- Natural exposure
- Multiple markets (DAR)
- Relatively fast and inexpensive

**Cons**

- Single exposure of commercials
- Variable program content bias on results
- Single market (RCT)
- Non-target sample
- Information limited to recall; no measure of response to advertising
- High media costs raises cost per commercial test considerably

Burke "Clucas" data/information provided:

**Standard data**

- Oral communication: percentage of viewers who state that they can remember each word in the script
- Visual communication: percentage who state that they can remember each shot in commercial
- Scene objectives: percentage who state that the scene succeeds in conveying a given message
- Audience response: percentage who report that something was going through their minds the first time the scene was presented
- Unaided recall of brand advertised
- Product rating: viewer perception of product quality
- Entertainment value: a measure of tolerance for multiple exposures
* Impressions of advertiser: Image of advertiser suggested by the commercial
* Sales rating: viewer's expectation of commercial's impact on sales

**Pros**
* Target sample
* Multiple measures
* Intensive and extensive diagnostic probing and analysis

**Cons**
* Question and response procedure too unstructured for rigorous data quantification; requires considerable subjective judgement on analyst's part
* More appropriate and applicable for "disaster checks" and exploratories at copy development stage than for conventional copy testing purposes.

Diagnostic Awareness Recall Test (DART) data/information provided:

**Standard data**
* 24-hour recall, attention (remember brand advertised) and copy playback (total attributed characteristics)

**Optional data**
* Limited custom diagnostics

**Pros**
* Natural, in-home viewing
* Multiple markets
* No on-air media costs, test commercials cut over lever air time

**Cons**
* Only one commercial exposure
* Non-target sample
* Variable program environment bias on scores
* Recall measure only; no measure of response to advertising
* Usefulness of optional diagnostics extremely limited
Mapes and Ross TV, Radio and Print copy testing data provided:

**Standard Data**
* 24-hour recall, attention and copy playback
* Overall persuasion - pre-post exposure brand preference points based on constant sum

**Optional data (at added cost)**
* Brand perceptions
* Customised diagnostics

**Pros**
* Customised test design options a big plus
* Multiple markets
* TV and Radio program audience pre-screened and pre-recruited

**Cons**
* Single exposure of test TV or Radio commercial
* Requires control of program environment variability for TV and Radio copy tests
* Non-target audience
* Emphasis on recall and summary persuasion measure

**Multiple Exposure Testing System (M.E.T.S)**
data/information provided:

**Standard Data (after three exposures)**
* Attention
* Communication/playback
* Pre-Post exposure brand preference
* Diagnostics - brand perceptions (scaled), likes/dislikes, believability, confusion and other customised diagnostics

**Pros**
* Realistic viewing environment
* Multiple exposures
* Simulates campaign exposure
* Useful for testing new product commercials

**Cons**
* Essentially a "controlled tracking study" that primarily measures potential "persuasion/sale" build
* Quite expensive and therefore impractical to use for standard copy testing purposes.

**Perception Research Service data/information provided:**

**Standard Data**

* Ad stopping and holding power (focus of attention from eye movement recorder)
  - average viewing time for each ad
  - range of viewing time
  - average viewing time for each specific ad element
  - percent of people who read any executional element (by quadrants)
  - pattern of examination
  - degree of visual interest in each element

* Copy recall/comprehension

**Optional Data**

* Brand perceptions
* Persuasion measures
* Customised diagnostics

**Pros**

* Eye movement measure is a behavioural measure; eliminates questioning bias
* Optional multiple measures available
* Target samples
* Good exposure environment for billboard testing

**Cons**

* Relatively expensive
* Limited locations
* Eye track recording units are "zones" instead of line-by-line; hence less precise

**Telcom TV data/information provided:**

* Attention
- Measured in terms of number of eye movements by each 2-second interval (commercial is segmented into 15 two-second-intervals)

- Percent of respondents who noticed each one visual element on the screen

* Diagnostics (after exposure of entire commercial)
  - Communication (visual and copy play back)
  - Likes/Dislikes
  - Confusion
  - Believability

Telecom Print and Billboard Test data/information provided:

Standard Data

* Advertisement stopping power and holding power (from telcommeter)

  - average viewing time for each advertisement
  - range of viewing time
  - average viewing time for each specific advertisement element
  - percent of people who read any executional element at all, read half, read fully

  - pattern of examination
  - degree of visual interest in each element

* Customised measures: e.g.

  - communications
  - brand perceptions
  - reactions to executions

Telecom Comments

* Since Telecom and Perception Research service are two of the few research companies that utilise the eye movement tracking technique, the comments on PRS can generally be applicable to Telecom as well
* Telecom's Telcommeter, however, offers several advantages over PRS's eye tracking equipment because it is more technically advanced and superior in design.

- It is more compact, lighter, easier and more comfortable for respondents to use.
- Because it's portable, Telcom can carry it in mobile trailers to high traffic locations almost anywhere; PRS units are installed in a limited number of markets.
- The telcommeter unit has fewer physiological restraints; it does not have to eliminate respondents with poor eyesight, eyeglass wearers, those with long eyelashes, etc.
- The telcommeter tracks eye movement on a stimulus line by line, PRS can only do it by zones e.g. quadrants; hence, can provide far more detailed analysis of copy and graphic elements.
- The telcom set-up permits standard verification and cross analysis of eye tracking data with other data which is not feasible with PRS' direct computer feed method.

* Tracking eye movement while viewing a TV commercial may be an interesting visual diagnostic instrument; however, for measuring the totality of response to a commercial (as well as the sound track), it obviously does not recommend itself. The viewing experience is too forced and unnatural.

* Perception Research Service does not recommend the eye movement technique for testing TV commercials for the following reasons:

- In the case of print and packaging, the camera indicates the number of people who overlook an item or fail to read message. However, in the case of TV, almost every item is seen since commercials present frames for viewers to see. Therefore, there is no information on what might be overlooked.
- Additionally, the eye reacts differently to light combined with sound and motion.
Tele-Research/Tele-Scan data/information provided:

**Standard Data**

* Selling Effectiveness Score: Tele-Research system rate cent-off coupon redemption toward purchase of test brand of viewer sample versus control (non-exposed) sample. Tele-Scan system rate of test brand purchase monitored by check-out scanners of viewer sample versus control sample, also used for tracking coupon redemption.

* 24-hour recall, how many recalled (attention) and copy playback

**Optional Data**

* Customised diagnostics available on request.

**Pros**

* Control versus test group design
* Measures purchase commitment, in the case of Tele-Scan, actual purchase
* Relatively inexpensive

**Cons**

* Reliance on sales measure, oversimplifies the dynamics of human response to advertising and range of specific strategic issues and objectives behind each advertising campaign
* While other data is available, recall data and diagnostic data obtained from two different sub-samples, either of which can only be partially cross-analysed with sales measure
* Artificial viewing situation
* Single exposure of test commercial
* Limited choice of markets
* Non-market sample
* Limited to testing products sold only in supermarkets

**Tachistoscope:**

Basically, a Tachistoscope is a machine which controls the time during which respondent is exposed to a stimulus (usually presented in the form of camera slides).
The Tachistoscope can be used in evaluating anything which can be presented in this form.

Print advertising is evaluated via Tachistoscope by
- Communicus, INC.
- Goldfarb Consultants.
- Strach INRA Hooper (Perceptual Meaning Studies)

**Communicus information provided**
* Ability to attract attention
* Ability to register the correct advertiser or brand quickly
* Ability to communicate accurately and rapidly the messages or impressions intended by the advertiser
* Optional diagnostics

**Goldfarb information provided**
* Visual appeal or visual interest
* What the advertisement communicates
* Optional diagnostics

**Starch information provided**
* Extent of perception of the advertisement
* Identification of the product and brand
* Communication of specific advertisement content
* Meaningfulness of the intended message, perceived meaning, and product orientation

**Pros**
* Primary utility in measuring advertisement stopping power, with additional C&R measurements

**Cons**
* Unnatural reading situation
* Unnatural exposure
* Does not measure response to Advertising

**Basal Skin Resistance**

A technique pioneered by Audience Studies, INC. Measures biofeedback in the form of electrodermal (galvanic skin) responses to test stimuli. May be used to measure unconscious
reactions to words, phrases, concepts, executions and package designs relating to consumer attention, interest and involvement. Suppliers of this technique are ASI (Audience Studies, INC), Consumer Behaviour Centre (message evaluation research) and The Walt Wesley Company ("Arousal" scoring system).

Theory
As people are exposed to various forms of external stimuli such as commercials, concepts, package designs, etc, changes will occur automatically to the organs, glands, muscles, and nerve endings in their bodies depending on their level of attention, interest, and involvement for that stimulus.

More extreme examples includes, hair standing on end when people are frightened or blushing occurring for a whole host of reasons.

Less obvious but nevertheless important measurable changes happen within all people all the time. The fingertip is one of the areas most sensitive to these types of changes and is also accessible for measurement purposes. The specific change that is measured is a change from each person’s "natural" or "at rest" (basal) levels in the resistance of the fingers to the flow of electrical current, and the change in the body’s level of self-generated electrical current.

The levels of these unconscious changes may or may not correlate with other "conscious" measurements obtained from a standard questionnaire. Knowing when unconscious and conscious response patterns differ can provide greater depth of understanding of commercial impact.

Method
* Exposure of stimulus :

ASI : Subsample of ASI theatre audience seated in chairs equipped with finger electrodes is exposed to stimulus in standard ASI pilot show format.
Walt Wesley: Individual exposure, with data reported for the aggregate of those exposed.

* Two finger sensors and wristband are attached by wires to self-sticking adhesive cloth that fits similarly to a bandage around the fingers and wrists.

* As respondents are exposed to test material, a minute electrical current is passed through the finger sensors, entering one finger and exiting another, encountering varying degrees of resistance (GSR) on the way.

* An electronically-operated graph pen is driven upward or downward depending on the degree of electric current. The electrical current itself is affected by increases or decreases in the several physiological factors mentioned previously.

* The graph is adjusted for each subject’s basal level.

Data Obtained

The "Basal Skin Resistance Multiple Recorder" then makes a composite graph for all GER respondents of the average change from basal level resistance occurring at any point in the viewing process. Predesignated subgroups (based on target definition, demographic category, brand behaviour category, etc) can be charted for any given stimulus.

Direction of the composite graph curve in relation to base level is supposed to indicate "favourable" or "unfavourable" reactions to stimulus material. Height or depth of the curve in relation to base level is supposed to relate the degree of unconscious attention and involvement with the perceived stimulus.

Data Evaluation

Comparison to norms can then be made. ASI presently has norms for some brands in cigarette and food product categories. Walt Wesley compares "Arousal" scores against a pre-determined set of absolute standards.

Service Evaluation
The Basal Skin Resistance test is not recommended for commercial testing.

**Cons**
* Lay people view involuntary measurement procedures as bordering on the occult.
* The validity of the technique is questionable. The Galvanic skin response is an involuntary (automatic) reaction to stimuli. This is not necessarily equivalent to what the technique purports to tap.
* The reliability of the technique has not been established in terms of:
  - measuring "subconscious" reactions
  - predicting levels of attention, interest, involvement
  - predicting "favourable" vs. "unfavourable" reactions
  - predicting levels after time elapses
  - predicting levels for commercials in different areas
  - predicting levels for different types of executions (mood appeal vs. hard sell, etc)
  - using composite basal levels and deviations to represent all individuals
* When the overt movements on the graph contradict conscious response patterns obtained via other measurements, a useful analytic red flag may be raised. However, the focus group sessions required to assess the contradiction, though useful, are time consuming and costly.
* Normative data not available in most product categories.
* Still in experimental stage.

**Pros**
* Test/retest reliability of reaction patterns to the same stimuli has been claimed by ASI. This provides some evidence of the stability of the technique.
* Basal skin resistance measurement might be useful when testing commercials containing complicated, controversial or
emotional appeals in high risk situations. Here, investigation of contradictory "conscious" and "subconscious" responses might be valuable.

* ASI research indicates that the Basal skin resistance measure is especially useful for measuring reactions to commercials for personal proprietary products and is highly correlated with life span of a commercial.

* Basal skin resistance measurement is an excellent predictor of the success or failure of pop records according to ASI!

* Other possible applications for the method for which success has been claimed include premium evaluations, alternative colour selection, reaction to alternative package design, concept studies and content analysis.

A discussion of brain waves and copy testing:

What is suggested by this research, and other experiments, is that two halves of the brain control fairly dissimilar mental process. In most persons, the left brain processes information in linear fashion, in an organised, step by step way, and is the seat of logic, verbal ability, reading, analytical and mathematical skills - in a word the Rational. The right brain processes information in patterns. Seems better at grasping the total picture, the gestalt, and is the location of feelings, of spatial perceptions, relationships, non-verbal skills like music or art, imagination, of, the emotional.

Brain Waves and Copy Testing

How does all this rather esoteric material relate to the mundane world of copy testing? It is argued that different hemispheres of the brain may be more or less appealed to by different forms of media. Or, put slightly differently, various types of media are more likely to activate different parts of the brain. In other more specific words, the print medium, with its reliance on words, on verbal expression, is more likely to appeal to, to activate, the left brain, that part which is the
seat of word power, cognition, and reasoning. Conversely, the medium of television, with its primarily visual orientation and presentation, will more likely activate the right brain, the place where images, intuition, non-verbal skills dwell, but not cognitive aspects.

It is then suggested that much about current television copy-testing techniques clash with the theory of the brain just presented. These techniques assume a kind of rational response on the part of the viewer. When you ask the question dealing with recall of a television commercial, you are in a sense assuming that the person, the brain, received the message, decoded the message, analysed the message, and remembered the relevant parts; that the person has translated a primarily visual presentation or image (the television commercial) into a verbal (non-visual) format; that there has occurred, in other words, substantial left-brain involvement.

But, it has been argued that television does not work that way. The viewer is not trying to receive, to decode, to translate the commercial. The television viewer is simply passively participating in an experience, in an evanescent experience at that. When on the next day you ask a respondent his recall, you are, in essence, asking his left brain to tell you something his right brain received and, since the latter's experience tends to be outside language, intelligent, organised copy point playback is relatively low. However, this does not mean that the commercial was a failure, that the reader, viewer, or listener has forgotten it or erased it from memory. Though recall may not result, it is possible that recognition has been communicated and that this recognition, this picture/image, can be stimulated at some future time when a person is shopping, and that such activation will stimulate purchase.
In a sense, then, memory without recall has been achieved. What is being suggested by the above is that in television copy-resting a recognition score should also be collected and that by relying only on recall, one is underestimating the effectiveness of a commercial.

It is suggested that this research is not entirely irrelevant, some research of this kind is indeed in process. It is admittedly somewhat controversial and needs to be tested for reliability and validity.

Conclusions

Some conclusions cautionary comments seem in order at this point:

1. Brain wave research, especially in terms of left brain-right brain, cognitive-affective and specialisation, is presently only in the experimental exploratory phase.

2. In terms of some of the real advertising research that has been done in this field:
   A. The cost is quite substantial
   B. Consequently, sample sizes tend to be quite small with the result that findings are suggestive at best.
   C. There is something unnatural to say the least in being hooked up with electrodes before viewing something, and this may affect test results.

3. The human brain normally functions in a more integrated and complementary manner than in the examples given previously, because of the sharing of information between the hemispheres. In other words, the proposed dichotomy between spheres and functions is an oversimplification. In reality, during different mental tasks, one hemisphere is only relatively more active than the other.

4. There is an element of Grailmanship, a search for a magic box or electrode that will allow the researcher to reach the "unconscious" but "real" response of the respondent.