



**Tuhin Chattopadhyay**

**Research for Advertising Decision**



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**A Study on Advertisement and Consumer Behavior  
from an Information Processing Perspective**

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*RESEARCH*  
*FOR*  
*ADVERTISING DECISIONS*

*BY*

*DR. TUHIN CHATTOPADHYAY*

To  
The Divine Trio...  
Sri Ramakrishna, Maa Sarada  
& Swami Vivekananda.

## **Preface**

Since advertisers increasingly seek greater communication effectiveness, knowledge of consumers' advertising preferences is becoming essential in the designing of advertising message. The present research assesses the influence of information presentation format in terms of advertising appeal and advertising execution style on consumer's preference of advertisement. Preferences of advertisements change with age and sex. The purpose of this study is to find out the advertising preference of every consumer segment differentiated by age and sex and further explore whether there exists any pattern in the change of advertising preferences through age and sex. The population available for study i.e. consumers are classified into ten strata based on their sex and age viz. boy child, girl child, teenage boys, teenage girls, young men, young women, middle aged men, middle aged women, senior men and senior women. From each of the stratum, four hundred respondents are selected.

The researcher took almost all print media advertisements (approximately three thousand) published in India from 2005 to 2007 by the fifteen leading advertising agencies of India and for all practical purposes the collection has been considered to be exhaustive. The advertisements are initially classified with respect to their target audience into ten groups i.e. advertisements for boy child, advertisements for girl child, advertisements for teenage boy, advertisements for teenage girl, advertisements for young men, advertisements for young women, advertisements for middle aged men, advertisements for middle aged women, advertisements for senior men and advertisements for senior women. The advertisements for each target segments are classified into two groups by identifying and labeling the emotional and rational appeal. Each group of rational appeal and emotional appeal are further classified with respect to ten types of advertising execution styles (Animation, Slice of life, Testimonial, Demonstration, Fantasy, Informative, Scientific/ technical evidence, Comparison, Personality symbol, Dramatization). From the twenty groups of advertisements the best representatives from each group are selected through Quick-sort procedure for the ten segments. So, twenty advertisements have been selected for each of the ten target markets.

Hypotheses were formulated to measure the interaction effect between advertising appeal and advertising execution style on attention, message comprehension, retention of the ad, attitude towards the ad and purchase motivation of the consumers in each of the ten segments. Each subject viewed these twenty advertisements in a different random order, to avoid systematic effects of practice. Multi-item scales were used to measure the five dependent variables i.e. attention towards the ad, comprehension of the ad, retention of the ad, attitude towards the ad and purchase motivations on seeing the advertisement. The dependent variables are in interval scales and independent variables are in nominal scales. A complete within-subjects MANOVA was employed in which each subject experienced all twenty advertisements differentiated by two types of advertising appeal and ten types of execution styles and that produces values for each cell of the five dependent variables. The hypothesis stating that the attention, comprehension, retention, attitude and purchase motivation of consumers generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/technical evidence, comparison, personality symbol, dramatization) was

tested in a 2 x 10 within-subjects MANOVA design for each of the target segment.

Typically, when a consumer's cognitive style was congruent with their preferred information format positive evaluations were indicated. Within-subjects MANOVA revealed an interaction between advertising appeal and advertising execution style on attention, comprehension, retention, attitude and purchase motivation in each of the ten target segment. The research further reveals a pattern in the change of consumers' preference to advertising appeal. The children and the teenagers, irrespective of their sex, prefer advertisements with emotional appeal. With the advent of age the preferences of the consumers change from emotional to rational advertising appeal is very much discernible from the preferences of young and middle-aged people. Further advance in age shift the preference to emotional appeal as revealed from the preferences of senior men and senior women. Thus the preference of advertising appeal shifts from emotional to rational with the advent of age and again returns back to emotional in old age.

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## **CHAPTER 1**

### **INTRODUCTION**

It is essential to have a deep understanding of the advertising preferences of the consumers, in order to design advertisements that contribute to high levels of effectiveness. Intrinsic analysis needs to be carried out in selecting the most effective advertising message strategy for each target segment. In this context, the study of consumer information processing has been an important development in communication research. The present research views consumers as active information processors of advertisements. Reader-response theory suggests that the meaning and significance of any form of communication is co-created at the point of engagement. The meaning of a print advertisement, for example, is located, not in the advertisement itself, as discussed in conventional research, but in the interaction between the advertisement and the viewer. The meanings that result in this process of negotiation are as much a reflection of age and sex as they are a response to particular advertising appeal and advertising execution style. To understand how consumers make sense out of these communicative texts, it is necessary to study them at the point of reception.



In response to advertising, the cognitive thoughts and ideas consumers generate are believed to be an important determinant of the direction and amount of persuasion (Brock & Shavitt, 1983; Olson, Toy, & Dover, 1982; Petty & Cacioppo, 1981; Tybout, Sternthal, & Calder, 1978; Wright, 1973, 1980). Much research in advertising investigates how the processing of advertisements results in advertisement effectiveness and specifies the determinants like consumer attention and memory for the same (Greenwald & Leavitt, 1984; Lavidge & Steiner, 1961). Similarly, extensive research examines the formation of attitudes towards the advertisements (Brown & Stayman, 1992). Attitude towards the advertisement can be influenced by the emotions elicited by exposure to an advertising appeal (Bagozzi & Moore, 1994; Stayman & Aaker, 1988). Good results on measures of attention, comprehension, retention, attitude and purchase intention are often taken to imply that an advertisement that performs well on these measures can be looked upon as successful. Recognition readership scores are examples of useful measures for assessing attention and memory of individual advertisements (Bagozzi & Silk, 1983; Holbrook & Lehmann, 1980; Lavidge & Steiner, 1961). As the marketplace continues to become more competitive with hundreds, if not thousands, of advertisers competing for the consumers' attention (Webb & Ray, 1979) marketers must develop a better understanding of the consumer preference of the advertising message if they aim to reach their desired target audience effectively. It is a universally acknowledged fact that matching advertising message to a consumer's mode of information processing enhances advertising effectiveness. The present research takes into consideration the dependent measures of the previous research and tries to

bring out the impact of the advertising message content on attention, comprehension, retention, attitude and purchase motivation.

One of the key issues for an advertiser is to decide how to phrase the advertising content which consumers will be exposed to. Advertising message content is a well-researched topic in both the academic as well as practitioner's community. Ray (1982) classifies commercials by "format," e.g. warmth, testimony, refutation, repetition and fear. Aaker and Myers (1987) used the term "message factors." Rothschild (1987) refers to classes of creative appeal (rational versus emotional) and execution style (slice of life, product comparison, problem/solution, music, sex and humour). Belch and Belch (1995) used the term "Appeals" (rational, emotional and combinations) and "Creative Execution Styles" (factual message, scientific/ technical evidence, demonstration, comparison, testimonial, slice of life, animation, personality symbol, fantasy, dramatization, humour and combinations).

The advertising appeal refers to the approach used to attract the attention of consumers and/ or to influence their feelings towards the product, service or cause. An advertising appeal can also be viewed as "something that moves people, speaks to their wants or needs, and excites their interest." (Moriarty, 1991). The most important types of advertising appeals include emotional and rational appeals. The emotional/rational framework has been studied extensively in the marketing and advertising literature, possibly stemming from Copeland's (1924) original proposition that individuals buy products for either rational or emotional reasons. Rational appeal stems from

the traditional information processing models of decision making where the consumer is believed to make logical and rational decisions; such approaches are designed to change the message receiver's beliefs about the advertised brand and rely on their persuasive power of arguments or reasons about brand attributes. Such appeals relate to the audience's self-interest by showing product benefits (Kotler & Armstrong, 1994). "Examples are messages showing a product's quality, economy, value or performance" (Kotler & Armstrong, 1994). In contrast, emotional appeals are grounded in the emotional, experiential side of consumption. They seek to make the consumer feel good about the product, by creating a likeable or friendly brand; they rely on feelings for effectiveness. According to Kotler & Armstrong (1994), "Emotional appeals attempt to stir up either negative or positive emotions that can motivate purchase. These include fear, guilt and shame appeals that get people to do things they should or stop doing things they shouldn't ...communicators also use positive emotional appeals such as love, humor, pride and joy".

The advertising execution style is the way a particular appeal is turned into an advertising message presented to the consumer. According to William Weilbacher (2003),

"The appeal can be said to form the underlying content of the advertisement, and the execution the way in which the content is presented. Advertising appeals and executions are usually independent of each other; that is, a particular appeal can be executed in a variety of ways and a particular means of execution can be applied to a variety of advertising appeals."

Advertising appeals like rational and emotional appeal can be executed through various advertising execution styles like animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/ technical evidence, comparison, personality symbol, dramatization etc. To make appeals more distinctive and hence, perhaps more persuasive, advertisers frequently use dramatic emotional advertisements - messages designed to "shock the emotions and make the brain itch" (Moore, 1989). Such advertising executions often feature high impact, sensually evocative appeals that stimulate strong positive emotions (e.g., the Hallmark greeting card advertisements dramatizing precious moments and nostalgic memories in life).

When the advertising format is compatible with the processing mode, the ability to process information gets enhanced, making the message more persuasive and advertisement evaluations and purchase intentions more favorable than when advertising format and processing mode are incompatible. It is a matter of study for the academicians to find out an effective advertising message strategy for the segmented target markets. The basic approach in studying advertising preference is to view the consumer as a processor of information; that is the consumer is characterized as interacting with his or her choice environment, seeking and taking in information from various sources, processing this information, and then making a selection among some alternatives (Bettman, 1979). The purpose is to provide an integrated view of choice from an information processing perspective. Since the effective combinations of advertising appeal and advertising execution

style will be different for different target audiences, the present research has taken into consideration the different segments with respect to age and sex and tries to explore the effective combinations of advertising appeals and advertising execution styles. The present study on information processing has been carried out by treating print advertisements as information sources and viewers as information processors.

## **1.1 RESEARCH OBJECTIVE**

The present research measures the impact of advertisements on individuals differentiated by age and sex to find out which type of advertisements should be used for their respective target audience.

The defined objectives of the study were as follows:

- i.** To test the impact of advertising message strategy (in terms of interaction between advertising appeals and advertising execution styles) on consumer's cognitive processing of advertisements (i.e. on attention, comprehension, retention, attitude and purchase motivation of the consumers).
- ii.** To explore the advertising message (in terms of advertising appeal and advertising execution style) preference of the consumers differentiated by sex and age.
- iii.** To find out a pattern, if any, in the change of advertising preferences of consumers with the change of sex and age.

The following chapter on literature review starts with a brief discussion on advertising appeal and thereafter it delineates the evolution of information processing perspective. Thereafter, past research on cognitive information processing and the relationship between advertisement processing and the components of cognitive information processing like attention, comprehension, retention, attitude and purchase motivation of the consumers have been explored. Next, the previous research on the impact of sex and age differences on advertisement processing was discussed. Finally, the chapter concludes with recent research directions and takes the discussion towards a research method.

## **CHAPTER 2**

### **LITERATURE REVIEW**

To develop the foundation of this research, a number of diverse areas of thoughts were explored. The advertising literature is reviewed to provide a research foundation. Taking into consideration the information processing perspective, the literature on consumer behaviour is consulted to provide some insight into the cognitive mechanisms activated when consumers process print advertising. Finally, the psychology literature is reviewed in an attempt to understand the impact of sex and age on the processing of advertisements. This chapter provides a summary of these areas which will serve as a conceptual basis for the experiment to be conducted.

#### **2.1 ADVERTISING MESSAGE APPEALS**

Advertising appeal is the general overall approach that a specific advertisement adopts to connect with the audience or the potential consumer. Despite an array of terminology there is general agreement that there are two major types of advertising appeal viz. rational and emotional appeal. As cited by Pang, Keh & Peng (2009), the emotional/rational framework stems from Copeland's (1924) original proposition that individuals buy products for either rational or emotional reasons.

The rational strategy is based on the traditional information processing models of decision making. This has been defined by Stafford and Day (1995) as a presentation of factual information in a straightforward way, characterised by objectivity. Puto and Wells (1984) refer to this rational approach as informational advertising. According to Laskey, Fox and Crask (1995), rational advertising comprises three approaches – comparative, unique selling proposition and preemptive – to influence consumers' information processing. The effective rational advertising is distinguished by the presence of logical arguments directed to pursue the audience and clear representation of products' attributes (Albers-Miller & Stafford, 1999). Johar and Sirgy (1991) propose that this approach tries to equalize the product utilitarian attributes and the consumer's ideal attributes and hence named it as functional congruity route.

The second appeal type is of an emotional nature and has been associated with such feelings as adventure, fear, romance, status etc. (Cutler & Javalgi, 1993). Johar and Sirgy (1991) refer to this emotional approach as the self-congruity route which is defined as the matching of the product's value expressive attributes and the consumer's self-concept and likened to peripheral processing in the Elaboration Likelihood Model (Petty & Cacioppo, 1984). In other words, emotional strategy of advertisements triggers the emotional feelings of the consumers complements their self esteem, subconscious and ego (Kotler & Armstrong, 1994). In contrast to rational advertising, emotional advertising tries to make the viewer feel good about the product (Ogilvy, 1963) and by using brand image and occasion of



use advertisers help the viewer to connect with the product at a personal level (Laskey et al. 1995).

Researchers have debated over the issue of comparative effectiveness of the two approaches for long. As rational advertisements provide more information than the emotional one and the factual content of the former is more credible, there is a school of belief among the researchers and marketers that the rational approach is superior to the emotional approach and hence results in better liking and higher purchase motivation (Holbrook, 1987; Golden & Johnson, 1983). Aaker and Norris (1982) also found that informational or rational appeal resulted in higher effectiveness ratings than the emotional appeal. Other scholars have proposed that advertising appeal evoking emotional response resulted in more positive reaction (Goldberg & Gorn, 1987) and higher level of recall (Choi & Thorson, 1983). Despite this active debate there is some point of agreement in the discussion of effective message strategy that the message style should be compatible with the product type i.e. a more emotional appeal should be used for a value-expressive product and a more rational appeal should be used for a utilitarian product (Johar & Sirgy, 1991; Vaughan, 1980). As cited by Albers-Miller and Stafford (1999), the cultural background of the viewer also influences the effectiveness of the message appeal of the advertisements. Triandis (1989) reveals that in many cultures emotionality and rationality are not looked upon as opposite attributes and some cultures are more likely to show emotional bonding than others. Hence rational and emotional decision making is culturally defined (Hofstede, 1980). In the present study, the differential

message processing in terms of rational and emotional style has been studied in gender and age dependent manner.

## **2.2 THE DEVELOPMENT OF INFORMATION PROCESSING PERSPECTIVE**

Since the mechanism of information processing process generates deep interest from varied disciplines like psychology, neurology and marketing, there is no dearth of research work carried out regularly from all of these perspectives. As discussed by Erik du Plessis (2005), the study of information processing rests on four pillars: philosophy, psychology, neurology and marketing research. Among the four perspectives, philosophical perspective enlightened us from as early as 17<sup>th</sup> century. Descartes (1637), the famous neurologist, philosopher and physician postulated that humans are rational beings (*Cogito ergo sum* – I think therefore I am) and emotions create irrationality in us. So the study on how we think should exclude the effect of emotions. Freud (1900) introduced the theories of subconscious in the modern discourse on thinking mechanism. The marketing perspective was introduced exactly a century ago. John Dewey (1910) proposed that consumers pass through five stages in problem-solving activity, namely problem recognition, search, evaluation, purchase decision, post-purchase evaluation (Runyon & Stewart, 1987). Colley (1961) proposed that consumers pass through four distinct stages namely, awareness, comprehension, conviction and action while processing information from advertisements. The Advertising Research Foundation in 1961 proposed another model with five steps, namely exposure, perception, communication (knowledge), communication (attitude)

and action for developing more effective advertisements. Wolfe, Brown & Thompson (1962) illustrated that the advertisers make the consumers pass through the six stages, namely awareness, acceptance, preference, intention, sale and provocation while designing advertisements. Francesco Nicosia (1966), a leading scholar in consumer behaviour, builds a comprehensive consumer decision making model with a number of variables like attributes of the brand, environmental factors, consumer's attributes, attributes of the organization, attributes of the message, consumer decoding, search and evaluation, decision, and consumption. Engel, Kollat and Blackwell (1968) proposed the consumer decision making model with four components: central processing unit (stored information and experience, evaluation criteria, attitude and personality), information processing (consumer's exposure, attention, comprehension and retention of information), the decision process (problem recognition, internal search and evaluation, external search and evaluation, purchase processes and decision outcomes) and the environmental factors (income, culture, family and social class). Howard and Sheth (1969) proposed a consumer decision making model with four sets of variables namely the stimulus-input variables (advertisements and other marketing programmes), internal variables (consumer's cognitive capabilities), exogenous variables (the reference frame in which the consumer belongs include the culture, social class, financial status etc.) and the response-output variable (buyer's final decision in response to the input, internal and exogenous variables). In 1970s, McGuire developed information processing model through a series of essays (e.g. McGuire, 1968, 1972, 1978) which remains a widely adopted theoretical basis for advertising research. Initially,

McGuire proposed a six stage information processing model. The steps through which the consumers pass when exposed to the advertisements are presentation, attention, comprehension, yielding, retention and behaviour. Later on, he expanded his information processing theory to eight steps viz. exposure, perception, comprehension, agreement, retention, retrieval, decision making and action. He further extended his information processing model with twelve dependent variables: exposure to the communication, attending to the communication, liking or becoming interested in the communication, comprehending the communication, skill acquisition, yielding to the communication (attitude change), memory storage of content and/or agreement, information search and retrieval, deciding on the basis of retrieval, behaving in accord with decision, reinforcement of desired acts and post-behavioral consolidating. Roger Sperry (1970a, 1970b, 1970c) introduced the neurological perspective in the studies of information processing. He performed a number of experiments on his patients and came to the conclusion that the human brain consists of two parts. The left hemisphere is specialized in processing of verbal and the right one in visual stimuli. This was further interpreted to mean that while the left hemisphere was involved in rational tasks, the right in emotional tasks. In the mean time, the marketing researchers also tried their best to uncover the information processing process by the consumers. In 1977, Krugman provided the information processing theory a new interpretation when he categorized the recall and recognition of advertisements as the outcomes of high information processing and low information processing, respectively. In this theory also the rational versus emotional nature of thinking persisted. According to Pinker's (1994) theory of

how the mind works, human brain was looked upon as a naturally selected system of organs of computation where mental life consists of information processing or computation. Recently two neurologists, LeDoux and Damasio, proposed a new paradigm on how human beings process information. LeDoux (2000) stated that emotions cause attention to shift towards the stimulus that causes an emotion, as a result of the limbic system's autonomic reaction and according to Damasio (1994), emotions create a 'soma' for the developing perception, which sets the background against which logical interpretation of the perception or rational thinking happens. Research in psychology reveals that information to which the consumer was exposed previously but ignored the same, is actually stored and processed later on although in a subconscious and pre-attentive level. This type of 'ignored' information escapes the memory of consumer and can affect consumer's judgment about an advertisement or brand by interfering with the information processing associated with the concerned advertisement (Janiszewski, 1988, 1993; Shapiro & MacInnis, 1992). As the mechanism of information processing of human brain continues to be an enigma to both the psychologists and advertisers, these results can be reinterpreted by the amalgamation of the ideas of Freud's subconscious and LeDoux—Damasio's 'emotion affecting cognition' theory.

## **2.3 COGNITIVE INFORMATION PROCESSING IN ADVERTISEMENT**

An effective advertisement is appreciated by its virtue of communicating with customers in such a manner where the pre-intended message encoded in the advertisement can be decoded in the form desired by the advertisers. Considering the importance of advertisements in varied fields ranging from market economy to matrimonial in newspaper, it has always been an active field of debate for researchers that how the information in an advertisement is being mentally processed and how the viewer remembers the message communicated by the advertisement. In this age of globalization, when an individual is continuously exposed to information from various sources, the choices made by the consumers are expected to be affected by the combined or integrated effect of that information. Hence, it is crucial for advertisers to decide what information to provide to consumer, how much to provide and how to provide. These decisions require knowledge of how consumers process, interpret and integrate that information in making choices (Bettman, 1979). The basic approach to study the decision making process, consumers are considered as a processor of information and it is also hypothesized that consumers seek and take up information from various sources which help them to maximize utility, reduce level of risk or solve problem. Most implicit theorizing in decision making concerns how people are motivated to behave after watching the advertisements. The consecutive mental stages that people traverse through in the way of decision making i.e. acquiring, processing, retaining and evaluating the sources of information, are not explained adequately. Still, theories of attitude and attitudinal change

have developed by taking count of input variables and situational factors such as motivation and processing ability. Attitudinal research has also explored issues related to information processing such as recall, peripheral cues, exposure, cognitive elaboration, sleeper effects, dissonance and many other areas (Petty, Wegener, & Fabrigar, 1997). In the present research, the effect of different types of advertisements on consumer's memory (Childers, Heckler & Houston, 1986; Heckler & Childers, 1992), beliefs (Lutz, 1975, 1977; Mitchell & Olson, 1981) and attitudes (Edell & Staelin, 1983; MacKerzie, Lutz & Belch, 1986; Mittal, 1990) is considered.

### **2.3.1 Advertisement Processing and Attention**

Advertising has to get attention. It has to cut through the clutter of other advertising and get noticed. The first principle of advertising is that it needs to stand out. To this end, advertising uses a variety of combinations of advertising appeal and advertising execution style. Attention, as explained by William James (1890) revealed,

“It is the taking possession by the mind, in clear and vivid form, of one out of what seem several simultaneously possible objects or trains of thought. Focalizations and concentration of consciousness are of its essence. It implies withdrawal from some things in order to deal effectively with others.”

The modern era of attention was introduced by Donald Broadbent (1954) who defined attention as the result of a limited-capacity information-processing

system. The essential notion of Broadbent's theory was that the world is made up of many more sensations that can be handled by the perceptual and cognitive capabilities of the human observer. Therefore, in order to cope with the deluge of available information, people selectively attend to only some of the cues and tune out much of the rest. Attention is also defined as the concentration of mental effort on sensory or mental events (Solso, 1995). Treisman and Gelade (1980) hypothesize that two different processes in visual attention are operating. In the first stage, there is an initial, preattentive process (a kind of master map of an image) that scans the field and rapidly detects the main features of objects, such things as size, colour, orientation and movement, if any. Then different properties of the object are encoded in specific feature maps, which are located in different parts of the cortex. Attention, defined as the general distribution of mental activity to the tasks being performed by the individual (Moates & Schumacher, 1980) reflects both that which receives mental activity (direction) and the duration of the focus. As a limited cognitive resource (Broadbent, 1977; Kahneman, 1973; Mitchell, 1983; Moray, 1967; Norman & Bobrow, 1975), attention can be allocated to the various degrees to the advertisement. The selective aspect of attention is under conscious control and is directed toward need-relevant stimuli. It is also recognized, however, the stimuli may contain properties that automatically elicit attention. (Berlyne, 1960).



### **2.3.2 Advertisement Processing and Comprehension**

Message comprehension is considered to be an important attribute of cognitive processing of advertisements. Comprehension is a function of message characteristics, the consumer's opportunity and ability to process the information and the consumer's motivation or level of involvement (Schiffman & Kanuk, 1991). As Marshall McLuhan (1964) aptly proclaims "the medium is the message", comprehension of a preintended message can be considered as a linear sequence involving the message itself, the medium that carries it and the person who receives or fails to receive the message intended by the sender (Jacoby & Hoyer, 1987). Use of 'borrowed interest' for the 'real material' of the advertisement like sex, humour, celebrity endorsers might deviate the consumer's attention in a detrimental way which reduces communication impact. It generates high level of interest in the advertisement in expense of diversion from message (Severn, Belch & Belch, 1990). Another aspect of comprehension is that the viewer might take away the message encoded in the advertisement in an objectively comprehended manner i.e. they actually give the message just the way the advertiser intended (Shannon & Weaver, 1949). In this objective comprehension orientation, communication is considered as a signal selected by the information source and the signal is transmitted to the receptor, which in absence of noises receives the signal. Here comprehension takes a one-dimensional structure where the amount of meaning drawn from the advertisement is measured. As reviewed by Mick (1992), the methodology used to study the objective comprehension measurement is post-exposure quizzes about message claims and their logical implication (Jacoby & Hoyer,

1987) or recall of message claims up to 72 hours afterwards. This method has its own shortcomings as very often the message comprehension becomes similar to the message based learning and overestimates the memory effects in the process of comprehension assessment. Another approach in understanding the comprehension is to the extent of subjectivity occurred in the process i.e. whether the viewer imparting the influence of his own life and experiences in comprehending the message irrespective of the advertisers intention. Here the message comprehension is a context specific and open ended process where the individual generates a new meaning beyond the one provided by the source. Mick (1992) also reveals that comprehension has varying levels (Monaco & Harris, 1978). At the surface level, a mental association occurs with the message assertion and logical implication of the same where at a deeper level elaborate meaning of the provided information emerges by activation of knowledge structure of the individual. From this perspective the concept of depth of comprehension can be analyzed. According to Mick (1992), comprehension levels are hypothesized to differ in their relations to advertisement perceptions, attitudes, and memory. In his work on subjective orientation he specifies four levels of comprehension in terms of their respective outcome meaning. Level defines the receiver-based level of meanings related to personalized embellishments (the individual consumer), triggered by the message content, derived from self-knowledge and self-experiences (Mick, 1992). The first level implies the message-based level of meanings related to the message content. The second level consists of the message-based level of meanings related to logical inferences derived directly from the explicit or asserted message content. The third and the

fourth levels are receiver based. They stand for the receiver-based level of meanings related to non-logical, non-personalized inferences or elaborations triggered by the message content, derived from general product or situational knowledge. The logic of this four level model follows the assumption that consumers' attention and comprehension processes are actually influenced by their motivations, abilities, and opportunities to process information in their environments (Batra & Ray, 1986). Comprehension processes also seem to be influenced by individual's domain knowledge or ability to process but only when individuals feel sufficiently involved (perceived self relevance is strong enough) to motivate deeper, more elaborate comprehension of product-related information (Celsi & Olson, 1988).

### **2.3.3 Advertisement Processing and Retention**

As consumers are continuously being exposed to a huge number of advertising information every day, the memory process involved in storing and recalling the information, influences the processing of message provided by advertisements. This concept emerges from the idea of viewing long term memory store of information as a complex network having inter and intra nodal structure. In this network, information is constantly organized and reorganized to influence the processing of newer information (Schiffman & Kanuk, 1991). The cognitive information processing theory involves three stages of memory. Sensory memory helps learner in organizing groups of information or patterns which can later on be recognized and processed. Short term memory enables learners to understand small amount of information

while long term memory allows the learners to remember the information for a long time after it is learnt and then apply it later on. As proposed by Craik and Lockhart (1972), memory formation is resulted by successive series of analysis performed on an incoming series of stimulus and the durability of the memory trace or extent of retention depends directly on the depth of processing. The encoding specificity (Thomson & Tulving, 1970) of certain information affects the accessibility of the information. According to this principle, what is stored in memory is determined by what is perceived and how it is encoded. As a result there exists an interrelationship between encoding process and retrieval. In case of advertisement, the ease with which certain purchase information is accessed depends upon how the information is stored in the memory (Olson, 1978). The encoding process can occur at different depths and breadth. Based on depth and breadth of memory process, a single stimulus can be encoded as larger memory trace or vivid information which by virtue of being elaborately encoded in memory is easily accessible while making a judgment. Encoding distinctiveness is also important to increase access of particular information by reducing the amount of competitive information (Lynch & Srull, 1982). Memory accessibility in advertisement processing and decision making is also dependent upon the fact that whether the viewer is engaged in recall or recognition (Lynch & Srull, 1982). When the individual independently produces cues to enable him/ her to access the memory, the free recall process is taking place. On the other hand, in case of recognition the cues helping in retrieval are generated by the representation of the stimulus. As consumer is only capable of retrieving a fraction of total information they have stored into long term memory which is

thought to be available, there is a difference between “available” and “accessible” information and this disparity affects the information processing (Lynch & Srull, 1982). The retrieval tasks in a decision-making environment can take place as a continuum with pure stimulus-based judgments and pure memory-based judgments representing the two extremes (Lynch & Srull, 1982). In order to design an effective advertisement, advertisers need to study both the memory process and the mechanism of forgetting. As reviewed by Lee and Lee (2007), forgetting occurs not only because of the passage of time but also because of input of additional information that is encoded during that time. Forgetting may be caused by retroactive interference when people forget associations between target brand-attributes as a result of learning new competitive brand-attribute associations or by proactive interference when consumer's ability to learn is inhibited by prior learning (Bettman, 1979; Lynch & Srull, 1982).

#### **2.3.4 Advertisement Processing and Attitude**

Successful buyer choice model works on complex decision making networks which are composed of product perceptions and situational variables. To measure the response of the viewers or the potential customers after viewing the advertisement researchers often take the resulted attitude towards the advertisement as an important parameter. Attitude can be defined as a learned predisposition to behave in a consistently favourable or unfavourable way with respect to a given object (Schiffman & Kanuk, 1991). According to Schroder, Driver and Streufert (1967), an attitude may be

defined in terms of content properties (magnitude and direction) and structural properties i.e. the complexity of conceptual rules involved in processing information about stimuli relevant to the attitude area (as cited in Bettman, 1974). The structural properties of attitude represent the internal model used by the consumer to process data about stimuli relevant to product choice. If attitude denotes the feeling towards an object, then cognition connotes beliefs about the object and behaviour can be identified as actions engaged in response to the object. Cognitive evaluation consists of analytical processing of the message and affective evaluation uses the concepts like moods, emotions and other feeling states. These two processing styles may influence the formation of attitude equally or one of them may become more important in the process. According to Fishbein (1972), a fruitful approach to study attitude behaviour relations involves using situation specific attitudes and measures of attitudes belief components (as cited in Bettman, 1974).

Attitude towards an advertisement is measured by individual's response to the concerned advertisement during the time of experiencing the advertisement (MacKenzie & Lutz, 1989). When studied under experimental conditions attitude towards the advertisement affects attitude towards the brand which in turn impacts the purchase intention (Lutz, MacKenzie & Belch, 1983). Attitude is considered to be consisting of three major components: a cognitive component, an affective component and a conative component. And it is a logical predictor of sales among constructs which are

influenced by advertising (Haley & Baldinger, 1991). Attitude towards the brand is complex in nature as it is resultant effect of prior experiences with the brand. According to Fabrigar, McDonald & Wegener (2005), though attitude is a multi-component complex, the components are closely interrelated. Some of the features of attitude are attitude strength, attitude certainty and attitude complexity. Attitude certainty results in stronger attitudes and it measures an individual's certainty about the correctness of his or her attitude (Gross, Holtz & Miller, 1995). Stronger attitude is a better decider of subsequent behaviour and rigid in nature. Attitude complexity also marks the attitude as a rigid one (Wood & Kallgren, 1988). Attitude accessibility is characterized by how quickly and easily an object evaluation occurs (Fazio & Williams, 1986). And readily accessible attitude usually are more rigid than the less accessible ones (Fabrigar, McDonald & Wegener, 2005).

### **2.3.5 Advertisement Processing and Purchase Motivation**

The effect of advertising on mental states like purchase intention or belief about product attributes is often treated as a direct consequence of exposure to advertising (Holbrook, 1978; Mitchell & Olson, 1981). Prior research findings further supported the effects of imagery processing on purchase intentions and purchase timing. In clinical contexts, Cautela and McCullough (1978) found that imagery processing was more influential in affecting behavioral intentions than discursive processing. Staats and Lohr (1979) posited that imagery could affect behavior by eliciting an emotional response. Images that create positive emotions elicit approach responses,

whereas images that create negative emotions elicit avoidance responses. MacInnis and Price (1987) posited that imagery processing may generate a stronger emotional or more concrete sensory experience than discursive processing using words and numbers, which in turn increases desire for the product. They further postulated that the emotions evoked by elaborated imagery processing may reduce the delay between purchase consideration and actual purchase, thus affecting purchase timing. Although it is accepted that the purchase motivation is only a single component in the sequence of events which actually result in buying and satisfyingly consuming the product, a positive feeling in terms of buying motivation may help the whole process to accumulate positive feeling (Holbrook & Hirschman, 1982).

## **2.4 IMPACT OF SEX DIFFERENCES ON ADVERTISEMENT PROCESSING**

The fact that men and women are different is commonly accepted both from social and analytical perspective, but the important inference that advertisers and marketers are looking for is that whether this difference is translated into differential information processing and evaluation of marketing communication. There is a rich literature base in both psychology and marketing suggesting that men and women process information differently. One important theory explaining cause of sex differences in information processing is the “selectivity hypothesis” (Meyers-Levy, 1989). According to the theory, in general, women tend to give attention to all the minute details provided in a piece of information and then conduct a



comprehensive processing of the information. On the contrary, men act selectively while processing information and concentrate on overall message theme instead of all the available information before making a judgment about the information (Meyers-Levy, 1989; Meyers-Levy & Maheswaran, 1991). Putrevu (2001), in his review, offers a more detailed explanation of gender differences in information processing which complements the predictions of the 'selectivity hypothesis'. Einstein and Hunt (1980) suggested that men are more likely to perform item-specific processing, although they tend to focus on individual attributes in an advertisement they do not attempt to decipher the interrelationships between them. On the other hand, they proposed that women are more likely to engage in 'relational processing', in which they look for interrelationships, similarities, and differences between multiple attributes during processing of information (as cited in Putrevu, 2001). Prior studies investigating gender and processing of information have focused almost exclusively on advertising as the information source (Kempf, Palan, & Lacznia, 1997; Meyers-Levy & Maheswaran, 1991) which shows the importance of deciphering the gender specific processing of information in the field of advertisements. It is also important to note that although gender is considered to be one prominent variable in information processing, its effect can be overshadowed by incorporation of external stimuli, need for cognition, prior knowledge about the product, product involvement and other personal attributes of the viewer.

## **2.5 IMPACT OF AGE DIFFERENCES ON ADVERTISEMENT PROCESSING**

Consumer's age is considered to be a very important factor in market segmentation. Studies on information processing abilities of consumers, belonging to different age groups, have generated keen interest to psychologists as well as to advertisers. The abilities of consumers, belonging to different groups, to understand, analyze, retain and use the information while making a choice have been studied regularly. It is a well known fact that complex tasks show larger age related difference in performance than easy tasks (Birren, 1965; Birren, Woods & Williams, 1980). Although the processing ability of children below 7 years is considered limited by socio-biological factors, children's perception of advertising intent becomes increasingly stronger with age and children above 12 years are shown to employ strategies, which are similar to mature individuals, to retrieve information (Selman, 1980). To understand children's cognitive ability at a particular stage, Piaget's theories of cognitive development have been useful for researchers. According to Piaget (1970), cognitive development travels through four stages: (A) Sensory-motor intelligence (0-2 years of age): when individual's behavior is mainly motorized (Gunter, Oates & Blades, 2005) and though cognitive growth is taking place, the child cannot think conceptually (Toland & Barbara, 2003). (B) Preoperational thought (2 to 7 years): in this stage children's symbolic thought (although mainly concentrated on perceptual properties of stimuli) starts growing (Ginsburg & Sylvia, 1988) and language skills also start developing. Children lack the

ability to think in a logical way and they rely on the observable aspect of environment. (C) Concrete operations (7 to 11 years): during this period the child's ability to utilize logical and rational thought about problems are developed. As a result of growing rational ability, the skill of considering more than one dimension of a task is developed. The child also starts thinking conceptually. (D) Formal operations (11 to 15 years): At this stage individual's mental ability covers almost all aspects of abstract and theoretical reasoning which to be utilized rationally for any task which is solved by rational thought. In this period the cognitive structures of children reach to their highest level of growth. Although the rational processing is not comparably fine tuned as adults, children or teenagers of this age show the highest levels of reasoning and rationalizing which are quite similar to mature individuals.

Results from many studies have shown that there is a considerable age related decline in working memory span (Salthouse, 1992). Other cognitive functions such as information processing speed, attention, spatial ability also decline with age (Light & Zelinski, 1983). According to Baddeley (1986), working memory involves both processing function and storage function. There is evidence that the decline in working memory is mainly caused by limited resource processing. As per inhibition deficit hypothesis, pro-active interference affects the memory process of an individual. In another study, older adults were shown to be more vulnerable to proactive interference (May, Hasher & Kane, 1999). Age related decline in working memory plays a role in many cognitive processes as long term memory encoding, retrieval, comprehension, reasoning, language complexity etc. (Kemper & Sumner,

2001; Zacks, Hasher, & Li, 2000). As reviewed by McDowd and Shaw (2000), older people also face problems in focusing on relevant information and inhibiting irrelevant information. Older people are also found to be slower in response to many cognitive tasks as compared to young. As speed is an indispensable parameter in measuring information processing, young people are evidently better equipped to process information (Birren & Fisher, 1995). On the other hand, the elderly are more efficient in addressing, handling and solving an emotionally charged problem (LaBouvie-Vief, DeVoe & Bulka, 1989). Processing robustness is also compromised with age and it is a clearer indicator of lower information processing fidelity (Welford, 1965). There also exist some contextual differences in cognitive processing of young and old people. For example, older adults' interpretations are more interpretive and subjective which is qualitatively different from younger adults (LaBouvie-Vief, 1992).

## **2.6 RECENT RESEARCH DIRECTIONS**

With the advent of accumulating knowledge in interdisciplinary science, the avenues addressing the real life enigmas are being explored from a holistic view point. How people balance between desire and financial capability while making a decision to buy a product is an interesting subject to be studied from several perspectives like neuroscience, economics and psychology. The holistic approach including all these arenas of study is called neuroeconomics. In future, the cognitive processing of consumer is likely to be mapped by marketers to find out which product images stimulate the medial prefrontal cortex, such that the viewer gives positive response towards

the advertisement (Cranston, 2004). Thus the study of information processing depends largely upon the contribution from neuroscientists. The experiments are conducted to study the human brain in response to the stimuli like advertisements. According to Wilson, Gaines & Hill, (2008),

“...when a person looks at a print advertisement, light activates some of the 125 million visual neural receptors, rods and cones, in each eye. Nerve signals travel to the midbrain, which focuses the pupils and coordinates eye movement over the advertisement. Other signals from the rods and cones pass through the optic nerve fibers, some of which cross-over to the other side of the brain so that the left half of the advertisement is perceived in the right hemisphere of the brain and the right half in the left hemisphere (Carey, 2005; Dubuc, 2007).”

Through neuroimaging techniques, the snaps of the consumers' brain are captured while they watch advertisements. The functions of neurons inside the brain are studied thereby to interpret the exact impact of advertisements on the consumer's brain. The uses of various noninvasive neuroimaging techniques are enabling market researchers in dissecting and mapping the mental activity of consumers while they process information like images, metaphors, jingles, appeals from advertisements. The experiments are carried out with equipments like Electroencephalography (EEG) cap, functional Magnetic Resonance Imaging (fMRI) scanner, Magnetoencephalography (MEG) scanner and Fluorescence Diffuse Optical Tomography (FDOT). The fMRI scanner identifies the part of the brain where high level of blood flow takes place while watching the advertisement. This is commonly known as Blood Oxygen Level Dependent, or "BOLD" technique. In that way, it

identifies whether an advertisement is able to generate excitement in the consumer's brain. Thus, it provides not only the structural information about the neurons inside the brain but also the functional information about how they get activated once the consumers watch the advertisements. Hence the neuroimaging techniques can clearly improve the study of information processing of advertisements. Professor Gerald Zaltman of Harvard Business School was the first one to use functional Magnetic Resonance Imaging (fMRI) as a marketing tool in 1999 and the word "Neuromarketing" was first used by Professor Ale Smidts in 2002 (as cited by Wilson et al., 2008). Thus in neuromarketing, clinical and physiological information on brain function is used to analyze and understand consumer behaviour.

However, the neuromarketing studies are not free from ethical concerns. Critics think that technologies like fMRI made for medical purpose should not be used to sell products by influencing people's thought processing unconsciously. Ethical issues also concern the fact that once monopolized by the multinational giants for selling their goods, the MRI machines which are being used in hospitals and Universities would be unavailable in terms of high price for medical and research purpose (Ziegenfuss, 2005). In the contrast to these critical depreciations of the idea of neuromarketing, many companies do not see neuromarketing as a tool to manipulate the consumer's mind, rather than they want to take this as a research tool which will help them to understand the targeted audience better and to design better products and advertisements for the audience.

## **2.7 TOWARDS A RESEARCH METHOD: DRAWING TO A CONCLUSION**

A large number of variables are involved in information processing studies, ranging from cultural variables to specific experiences, to memory recall, to personality traits, to motivations and attitudes, to mental capacity, to situation-specific criteria and so on. It is therefore a complex task to model or codify the way the mind processes information when it constructs understanding and a sense of meaning. The complexities of elements within information processing of advertisements, however, also encourage the conduction of inductive modes of investigation and the way these may be interpreted and modelled. While most of the researchers in information processing perspective seek to encourage the exploration of theoretical strands not typically employed in practical research, it is intended that the present research combine the practical and the theoretical, as new ways are sought to add value to advertising intelligence that helps underpin sound return on investment. As Hunt (1991) says:

“Almost all marketing practitioners, most marketing academicians, and, sadly, too many marketing researchers perceive theoretical and practical as being at the opposite ends of a continuum. This perception leads to the conclusion that as any analysis becomes more theoretical, it must become less practical. To puncture this misperception, one need only note that a theory is a systematically related set of statements, including some law like generalisations that are empirically testable. The purpose of theory is to increase scientific understanding through a systematised structure capable of both explaining and predicting phenomena.”

To bridge the gap between academic and practitioner based research, an effort is made in this study to integrate both perspectives. The present study attempts to incorporate print advertisements from the magazines and newspapers with a theoretically based research foundation in cognitive science. It is hoped that this integration of perspectives will generate an increased understanding of how consumer's attention, comprehension, retention, attitude and purchase motivation vary with different combinations of advertising appeal and advertising execution style and provide some practical guidelines to future advertising efforts. In the next chapter, the hypothesis is formulated to bridge the gap in the existing literature. The research design along with the procedure of advertising treatment selection, sampling design, data collection design, experimental procedure and statistical design follow thereof.



## **CHAPTER 3**

### **FORMULATION OF HYPOTHESIS AND RESEARCH DESIGN**

The initial encoding of the message by dint of selecting the effective combination of advertising appeal and advertising execution style is an area of research which might possibly receive the least amount of attention. The literature reviewed in the previous chapter shows that the prior researches on advertising appeal have seemingly bypassed the impact of advertising execution style in assessing the behavioural response of consumers. Researchers have concentrated on information processing but have not assessed the impact of both advertising appeal and advertising execution style jointly on associated behavioural response. The present chapter bridges the gap in the literature in stating the hypothesis in clear terms to draw out and test its logical or empirical consequences. The present chapter also provides the conceptual structure within which the research is conducted. It provides the blueprint for the collection, measurement and analysis of data.

### 3.1 DEVELOPMENT OF HYPOTHESIS

The hypothesis has been framed to bridge the existing gap in the previous research. In order to fulfill the proposed object, an ex post facto design was prepared, with two within-subject factors: advertising appeal and advertising execution style. The advertising appeal is of two kinds: rational appeal and emotional appeal. The advertising execution style was divided into ten levels: animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/ technical evidence, comparison, personality symbol and dramatization. The independent variables and their levels have been selected keeping in mind the seminal works of the academicians (Belch & Belch, 1995) on advertising format. As for the dependent variables, the five dependent variables, namely ability to gain attention, message comprehension, retention of the advertisement, attitude towards the advertisement and purchase motivation of the consumers after watching the advertisement, have been identified in line with McGuire's Information Processing Theory. The null hypothesis is as follows:

**H<sub>0</sub>:** The attention, comprehension, retention, attitude and purchase motivation of consumers generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/ technical evidence, comparison, personality symbol, dramatization)

### **3.2 RESEARCH DESIGN**

The strength of the present study is that it is based on real-life advertisements and does not artificially create advertisements to manipulate the treatment of advertising appeal and advertising execution style. If an experimenter controls variations in all but a single independent-experimental-variable, he may prevent the simultaneous functioning of variables that normally are found operating together and thus may free the independent variable from the influence of other variables. In such instances, an analysis of what actually does happen in a natural situation may be more satisfactory. Thus the present research suits more of an *ex post facto* design than an experimental design since the advertisements are included in the research by selection of advertisements rather than creating the advertisements by manipulating the treatment of advertising appeal and advertising execution style. Tuckman (1972) defined the term *ex post facto* to be: an experiment in which the researcher examines the effects of a naturalistic occurring treatment after that treatment has occurred rather than creating the treatment itself. Kerlinger (1964) defined *ex post facto* research as: that research in which the independent variable or variables have already occurred and in which the researcher starts with the observation of a dependent variable or variables (p. 360). Ary, Jacobs and Razavieh (1972) suggested that the basic purpose of *ex post facto* research is to discover or establish causal or functional relationships among variables. The experimenter attempts to relate this after-the-fact treatment to an outcome or dependent measure.

### **3.3 ADVERTISEMENT TREATMENT SELECTION**

The advertisements in this research were examined by performing a content analysis. This is an observational research method that can be used to examine an array of communication forms such as advertising and printed materials (Kolbe & Burnett, 1991). It enables the researcher to observe the content of the print advertisements and categorise it in order to examine trends and make comparisons. This observation is unobtrusive and therefore has not affected the data itself (Weber, 1985). Kassanjian (1977), whose article on the subject is considered to be an important milestone in the development of this methodology (Kolbe & Burnett, 1991), describes content analysis as “a scientific, objective, systematic, quantitative and generalisable description of communications content”. He states that objectivity is achieved by providing clear rules and procedures to ensure that any analyst, utilising the same rules, would reach similar conclusions. This is obviously important to remove any researcher’s bias. Such instructions are also needed to ensure consistency in the inclusion and exclusion of the communications content. These guidelines have been incorporated into this research. This method of analysis has been in vogue in recent years (Holbrook & Batra, 1987; Olney, Holbrook & Batra, 1991; Stewart & Furse, 1986), because it has more significance for advertising practitioners who have to consider the effects of individual ads. In the present research, almost all print media advertisements (approximately three thousand) published in India from 2005 to 2007 by the fifteen leading advertising agencies of India were taken and for all practical purposes the collection was considered to be exhaustive. The fifteen leading advertising agencies for the three years are enlisted in Table 3.1:

**Table 3.1**

**List of Fifteen Leading Advertising Agencies from 2005 to 2007**

<b>Rank</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
<b>1</b>	O&M	O&M	O&M
<b>2</b>	Lowe	McCann Erickson	Mudra
<b>3</b>	McCann Erickson	Lowe	McCann Erickson
<b>4</b>	JWT	JWT	JWT
<b>5</b>	Leo Burnett	Leo Burnett	Lowe
<b>6</b>	Grey	Mudra	Rediffusion DYP
<b>7</b>	Mudra	Grey	Leo Burnett
<b>8</b>	FCB-Ulka	FCB-Ulka	Grey
<b>9</b>	Rediffusion DYP	Contract	FCB-Ulka
<b>10</b>	Contract	Rediffusion DYP	Saatchi & Saatchi
<b>11</b>	Saatchi & Saatchi	RK Swamy BBDO	RK Swamy BBDO
<b>12</b>	Ambience Publicis	Saatchi & Saatchi	Contract
<b>13</b>	Enterprise Nexus	iB&W	Everest
<b>14</b>	RMG DAVID	Euro RSCG	Bates Enterprise
<b>15</b>	Everest	Bates Enterprise	Percept H

Source: Brand Equity, Economic Times, 17<sup>th</sup> December, 2008, Pg. 11

A panel of four judges including two marketing academicians and two advertising practitioners viewed over three thousand advertisements to classify them with respect to their target audience into ten groups i.e. advertisements for boy child, advertisements for girl child, advertisements for teenage boys, advertisements for teenage girls, advertisements for young men, advertisements for young women, advertisements for middle-aged men, advertisements for middle-aged women, advertisements for senior men and advertisements for senior women. The initial classification of the

advertisements into ten groups was done to maintain personal relevance of the advertisements for each segment. The second stage of the content analysis was to identify the type or types of appeal being used. This was achieved by examining each advertisement with reference to Pollay's (1983) extensive list of 42 different advertising appeals. This list was chosen for the analysis because it is one of the most comprehensive lists available and comes with a detailed description of each appeal to assist in interpretation. It has also been used in advertising studies of both goods and services previously (Albers-Miller & Stafford, 1999; Hetsroni, 2000; Chenge & Schweitzer, 1996). The coder was required to identify the advertising appeals by considering the visual, verbal and textual elements of the advertisement and the overall effect that they created. The third stage was to label these appeals as either emotional or rational. Such a classification has already been performed by Albers-Miller and Stafford (1999) and their recommendations were therefore followed. For example, "convenient" and "effective" are identified as rational appeals and "enjoyment" and "freedom" as emotional appeals. The advertisements were to be strong representations of either rational advertising appeal or emotional advertising appeal. Rational was defined as focusing on the consumer's practical, functional or utilitarian need for the product or service and/or the benefits or reasons for owning or using a particular brand and emotional was defined as creating a mood and appealing to the emotions. The rational advertisements made objective appeals and the emotional advertisements tended to create a mood. For example, the rational advertisement for the hair care product described the benefits of use, such as healthy hair, while the emotional advertisement showed women flaunting

their healthy hair. The rational advertisements for the soft drink and the airlines stated tangible product benefits while the emotional advertisements were mood provoking and attempted to create a feeling around product use. Lastly, the advertisements were analysed in terms of advertising execution styles employed in them to identify the presence of the ten advertising execution styles, i.e. Animation, Slice of life, Testimonial, Demonstration, Fantasy, Informative, Scientific/ technical evidence, Comparison, Personality symbol and Dramatization. Once the rational advertisements and the emotional advertisements have been identified for each of the target segments, all the rational advertisements of each group are further classified into ten groups according to the ten types of advertising execution styles i.e. Animation, Slice of life, Testimonial, Demonstration, Fantasy, Informative, Scientific/ technical evidence, Comparison, Personality symbol and Dramatization. Similarly all the emotional advertisements of each target segment are further classified into ten groups according to the ten types of advertising execution styles i.e. Animation, Slice of life, Testimonial, Demonstration, Fantasy, Informative, Scientific/ technical evidence, Comparison, Personality symbol, Dramatization. The ten types of advertising execution styles are defined as follows:

- i. Animation—this technique used animated characters or scenes drawn by artists or on computer. Animation is often used as an execution technique for advertising targeted at children.
- ii. Slice of life—this type of execution is often based on a problem/solution type of format. The ad attempts to portray a real-life situation involving a problem, conflict or the situation

consumers may face in their daily lives. The ad then focuses on showing how the advertiser's product or service can resolve the problem. Slice-of-life executions are also becoming very common in business-to-business advertising as companies use this approach to demonstrate how their products and services can be used to solve business problems.

- iii. Testimonials—many advertisers present their advertising messages in the form of a testimonial whereby a person speaks on behalf of the product or service based on his or her personal use of and/or experiences with it.
- iv. Demonstration—this type of execution is designed to illustrate the key advantages or benefits of a product or service by showing it in actual use or in some contrived or staged situation.
- v. Fantasy—this type of appeal is often used for image advertising by showing an imaginary situation or illusion involving a consumer and the product or service. Cosmetic companies often use fantasy executions although the technique has also been used in advertising for other products such as automobiles and beer.
- vi. Informative—this type of execution relies on a straightforward presentation of information about the product or service such as specific attributes or benefits.



- vii. Scientific/technical evidence—a variation of the straight selling where scientific or technical evidence or information is presented in the ad to support a claim.
- viii. Comparison—this type of execution involves a direct or indirect comparison of a brand against the competitors.
- ix. Personality symbol—this type of execution involves the use of a central character or personality symbol to deliver the advertising message and with which the product or service can be identified. The personality symbol can take the form of a person who is used as a spokesperson, animated characters or even animals. Many businesses will use a ‘character’ be it an actual person, or animated character, to represent the product, or the company.
- x. Dramatization—this execution technique creates a suspenseful situation or scenario in the form of a short story. Dramatizations often use the problem/solution approach as they show how the advertised brand can help resolve a problem.

From the twenty groups of advertisements (Rational—Animation, Rational—Slice of life, Rational—Testimonial, Rational—Demonstration, Rational—Fantasy, Rational—Informative, Rational—Scientific/ technical evidence, Rational—Comparison, Rational—Personality symbol, Rational—Dramatization, Emotional—Animation, Emotional—Slice of life, Emotional—Testimonial, Emotional—Demonstration, Emotional—Fantasy, Emotional—Informative, Emotional—Scientific/ technical evidence, Emotional—Comparison, Emotional—Personality symbol and Emotional—

Dramatization) the best representatives from each group are selected through Quick-sort procedure for the ten segments. Several pretests were then conducted to arrive at a final set of stimuli to be used in the study. The final selection comprised 200 advertisements i.e. 20 advertisements for each of the ten segments (boy child, girl child, teenager boy, teenager girl, young men, young women, middle aged men, middle aged women, senior men, senior women). A reliability check was further performed by a second group of one practitioner and another academician on twenty selected advertisements of each target segment. A consistency level of 85 per cent was recorded which is considered to be a satisfactory level (Kassarjian, 1977). Differences were resolved through coder discussion.

### **3.4 SAMPLING DESIGN**

The population available for study i.e. consumers throughout India were classified into ten strata based on their sex and age viz. boy child, girl child, teenage boys, teenage girls, young men, young women, middle aged men, middle aged women, senior men and senior women where “child” represents five to twelve years, “teenage” represents twelve above to nineteen years, “young” represents nineteen above to thirty five years, “middle aged” represents thirty five above to fifty years and “Senior” represents above fifty years. From each of the ten strata, four hundred respondents are randomly selected. So, four thousand respondents have been selected in total by stratified random sampling. The sample was collected from four different geographic areas in India: southern area (city of Kozhikode), western area (city of Ahmedabad), eastern area (city of Kolkata) and northern area

(National Capital Region). These states were selected because their populations were both culturally and geographically diverse which ruled out any probable regional prejudice for or against any advertisement. The sample was equally divided among the four cities; for example, within the sample of four hundred boy children, one hundred boy children were from each city. Thus in each of the ten stratum of four hundred respondents, there were equal participation of respondents from all the four regions of India.

### **3.5 DATA COLLECTION DESIGN**

Multi-item scales were used to measure the five dependent variables i.e. attention towards the ad, comprehension of the ad, retention of the ad, attitude towards the ad and purchase intentions on seeing the advertisement. Literature from advertising, psychology and marketing provided the basis for the measurement of the consumer advertising preference.

As for the dependent variables, attention paid to the ad was measured (Ha, 1996) by asking the respondent to indicate to what extent his attention was attracted by the ad shown on a five-point likert scale (where 1 = strongly disagree, 2 = somewhat disagree, 3 = undecided, 4 = somewhat agree and 5 = strongly agree).

1. I paid attention to the content of the ad.
2. I carefully read the content of the ad.
3. When I saw the ad, I concentrated on its contents.
4. I expended effort looking at the content of this ad

The measurement of comprehension was executed by asking consumers how much they have understood the advertisement. Since the deeper the level of comprehension, the more effective the ad will be in credibility, in being liked, in persuasion, and in recall. Ad comprehensibility was assessed by the summation of two items: easy—difficult and understandable—confusing (Alba, 1983).

Retention for advertisements was measured with ad recognition. Ad recognition was used because previous studies showed that this measure results in a significantly higher correct claim of remembrance of the ad than do recall measures that make use of verbal instead of visual cues. This result was especially found for print advertisements compared with television commercials (Zielske, 1982). Once the subjects had seen all the advertisements and answered all the questions corresponding to the 28 ads they were then given a recognition confidence rating task with the original 28 items and 28 lures. Each advertisement was rated along the following scale (Srull, 1983): (1) positive the advertisement was not presented, (2) fairly certain the advertisement was not presented, (3) undecided, (4) fairly certain the item was presented, and (5) positive the item was presented.

Attitude towards the ad was measured by asking the respondents to evaluate the message they had been exposed to by using five items (Ha, 1996) measured on a five-point semantic differential scale: pleasant-unpleasant, useful-not useful, entertaining-not entertaining, interesting-uninteresting and like-dislike.

1. This ad was pleasant/unpleasant.
2. This ad was useful/not useful.
3. This ad was entertaining/not entertaining.
4. This ad was interesting/uninteresting.
5. I liked this ad/disliked this advertisement.

Four items were used to measure Purchase Intention (Mathur, 1998; Yi, 1990). The consumers were asked to imagine a situation in which they needed to buy that particular brand right then and to indicate what the probability would be that they would buy the brand they had seen advertised. These four items were: "I would definitely intend to buy/absolutely consider buying/definitely expect to buy/absolutely plan to buy the advertised brand" (1 = strongly disagree and 5 = strongly agree). The questionnaire was pretested several times and was refined on the basis of the pretest results. In terms of construct reliability (i.e. greater than 0.60) and percentage of variance extracted by the latent construct (i.e. greater than 0.50), all the individual scales exceeded the recommended minimum standards (Bagozzi, Yi, & Nassen, 1998).

### **3.6 EXPERIMENTAL PROCEDURE**

The appropriate procedure given by a study of this kind is difficult to define and equally complex to execute. The subjects were told that the purpose of the study was to evaluate the advertisements and they would perform an evaluation task but were not told that they would be asked to recall the stimuli. Each subject was exposed to a series of advertisements with

all combinations of the two types of advertising appeals and ten types of advertising execution styles. For each stimulus the task was to evaluate it on the basis of the five dependent variables of the research namely attention, comprehension, attitude, retention and purchase motivation on a five-point likert scale. Prior to viewing each stimulus, subjects were presented with slides showing the scales to be used in evaluating the ads (orienting task). After viewing each stimulus, subjects were again presented with the ratings scales and evaluated the stimulus. Thus, the basic procedure consisted of exposure to the advertisement (5 seconds) and then performing the ratings on the questionnaire (10 seconds). This cycle was repeated for 20 experimental and 8 extraneous slides. The brief exposure and evaluation periods were designed to limit rehearsal and undirected processing (e.g., spontaneous semantic processing in sensory condition). To enable subjects to become acquainted with the rating task and to reduce the primacy effect, the first four stimuli served as practice for each group and were not included in the primary analyses. These stimuli were similar to the remaining pool of stimuli. To reduce the recency effect on the dependent measures, the last four stimuli were also not included in the analysis. Also, the experimental stimuli were rotated to guard against order effects. Thus, in each treatment subjects were exposed to and rated twenty eight stimuli, twenty of which were included in the subsequent statistical analyses. After viewing each advertisement, the subjects evaluated the advertisement on the attention, comprehension, attitude and purchase motivation generated. Once the subjects had seen all the advertisements and answered all the questions on attention, comprehension, attitude and purchase motivation corresponding to the twenty eight ads, they

were then given a recognition confidence-rating task with the original twenty eight items and twenty eight lures. They were then thanked for their cooperation and patience in what was a long experimental process. A copy of the complete survey instrument is available in Appendix 4.

### **3.7 STATISTICAL DESIGN**

The hypothesis drawn from the literature was tested using  $2$  (advertising appeals)  $\times$   $10$  (advertising execution styles) within subjects Multivariate Analysis of Variance (MANOVA). In a within-group design, each subject is exposed to each one of the twenty advertisements. The dependent variables examined were: (1) Attention (2) Comprehension (3) Retention (4) Attitude, and (5) Purchase Motivation. The independent variables were: (1) Advertising appeals with two levels rational and emotional appeal, and (2) Advertising execution styles with ten levels viz., animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/technical evidence, comparison, personality symbol and dramatization. Thus, the male and female subjects of different age groups were asked to evaluate the advertisements on a variety of attention, comprehension, retention, attitude and purchase motivation level. The dependent variables are in interval scales, and the independent variables are in nominal scales. A  $2 \times 10$  completely within-subjects MANOVA was employed in which each subject experienced all twenty experimental conditions and produced values for each cell of the five dependent variables. With the within-subjects design, the problem of equivalence is solved because each subject is measured under all of the conditions and, therefore, serves as its own control. This within-

subjects design is done by exposing the same subject to the twenty advertisements (Rational—Animation, Rational—Slice of life, Rational—Testimonial, Rational—Demonstration, Rational—Fantasy, Rational—Informative, Rational—Scientific/ technical evidence, Rational—Comparison, Rational—Personality symbol, Rational—Dramatization, Emotional—Animation, Emotional—Slice of life, Emotional—Testimonial, Emotional—Demonstration, Emotional—Fantasy, Emotional—Informative, Emotional—Scientific/ technical evidence, Emotional—Comparison, Emotional—Personality symbol and Emotional—Dramatization) and collecting data on their attention, comprehension, retention, attitude and purchase motivation. Data were entered, edited and analyzed by using the SPSS software. It was assumed that there were linear relationships among all pairs of dependent variables. The dependent variables were assumed to take on a multivariate normal distribution. Tests for outliers were also run before performing the MANOVA, and outliers were transformed or removed. Wilks' lambda Criterion or Maximum likelihood criterion or U statistic test criteria was used to test the within-subjects MANOVA. Wilks' lambda can be interpreted as the proportion of the variance in the outcomes that is not explained by an effect. After performing Wilks' Lambda, significance of F was calculated. This is the p-value associated with the F statistic and the hypothesis and error degrees of freedom of a given effect and test statistic. For a given alpha level (.05), if the p-value is less than alpha (.05), the null hypothesis was rejected. A significant MANOVA result only indicates that the groups are not exactly the same with respect to their outcome variable



mean vectors. The focus of the follow-up procedures inevitably centers on each individual outcome variable.

Historically, following a significant MANOVA with ANOVAs on each of the  $p$  variables was one of the first methods recommended for interpreting group differences (Cramer & Bock, 1966). It was assumed that when the multivariate null hypothesis is rejected, then at least one of these univariate  $F$ 's should be significant. Before conducting the within-subjects ANOVAs, the variances and covariances were assumed to follow a pattern called sphericity. Sphericity may be defined mathematically in terms of the matrix of variances and covariances that apply to the various treatment levels and pairs of levels. Sphericity means that the variance of the population difference scores for any two conditions should be the same as the variance of the population difference scores for any other two conditions. It was tested by Mauchly's sphericity test. When the significance level of Mauchly's test is  $< 0.05$ , then sphericity cannot be assumed. However, when Mauchly's  $W$  is found to be non-significant, it indicates that sphericity has been achieved.

When enough statistical evidence was found to reject the null hypothesis of the interaction effect of  $2 \times 10$  within-subjects MANOVA, individual  $2 \times 10$  within-subjects ANOVAs on each of the five dependent variables were performed to test the interaction between advertising appeal and advertising execution style. The interaction between the two factors in ANOVA takes place when the effect of one factor depends on the levels of the second factor. Interaction effects represent the combined effects of factors on the dependent measure. Part of the power of ANOVA is the ability to estimate and test interaction effects. As Pedhazur and Schmelkin (1991) note,

the idea that multiple effects should be studied in research rather than the isolated effects of single variables is one of the important contributions of Sir Ronald Fisher. When interaction effects are present, it means that interpretation of the main effects is incomplete or misleading. Interaction results whose lines do not cross are called “ordinal” interactions. If the slopes of lines are not parallel in an ordinal interaction, the interaction effect will be significant, given enough statistical power. In the next chapter, the impacts of two types of advertising appeal and ten types of advertising execution styles on the attention, comprehension, retention, attitude and purchase motivation of boy child, girl child, teenage boy, teenage girl, young men, young women, middle aged men, middle aged women, senior men and senior women are assessed.

## **CHAPTER 4**

### **INFORMATION PROCESSING OF ADVERTISEMENTS DIFFERENTIATED BY SEX AND AGE**

Consumers' age and sex have traditionally been considered as important basis for market segmentation. Factors related to age and sex are found to have a significant impact on the way consumers process information. Age and sex differences in processing information are assessed to determine marketing-relevant differences between young and old people. In the light of the evidence for the differential sensitivity of consumers with relation to sex and age, the present research has focused on the efficacy of two types of advertising appeals and ten types of advertising execution styles in influencing the boy child, girl child, teenage boys, teenage girls, young men, young women, middle aged men, middle aged women, senior men and senior women.

#### **4.1 INFORMATION PROCESSING OF ADVERTISEMENTS BY BOY CHILD**

Advertisers pay special attention to children, who are considered as the most vulnerable audiences because they enjoy advertisements to the maximum extent. In the past the most effective way to sell children's products was through the parents. Now the opposite is true. Children today are the focal point of intense advertising pressure. Advertisers are aware that children influence purchase of not only kid's products, but also everything in the household from car to toothpaste. Children initially take advertisements as entertainment and emotionally manipulate their parents for product purchase. This is termed as a 'Nag Factor'. Advertisers use catchy visuals, cartoon characters, film stars and logos to grab the attention of children. The information-processing view interprets children's reactions to advertising in terms of cognitive abilities to store and retrieve information. The best-documented shortcoming of young children is their failure to evoke and utilize cognitive plans for storing and retrieving information. Two types of deficiencies have been identified—production deficiencies and mediational deficiencies (Flavell, 1970). Children with production deficiencies have the capacity to use storage and retrieval strategies as a mean for remembering information. But this capacity is used only when they are prompted to do so. Children with mediational deficiencies can follow instructions to use storage and retrieval strategies, but cannot utilize the strategies to enhance remembering. Thus, instructions to use a learning strategy can correct the problems exhibited by children with production deficits, but do not help

overcome the problems faced by children with mediational deficits. Children use a variety of devices to ensure storage of information. One device that is widely recognized as affecting children's information storage is verbal labeling (Reese, 1962) — verbalizing the information to be stored as it is presented. Evidence pertaining to the effects of instructions to label has been reported in a serial recall study by Hagen and Kingsley (1968). In the light of the past research on the information processing of the advertisements by the children, the present chapter focuses on the advertising preferences of boy child in the age group of five to twelve years.

#### **4.1.1 Chapter Objective**

This chapter is designed to extend knowledge of cognitive processing of advertising messages by boy child in India. The objective of the present chapter is to give the advertising industry a definite guideline while targeting the boy child. The specific objectives of the present chapter are as follows:

- i.** To find out whether the difference in boy child's cognitive processing of advertisements between rational and emotional appeal depends on the advertising execution style.
- ii.** To explore any predominant advertising appeal or advertising execution style in the advertising preference of the boy child.

#### **4.1.2 Hypothesis**

**H<sub>0</sub>:** The attention, comprehension, retention, attitude and purchase motivation of boy child generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/ technical evidence, comparison, personality symbol, dramatization).

#### **4.1.3 Sample Size**

The sample size in each group is an important issue in repeated measure MANOVA, because there should be more research units in the smallest group than there are dependent variables. This is recommended both because of considerations of power and for evaluation of the assumption of homogeneity of variance-covariance matrices. As always, larger sample sizes produce greater power all else being equal. Since sample sizes are equal, evaluation of homogeneity of variance-covariance matrices is not necessary. The sample of four hundred boy children in the age group of five to twelve years was collected from four different geographic areas in India: southern area (city of Kozhikode), western area (city of Ahmedabad), eastern area (city of Kolkata) and northern area (National Capital Region). The participation sought through the consent form (included in Appendix 3) was signed from the parents or guardians of the boy child to allow their children to participate in the experiment. The sample was equally divided among the four cities, i.e., in the sample of four hundred boy children, one hundred were from each city. The experiment was conducted through the procedure mentioned in Chapter 3.6

#### **4.1.4 Advertising Treatment for Boy Child**

Four judges including two marketing academicians and two advertising practitioners selected twenty advertisements for the boy child through the process detailed in Chapter 3.3 The advertising treatment selected for boy child comprised the print advertisements for Hot Wheels, Maggi, Boost, Pepsodent, Horlicks, Complan, Gizmos, Cyberpad, Boomer, Parle-G, Catmoss, Top Ramen, Chicklets, Gini & Jony, Zapp, Batman, Liberty shoes, Dairy Milk, Hero Cycles and Mother Dairy.

#### **4.1.5 Results**

To investigate the interaction between advertising appeal and advertising execution style on the boy child's attention, message comprehension, attitude, retention and purchase motivation a within-subjects 2 (advertising appeal)  $\times$  10 (advertising execution style) multivariate analysis of variance (MANOVA) was performed to control the overall alpha level at the desired level (.05). The within-subjects 2  $\times$  10 MANOVA revealed a significant interaction (Wilks' lambda = .56,  $F(45, 355) = 6.31$ ,  $p < .01$ ) between advertising appeal and advertising execution style on attention, comprehension, retention, attitude and purchase motivation of the boy child. The significant interaction effect of MANOVA shows that there exists a significant difference among vectors of means (centroid) of boy child's attention, message comprehension, retention, attitude and purchase motivation across different levels of message strategies and advertising execution style. Thus the result provides sufficient statistical evidence that the

differences in the boy child's attention, comprehension, retention, attitude and purchase motivation between rational appeal and emotional appeal depend on the advertising execution styles, or, the differences among advertising execution styles vary with advertising appeal with respect to boy child's attention, comprehension, retention, attitude and purchase motivation. Mauchly's test of sphericity is used in relation to meeting the assumptions of univariate models. It tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variable is proportional to an identity matrix. A finding of non-significance ( $p > .05$ ) of Mauchly's W Statistic for each of the five dependent variables corresponds to concluding that assumptions are met. The foremost analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attention of the boy child revealed a significant interaction (Wilks' lambda = .8,  $F(9, 391) = 5.14$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of the boy child is displayed in Table 4.1.1.



**Table 4.1.1**

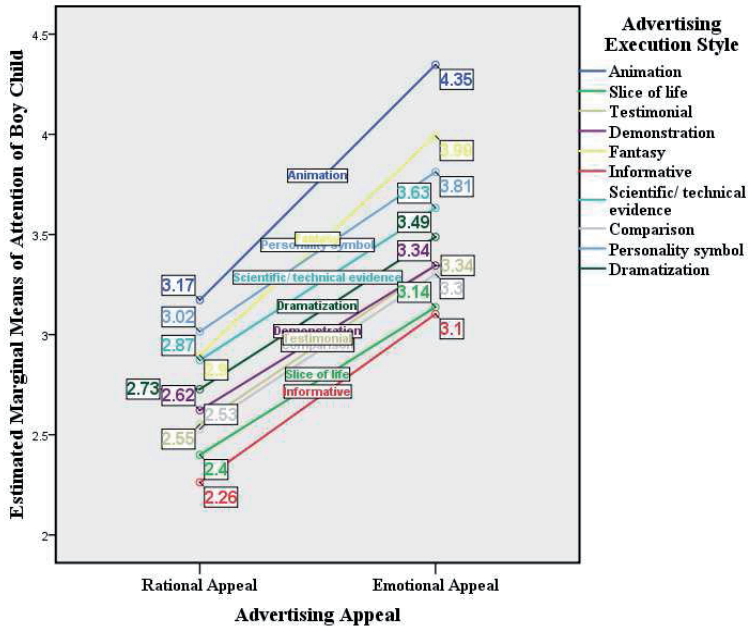
**Estimated Marginal Means for Advertising Appeal × Advertising Execution Style on Attention of Boy Child**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.17	4.35	37.07
<b>Slice of life</b>	2.4	3.14	30.75
<b>Testimonial</b>	2.55	3.35	31.07
<b>Demonstration</b>	2.62	3.35	27.57
<b>Fantasy</b>	2.9	3.99	37.75
<b>Informative</b>	2.26	3.1	37.14
<b>Scientific/ technical evidence</b>	2.87	3.63	26.46
<b>Comparison</b>	2.53	3.3	30.62
<b>Personality symbol</b>	3.02	3.81	26.43
<b>Dramatization</b>	2.73	3.49	27.86

A graphical representation of Table 4.1.1, found in Figure 4.1.1, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. For the attention of the boy child, the most effective advertisement was found to be the combination of emotional appeal and animated execution (mean = 4.35).

Figure 4.1.1

**Profile Plot for Advertising Appeal × Advertising Execution Style on Attention of Boy Child**



The second analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on comprehension of the boy child revealed a significant interaction (Wilks' lambda = .83,  $F(9, 391) = 8.96$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of the boy child is displayed in Table 4.1.2.

**Table 4.1.2**

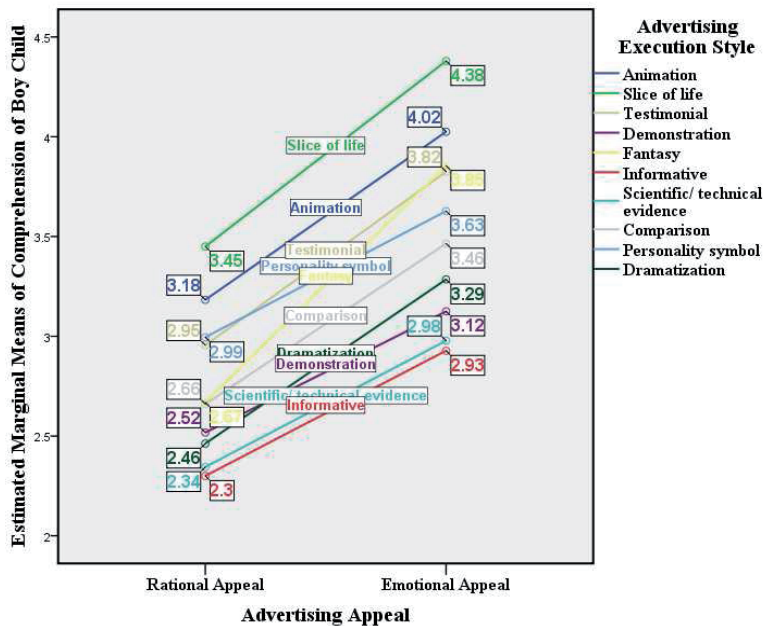
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of Boy Child**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.18	4.03	26.49
<b>Slice of life</b>	3.45	4.38	26.96
<b>Testimonial</b>	2.96	3.83	29.44
<b>Demonstration</b>	2.52	3.13	24.16
<b>Fantasy</b>	2.67	3.86	44.54
<b>Informative</b>	2.3	2.93	27.26
<b>Scientific/ technical evidence</b>	2.35	2.98	26.95
<b>Comparison</b>	2.66	3.47	30.26
<b>Personality symbol</b>	3	3.63	21.1
<b>Dramatization</b>	2.46	3.29	33.37

A graphical representation of Table 4.1.2, found in Figure 4.1.2, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The comprehension of the advertisement by the boy child is the maximum when emotional appeal is executed through slice of life (Mean = 4.38).

**Figure 4.1.2**

**Profile Plot for Advertising Appeal × Advertising Execution Style on Comprehension of the Boy Child**



The third analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on retention of the boy child revealed a significant interaction (Wilks' lambda = .89,  $F(9, 391) = 5.38$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of the boy child is displayed in Table 4.1.3

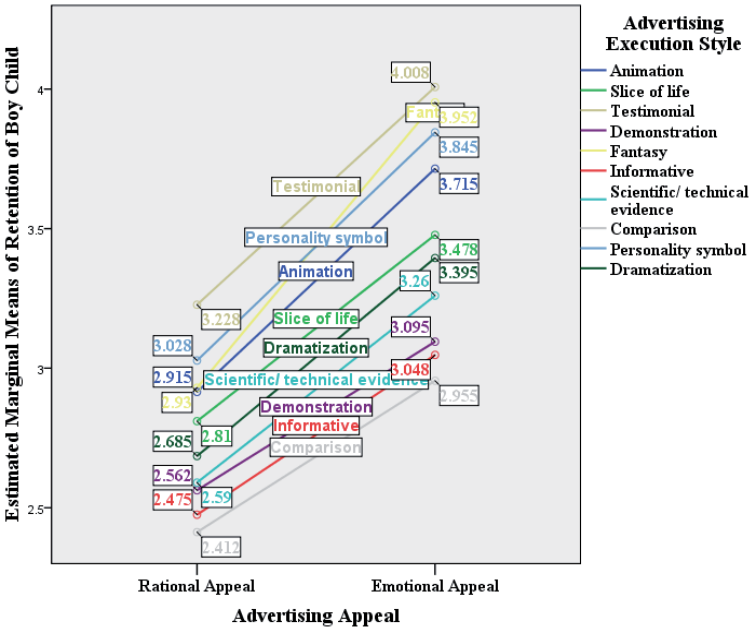
**Table 4.1.3**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of Boy Child**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.92	3.72	27.44
<b>Slice of life</b>	2.81	3.48	23.77
<b>Testimonial</b>	3.23	4.01	24.16
<b>Demonstration</b>	2.56	3.1	20.8
<b>Fantasy</b>	2.93	3.95	34.88
<b>Informative</b>	2.48	3.05	23.15
<b>Scientific/ technical evidence</b>	2.59	3.26	25.87
<b>Comparison</b>	2.41	2.96	22.51
<b>Personality symbol</b>	3.03	3.85	26.98
<b>Dramatization</b>	2.69	3.4	26.44

A graphical representation of Table 4.1.3, found in Figure 4.1.3, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The boy child can retain the most when emotional appeal is coupled with testimonial execution (Mean = 4.008).

**Figure 4.1.3**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on Retention of Boy Child**



The fourth analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attitude of the boy child revealed a significant interaction (Wilks' lambda = .9,  $F(9, 391) = 4.65$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of the boy child is displayed in Table 4.1.4.

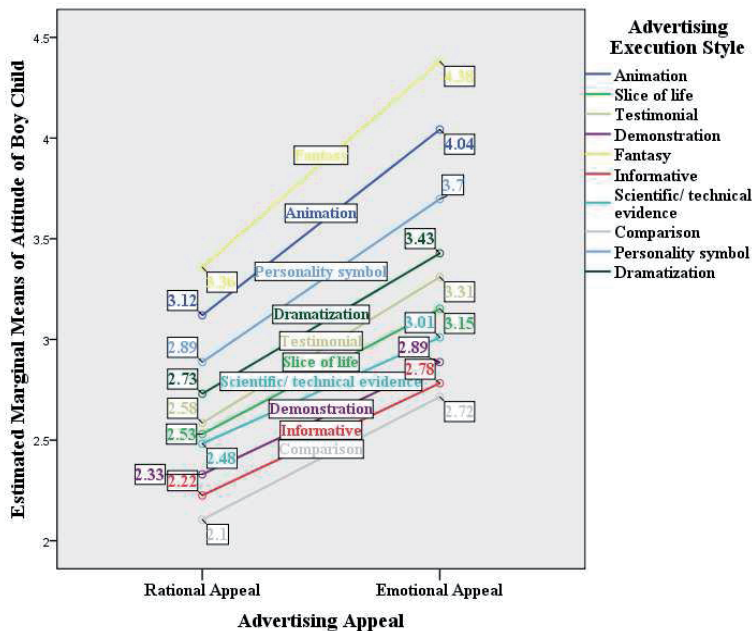
**Table 4.1.4**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of Boy Child**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.12	4.04	29.55
<b>Slice of life</b>	2.53	3.15	24.58
<b>Testimonial</b>	2.59	3.31	28.05
<b>Demonstration</b>	2.33	2.89	23.91
<b>Fantasy</b>	3.36	4.38	30.47
<b>Informative</b>	2.23	2.78	25.03
<b>Scientific/ technical evidence</b>	2.48	3.01	21.27
<b>Comparison</b>	2.11	2.72	28.98
<b>Personality symbol</b>	2.89	3.7	28.09
<b>Dramatization</b>	2.73	3.43	25.57

A graphical representation of Table 4.1.4, found in Figure 4.1.4, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The attitude towards the advertisement gets the maximum with the boy child when emotional appeal is executed through fantasy (Mean = 4.38).

**Figure 4.1.4**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attitude of the boy child**





The final analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on purchase motivation of the boy child revealed a significant interaction (Wilks' lambda = .95,  $F(9, 391) = 2.05$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of the boy child is displayed in Table 4.1.5.

**Table 4.1.5**

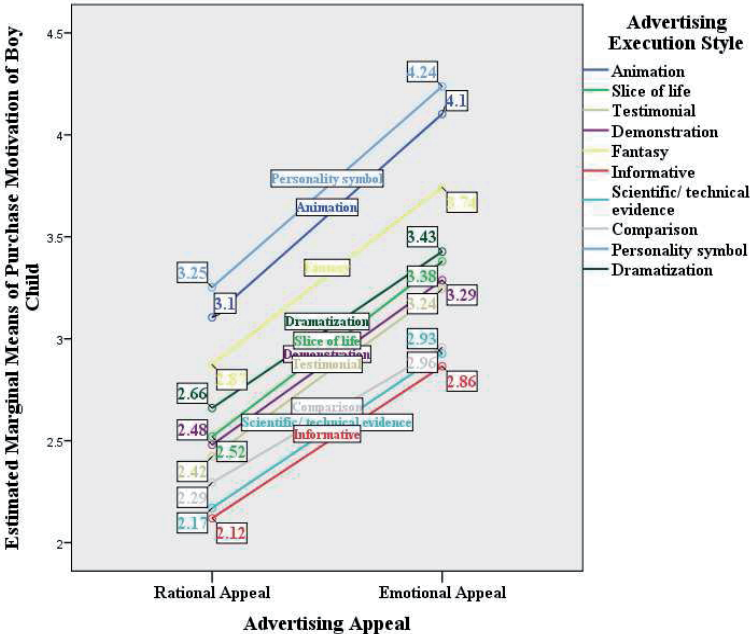
**Estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of Boy Child**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.11	4.1	32.11
<b>Slice of life</b>	2.52	3.38	34.13
<b>Testimonial</b>	2.42	3.25	33.98
<b>Demonstration</b>	2.48	3.29	32.54
<b>Fantasy</b>	2.87	3.74	30.29
<b>Informative</b>	2.12	2.87	35.14
<b>Scientific/ technical evidence</b>	2.17	2.93	34.88
<b>Comparison</b>	2.3	2.96	28.85
<b>Personality symbol</b>	3.25	4.24	30.29
<b>Dramatization</b>	2.66	3.43	28.87

A graphical representation of Table 4.1.5, found in Figure 4.1.5, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. For the purchase motivation of the boy child, the advertisement is most effective when the emotional appeal is executed through the personality symbol (Mean = 4.24).

Figure 4.1.5

Profile Plot for Advertising Appeal × Advertising Execution Style on Purchase Motivation of Boy Child



#### 4.1.7 Inference

Creating and producing effective advertising is one of the main aims pursued by publicists and advertising agencies, as well as one of the major worries. In this task, both groups constantly search for new advertising strategies that will help get their message across to the public as effectively as possible. From the present chapter, it can be inferred that advertisement elements like advertising appeal and advertising execution style influence processing of advertising messages by the boy child of India. On testing the hypothesis with  $2 \times 10$  repeated measures MANOVA, it has been found that the boy child's attention, message comprehension, attitude, retention and purchase motivation are different across different levels of advertising appeals and advertising execution styles. The interaction remained significant on each of the dependent variable when tested through univariate  $2 \times 10$  repeated measures ANOVA. For the attention of the boy child, the most effective advertisement was found to be the combination of emotional appeal and animated execution. The comprehension of the advertisement by the boy child is maximum when emotional appeal is executed through slice of life. The boy child can retain the most when emotional appeal is coupled with testimonial execution. The attitude towards the advertisement gets the maximum with the boy child when emotional appeal is executed through fantasy. For the purchase motivation of the boy child, the advertisement is most effective when the emotional appeal is executed through the personality symbol. So it has been observed that though the type of advertising execution styles vary in the most effective combination of advertising appeal and advertising

execution style on each of the dependent variables, the emotional advertising appeal remains constant in all the combinations. Therefore, it may be inferred that emotional appeal is more effective on the boy child than rational appeal. Thus the present chapter gives a guideline to the advertising practitioners to use emotional appeal while targeting the boy child of India. In the next section (Chapter 4.2), the advertising message preferences of the girl child are explored.

## **4.2 INFORMATION PROCESSING OF ADVERTISEMENTS BY GIRL CHILD**

Children represent an important demographic section to marketers because they have their own purchasing power, they influence their parents' buying decisions and they're the adult consumers of the future. The possibility that children use a different approach to information processing is based on the theory of Piaget (Piaget & Inhelder, 1969), who discerned four separate, successive cognitive developmental stages. The theory proposes four main stages of cognitive development: sensory motor (birth to two years), pre operational (two to seven years), concrete operational (seven to eleven years) and formal operational (eleven through adulthood). His approach, labeled, genetic epistemology, focused on the development of knowledge through the interplay of assimilation (modifying the environment to fit one's established patterns of thinking or doing) and accommodation (modifying oneself to fit the environment). The present chapter takes into consideration the girl child of Piaget's concrete operational stage. Children at this stage develop the

ability to sort objects in an order according to size, shape, or any other characteristic. There are information processing theories of child development, which go beyond Piaget's theory and provide explanation about the type of cognitive abilities evidenced by children as they mature (Roedder, 1999). Nevertheless, they all share a focus on children's developing skills in the areas of acquisition, decoding, organization and retrieval of information. Literature on consumer behavior area about the information processing characterizes children as belonging to one of the three segments – strategic processors, cued processors and limited processors – based on the information skills they possess (Roedder, 1981). Most children under the age of seven are limited processors, with processing skills that are not yet fully developed or successfully utilized in learning situations. In addition, numerous research studies have been undertaken over the past three decades to determine the way children process advertising information: attention to ads (Anderson & Lorch, 1983; Gunter & McAleer, 1997; Wartella & Ettema, 1974); awareness of the persuasion intent (Donohue, Henke, & Donohue, 1980; Kunkel, 2001; Macklin, 1987; Robertson & Rossiter, 1974; Van Evra, 1990; Ward, Wackman, & Wartella, 1977; Young, 1990); identifying imbalance and intent to mislead (Bever, Smith, Bengen, & Johnson, 1975; Roedder, 1999; Ward et al., 1977); understanding the contents (Liebert, Sprafkin, Liebert & Rubinstein, 1977; Pawlowski, Badzinski, & Mitchell, 1998; Huston et al., 1981); appreciating and liking the ads (Robertson & Rossiter, 1974; Van Evra, 1990). In the light of the past research on the information processing of the advertisements by the children, the present chapter focuses on the advertising preferences of girl child in the age group of five to twelve years.

### **4.2.1 Chapter Objective**

This chapter is designed to extend knowledge of cognitive processing of advertising messages by the girl child in India. The objective of the present research is to give the advertising industry a definite guideline while targeting the girl child. The specific objectives of the present chapter are as follows:

- i. To find out whether the difference in the girl child's cognitive processing of advertisements between rational and emotional appeal depends on the advertising execution style.
- ii. To explore any predominant advertising appeal or advertising execution style in the advertising preference of the girl child.

### **4.2.2 Hypothesis**

**H<sub>0</sub>:** The attention, comprehension, retention, attitude and purchase motivation of girl child generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/ technical evidence, comparison, personality symbol, dramatization).

### **4.2.3 Sample Size**

The sample of four hundred girl children in the age group of five to twelve years was selected from four different geographic areas in India: southern area (city of Kozhikode), western area (city of Ahmedabad), eastern area (city of Kolkata) and northern area (National Capital Region). The sample was equally divided among the four cities, i.e., in the sample of 400 girl children 100 were from each city. The participation sought through the consent form (included in Appendix 3) was signed from the parents or guardians of the girl child to allow their children to participate in the experiment. The sample was equally divided among the four cities, i.e., in the sample of four hundred girl children, one hundred were from each city. The experiment was conducted through the procedure mentioned in Chapter 3.6

### **4.2.4 Advertising Treatment for Girl Child**

Four judges including two marketing academicians and two advertising practitioners selected twenty advertisements for the girl child through the process detailed in Chapter 3.3 The advertising treatment selected for girl child comprises the print advertisements for Rasna, Fisher Price, Bourbon, Horlicks, Complan, Giny & Jony, Planet Kids, Barbie, Juju Beans, Maggi, Pepsodent, Boomer, Colgate, Kellogg's, Dairy Milk, Eclairs, Mango Byte, Johnson & Johnson, Alpenliebe and Bournvita.

#### 4.2.5 Results

To investigate the interaction between advertising appeal and Advertising execution style on the girl child's attention, message comprehension, attitude, retention and purchase motivation a within-subjects 2 (advertising appeal)  $\times$  10 (advertising execution style) multivariate analysis of variance (MANOVA) was performed to control the overall alpha level at the desired level (.05). The within-subjects 2  $\times$  10 MANOVA revealed a significant interaction (Wilks' lambda = .72,  $F(45, 355) = 3.14$ ,  $p < .01$ ) between advertising appeal and advertising execution style on attention, comprehension, retention, attitude and purchase motivation of the girl child. The significant interaction effect of MANOVA indicates that there exists a significant difference among vectors of means (centroid) of girl child's attention, message comprehension, retention, attitude and purchase motivation across different levels of message strategies and advertising execution style. Thus the result provides sufficient statistical evidence that the differences in the girl child's attention, comprehension, retention, attitude and purchase motivation between rational appeal and emotional appeal depend on the advertising execution styles, or, the differences among advertising execution styles vary with advertising appeal with respect to the girl child's attention, comprehension, retention, attitude and purchase motivation. Mauchly's test of sphericity is used in relation to meeting the assumptions of univariate models. It tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variable is proportional to an identity matrix. A finding of non significance ( $p > .05$ ) of Mauchly's W



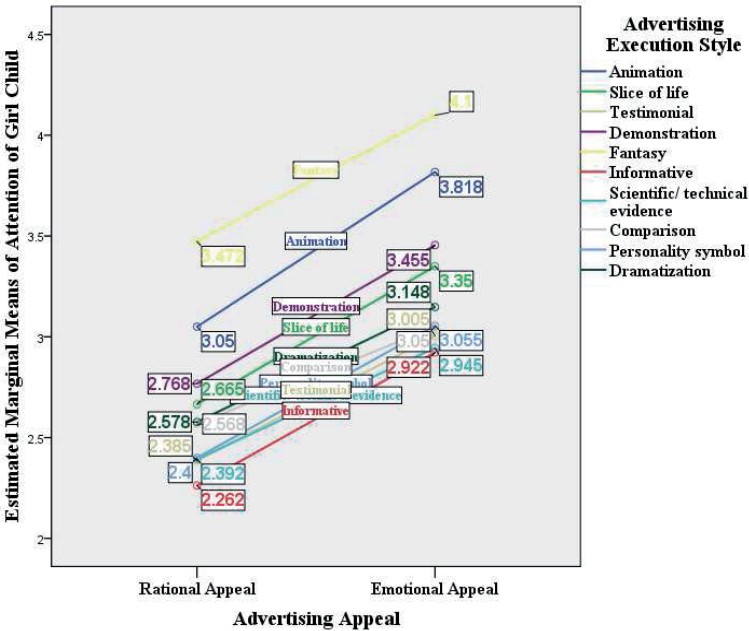
Statistic for each of the five dependent variables corresponds to concluding that assumptions are met. The initial analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attention of the girl child revealed a significant interaction (Wilks' lambda = .95,  $F(9, 391) = 2.4$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of the girl child is displayed in Table 4.2.1.

**Table 4.2.1**  
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of Girl Child**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.05	3.82	25.16
<b>Slice of life</b>	2.67	3.35	25.7
<b>Testimonial</b>	2.39	3.01	26
<b>Demonstration</b>	2.77	3.46	24.84
<b>Fantasy</b>	3.47	4.1	18.07
<b>Informative</b>	2.26	2.92	29.17
<b>Scientific/ technical evidence</b>	2.39	2.95	23.09
<b>Comparison</b>	2.57	3.05	18.79
<b>Personality symbol</b>	2.4	3.06	27.29
<b>Dramatization</b>	2.58	3.15	22.11

A graphical representation of Table 4.2.1, found in Figure 4.2.1, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. For the attention of the girl child, the most effective advertisement (Mean = 4.1) was found to be the combination of emotional appeal and fantasized execution.

**Figure 4.2.1**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attention of Girl Child**



The second analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on comprehension of the girl child revealed a significant interaction (Wilks' lambda = .94,  $F(9, 391) = 2.65$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of the girl child is displayed in Table 4.2.2.

**Table 4.2.2**

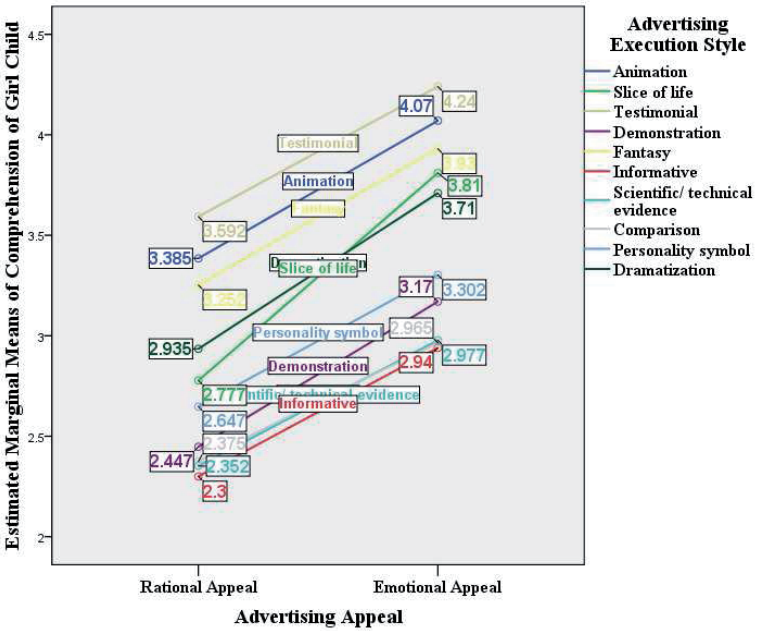
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of Girl Child**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.38	4.07	20.24
<b>Slice of life</b>	2.78	3.81	37.17
<b>Testimonial</b>	3.59	4.24	18.02
<b>Demonstration</b>	2.45	3.17	29.52
<b>Fantasy</b>	3.25	3.93	20.83
<b>Informative</b>	2.3	2.94	27.83
<b>Scientific/ technical evidence</b>	2.35	2.98	26.57
<b>Comparison</b>	2.37	2.96	24.84
<b>Personality symbol</b>	2.65	3.3	24.74
<b>Dramatization</b>	2.94	3.71	26.41

A graphical representation of Table 4.2.2, found in Figure 4.2.2, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The comprehension of the advertisement by the girl child is the maximum (Mean = 4.24) with the combination of emotional appeal and testimonial execution.

Figure 4.2.2

Profile Plot for Advertising Appeal × Advertising Execution Style on Comprehension of Girl Child



The third analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on retention of the girl child revealed a significant interaction (Wilks' lambda = .95,  $F(9, 391) = 2.36$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of the girl child is displayed in Table 4.2.3.

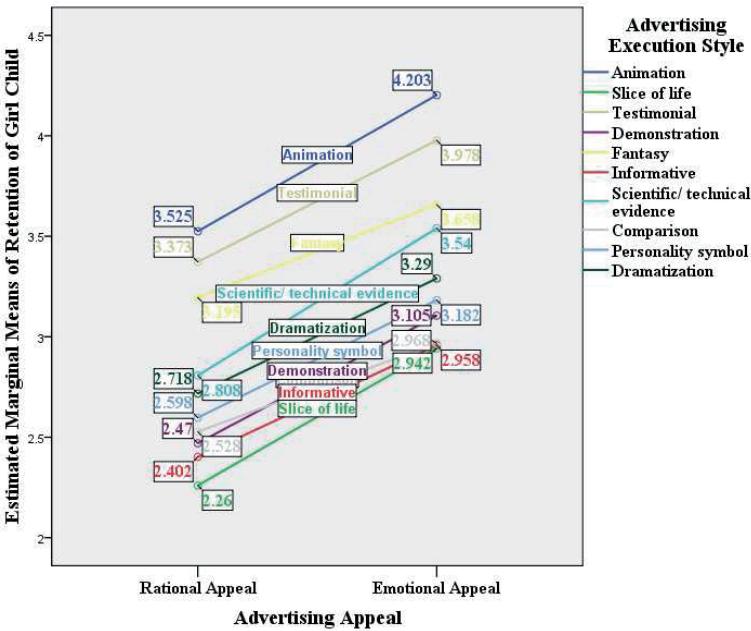
**Table 4.2.3**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of Girl Child**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.53	4.2	19.22
<b>Slice of life</b>	2.26	2.94	30.2
<b>Testimonial</b>	3.37	3.98	17.94
<b>Demonstration</b>	2.47	3.11	25.71
<b>Fantasy</b>	3.2	3.66	14.48
<b>Informative</b>	2.4	2.96	23.1
<b>Scientific/ technical evidence</b>	2.81	3.54	26.09
<b>Comparison</b>	2.53	2.97	17.41
<b>Personality symbol</b>	2.6	3.18	22.52
<b>Dramatization</b>	2.72	3.29	21.07

A graphical representation of Table 4.2.3, found in Figure 4.2.3, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The girl child retains the most (Mean = 4.2) when emotional appeal is coupled with animated execution.

**Figure 4.2.3**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on Retention of Girl Child**



The fourth analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attitude of the girl child revealed a significant interaction (Wilks' lambda = .96,  $F(9, 391) = 1.98$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of the girl child is displayed in Table 4.2.4.

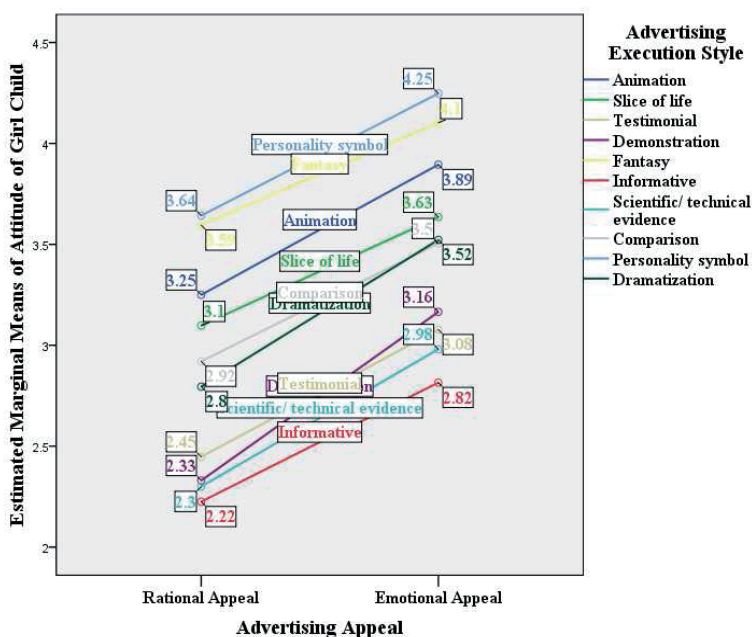
**Table 4.2.4**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of Girl Child**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.25	3.89	19.85
<b>Slice of life</b>	3.1	3.63	17.35
<b>Testimonial</b>	2.45	3.08	25.74
<b>Demonstration</b>	2.33	3.16	35.84
<b>Fantasy</b>	3.59	4.1	14.12
<b>Informative</b>	2.22	2.81	26.52
<b>Scientific/ technical evidence</b>	2.3	2.98	29.57
<b>Comparison</b>	2.92	3.5	20.03
<b>Personality symbol</b>	3.64	4.25	16.61
<b>Dramatization</b>	2.8	3.52	26.03

A graphical representation of Table 4.2.4, found in Figure 4.2.4, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The attitude towards the advertisement is the maximum (Mean = 4.25) with the girl child when emotional appeal is executed through personality symbol.

**Figure 4.2.4**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attitude of the Girl Child**





The final analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on purchase motivation of the girl child revealed a significant interaction (Wilks' lambda = .94,  $F(9, 391) = 2.97$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of the girl child is displayed in Table 4.2.5

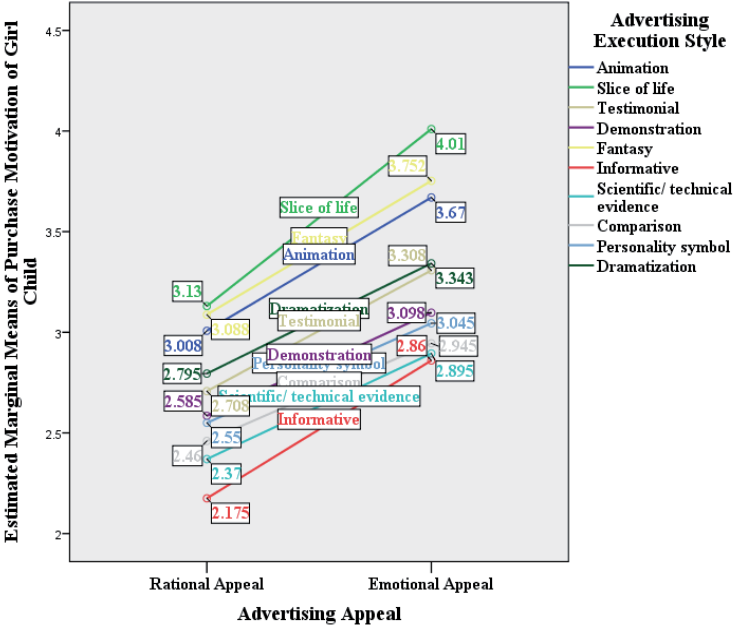
**Table 4.2.5**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of Girl Child**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.01	3.67	22.03
<b>Slice of life</b>	3.13	4.01	28.12
<b>Testimonial</b>	2.71	3.31	22.16
<b>Demonstration</b>	2.59	3.1	19.83
<b>Fantasy</b>	3.09	3.75	21.54
<b>Informative</b>	2.18	2.86	31.49
<b>Scientific/ technical evidence</b>	2.37	2.9	22.15
<b>Comparison</b>	2.46	2.95	19.72
<b>Personality symbol</b>	2.55	3.05	19.41
<b>Dramatization</b>	2.8	3.34	19.59

A graphical representation of Table 4.2.5, found in Figure 4.2.5, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. For the purchase motivation of the girl child, the advertisement got most effective (Mean = 4.01) when emotional appeal is executed through slice of life.

**Figure 4.2.5**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on Purchase Motivation of Girl Child**



#### **4.2.6 Inference**

From the present chapter, it can be inferred that advertisement elements like advertising appeal and advertising execution style influence processing of advertising messages by the girl child of India. On testing the hypothesis with repeated measures MANOVA, it has been found that the girl child's attention, message comprehension, attitude, retention and purchase motivation are different across different levels of advertising appeals and advertising execution styles. The interaction remained significant on each of the dependent variable when tested through univariate repeated measures ANOVA. For the attention of the girl child, the most effective advertisement was found to be the combination of emotional appeal and fantasized execution. The comprehension of the advertisement by the girl child is maximum with the combination of emotional appeal and testimonial execution. The girl child retains the most when emotional appeal is coupled with animated execution. The attitude towards the advertisement is the maximum with the girl child when emotional appeal is executed through personality symbol. For the purchase motivation of the girl child, the advertisement got most effective when emotional appeal is executed through slice of life. So it has been observed that though the type of advertising execution styles vary in the most effective combination of advertising appeal and advertising execution style on each of the dependent variables, the emotional advertising appeal remains constant in all the combinations. Therefore, it may be inferred that emotional appeal is more effective on the girl child than rational appeal. Thus present chapter gives a guideline to the advertising practitioners to use emotional appeal while targeting the girl child

of India. In the next section (Chapter 4.3), the advertising message preferences of the teenage boy are explored.

### **4.3 INFORMATION PROCESSING OF ADVERTISEMENTS BY TEENAGE BOY**

It is widely believed that teenagers are difficult to assess as they experience huge swings in mood and turbulent outbursts of emotion. In several studies on this issue, results indicated that teenagers show more frequent and larger swings in mood than those shown by older persons (Csikszentmihalyi & Larson, 1984). In fact, most adolescents report of feeling quite happy and self-confident (Diener & Diener, 1996). Peer-group membership assumes more importance during adolescence than at any other period of life. As teenage boy's involvement with their family includes more objective issues of authority and privilege, in current scenario, they can be distinguished as important decision makers on what to buy. The current research tries to explore the advertising messages preferred by the teenage boy in the age group of twelve above to nineteen.

#### **4.3.1 Chapter Objective**

This chapter is designed to extend knowledge of cognitive processing of advertising messages by the teenage boy in India. The objective of the present research is to give the advertising industry a definite guideline while targeting the teenage boys. The specific objectives of the present chapter are as follows:

- i. To find out whether the difference in teenage boy's cognitive processing of advertisements between rational and emotional appeal depends on the advertising execution style.
- ii. To explore any predominant advertising appeal or advertising execution style in the advertising preference of the teenage boy.

#### **4.3.2 Hypothesis**

**H<sub>0</sub>:** The attention, comprehension, retention, attitude and purchase motivation of teenage boy generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/ technical evidence, comparison, personality symbol, dramatization).

### **4.3.3 Sample Size**

The sample of four hundred teenage boys in the age group of twelve above to nineteen years was selected from four different geographic areas in India: southern area (city of Kozhikode), western area (city of Ahmedabad), eastern area (city of Kolkata) and northern area (National Capital Region). The participation was sought through a letter attached in Appendix 2. The sample was equally divided among the four cities, i.e., in the sample of four hundred teenage boys, one hundred were from each city.

### **4.3.4 Advertising Treatment for Teenage boy**

Four judges including two marketing academicians and two advertising practitioners selected twenty advertisements for the teenage boys through the process detailed in Chapter 3.3. The advertising treatment selected for the teenage boys comprises the print advertisements for Liberty Shoes, Timex watch, Fastrack watch, 7 Up, Axe, Levis, Ray-Ban, NIIT, ESPN, Indian Army, Benetton, Wrangler, Pepsi, Nokia, Motorola, Domino's Pizza, KFC, Pizza Hut, McDonald's and Sprite.

### **4.3.5 Results**

To investigate the interaction between advertising appeal and advertising execution style on the teenage boy's attention, message comprehension, attitude, retention and purchase motivation a within-subjects measures  $2$  (advertising appeal)  $\times$   $10$  (advertising execution style)

multivariate analysis of variance (MANOVA) was performed to control the overall alpha level at the desired level (.05). The within-subjects  $2 \times 10$  MANOVA revealed a significant interaction (Wilks' lambda = .34,  $F(45, 355) = 15.45$ ,  $p < .01$ ) between advertising appeal and advertising execution style on attention, comprehension, retention, attitude and purchase motivation of the teenage boy. The significant interaction effect of MANOVA indicates that there exists a significant difference among vectors of means (centroid) of teenage boy's attention, message comprehension, retention, attitude and purchase motivation across different levels of message strategies and advertising execution style. Thus the result provides sufficient statistical evidence that the differences in the teenage boy's attention, comprehension, retention, attitude and purchase motivation between rational appeal and emotional appeal depend on the advertising execution styles, or, the differences among advertising execution styles vary with advertising appeal with respect to the teenage boy's attention, comprehension, retention, attitude and purchase motivation. Mauchly's test of sphericity is used in relation to meeting the assumptions of univariate models. It tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variable is proportional to an identity matrix. A finding of non-significance ( $p > .05$ ) of Mauchly's W Statistic for each of the five dependent variables corresponds to concluding that assumptions are met. The first analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attention of the teenage boy revealed a significant interaction (Wilks' lambda = .8,  $F(9, 391) = 10.93$ ,  $p < .01$ ) between advertising appeal and advertising execution

style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of the teenage boy is displayed in Table 4.3.1.

**Table 4.3.1**

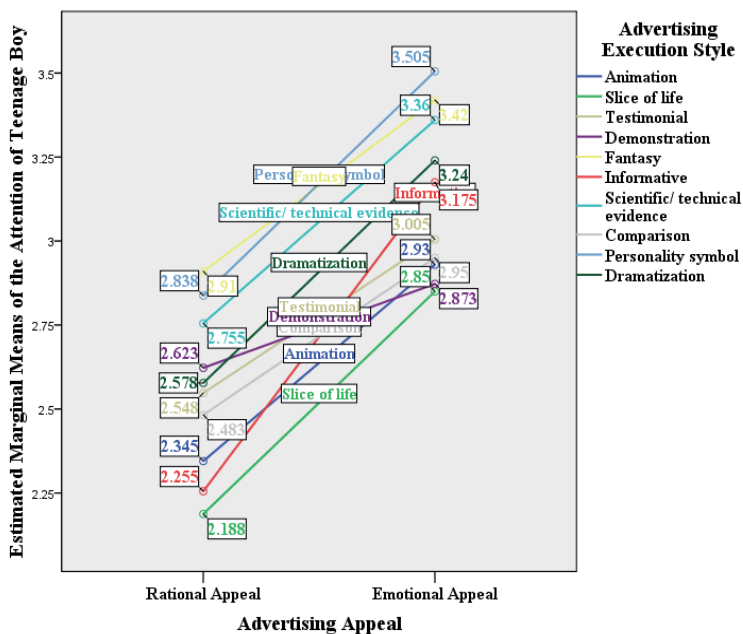
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of Teenage Boy**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.35	2.93	24.95
<b>Slice of life</b>	2.19	2.85	30.29
<b>Testimonial</b>	2.55	3.01	17.96
<b>Demonstration</b>	2.62	2.87	9.533
<b>Fantasy</b>	2.91	3.42	17.53
<b>Informative</b>	2.26	3.18	40.8
<b>Scientific/ technical evidence</b>	2.76	3.36	21.96
<b>Comparison</b>	2.48	2.95	18.83
<b>Personality symbol</b>	2.84	3.51	23.52
<b>Dramatization</b>	2.58	3.24	25.7



A graphical representation of Table 4.3.1, found in Figure 4.3.1, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. For the attention of the teenage boy, the advertisement is most effective (Mean = 3.5) when emotional appeal is executed through personality symbol.

**Figure 4.3.1**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attention of Teenage Boy**



The second analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on comprehension of the teenage boy revealed a significant interaction (Wilks' lambda = .62,  $F(9, 391) = 26.64$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of the teenage boy is displayed in Table 4.3.2.

**Table 4.3.2**

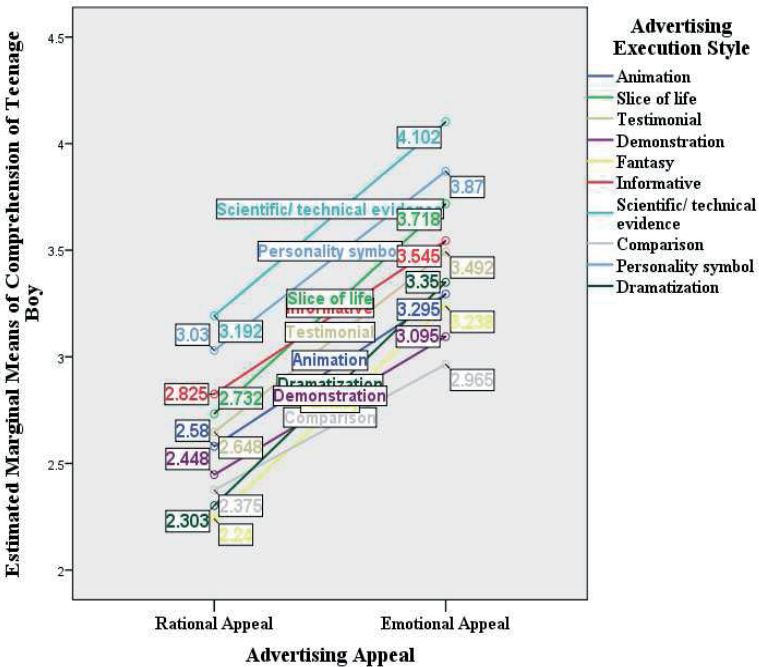
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of Teenage Boy**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.58	3.29	27.71
<b>Slice of life</b>	2.73	3.72	36.05
<b>Testimonial</b>	2.65	3.49	31.92
<b>Demonstration</b>	2.45	3.09	26.46
<b>Fantasy</b>	2.24	3.24	44.53
<b>Informative</b>	2.82	3.55	25.49
<b>Scientific/ technical evidence</b>	3.19	4.1	28.5
<b>Comparison</b>	2.37	2.97	24.84
<b>Personality symbol</b>	3.03	3.87	27.72
<b>Dramatization</b>	2.3	3.35	45.49

A graphical representation of Table 4.3.2, found in Figure 4.3.2, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The comprehension of the advertisement by the teenage boy is the maximum (Mean = 4.1) when emotional appeal is executed through scientific/technical evidences.

Figure 4.3.2

Profile Plot for Advertising Appeal × Advertising Execution Style on Comprehension of Teenage Boy



The third analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on retention of the teenage boy revealed a significant interaction (Wilks' lambda = .85,  $F(9, 391) = 7.69$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of the teenage boy is displayed in Table 4.3.3

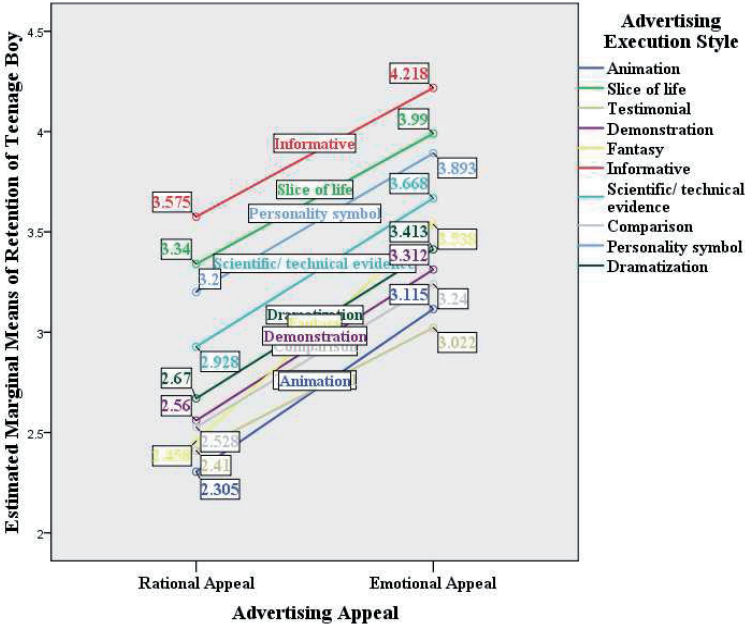
**Table 4.3.3**

**Estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of Teenage Boy**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.31	3.12	35.14
<b>Slice of life</b>	3.34	3.99	19.46
<b>Testimonial</b>	2.41	3.02	25.41
<b>Demonstration</b>	2.56	3.31	29.39
<b>Fantasy</b>	2.46	3.54	43.95
<b>Informative</b>	3.58	4.22	17.97
<b>Scientific/ technical evidence</b>	2.93	3.67	25.28
<b>Comparison</b>	2.53	3.24	28.19
<b>Personality symbol</b>	3.2	3.89	21.64
<b>Dramatization</b>	2.67	3.41	27.81

A graphical representation of Table 4.3.3, found in Figure 4.3.3, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The teenage boy can retain the most (Mean = 4.22) when emotional appeal is executed through information.

**Figure 4.3.3**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on Retention of Teenage Boy**



The fourth analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attitude of the teenage boy revealed a significant interaction (Wilks' lambda = .93,  $F(9, 391) = 3.08$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of the teenage boy is displayed in Table 4.3.4.

**Table 4.3.4**

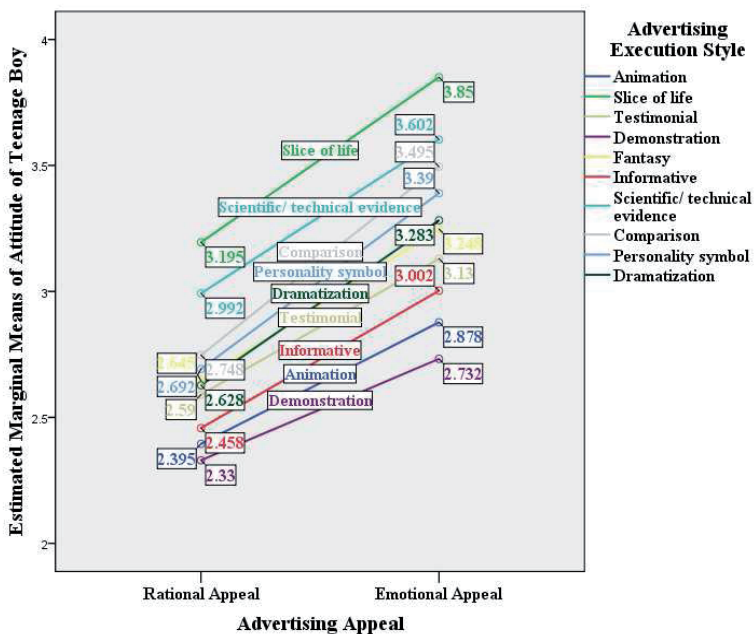
**Estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of Teenage Boy**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.4	2.88	20.15
<b>Slice of life</b>	3.2	3.85	20.5
<b>Testimonial</b>	2.59	3.13	20.85
<b>Demonstration</b>	2.33	2.73	17.27
<b>Fantasy</b>	2.65	3.25	22.78
<b>Informative</b>	2.46	3	22.18
<b>Scientific/ technical evidence</b>	2.99	3.6	20.38
<b>Comparison</b>	2.75	3.49	27.21
<b>Personality symbol</b>	2.69	3.39	25.91
<b>Dramatization</b>	2.63	3.28	24.93

A graphical representation of Table 4.3.4, found in Figure 4.3.4, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The attitude towards the advertisement is the highest (Mean = 3.85) with the teenage boy when emotional appeal is executed through slice of life.

**Figure 4.3.4**

**Profile Plot for Advertising Appeal × Advertising Execution Style on Attitude of Teenage Boy**



The final analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on purchase motivation of the teenage boy revealed a significant interaction (Wilks' lambda = .92,  $F(9, 391) = 3.84$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of the teenage boy is displayed in Table 4.3.5.

**Table 4.3.5**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of Teenage Boy**

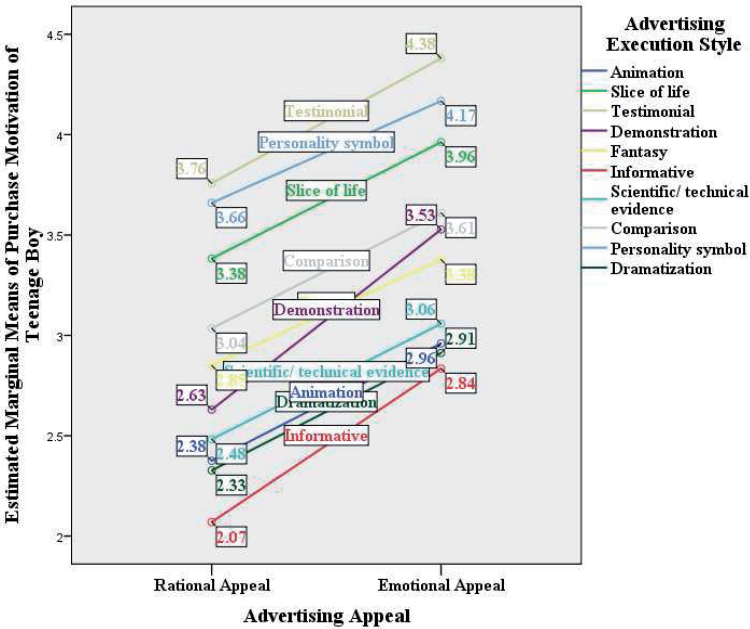
<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.38	2.96	24.63
<b>Slice of life</b>	3.38	3.96	17.15
<b>Testimonial</b>	3.76	4.38	16.57
<b>Demonstration</b>	2.63	3.53	34.13
<b>Fantasy</b>	2.85	3.38	18.51
<b>Informative</b>	2.07	2.84	36.96
<b>Scientific/ technical evidence</b>	2.48	3.06	23.16
<b>Comparison</b>	3.04	3.61	18.95
<b>Personality symbol</b>	3.66	4.17	13.87
<b>Dramatization</b>	2.33	2.91	25.13



A graphical representation of Table 4.3.5, found in Figure 4.3.5, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. For the purchase motivation of the teenage boy, the most effective (Mean = 4.38) advertisement was the combination of emotional appeal and testimonial execution.

Figure 4.3.5

Profile Plot for Advertising Appeal × Advertising Execution Style on Purchase Motivation of Teenage Boy



#### 4.3.6 Inference

From the present chapter, it can be inferred that advertisement elements like advertising appeal and advertising execution style influence processing of advertising messages by the teenage boy of India. On testing the hypothesis with repeated measures MANOVA, it has been found that the teenage boy's attention, message comprehension, attitude, retention and purchase motivation are different across different levels of advertising appeals and advertising execution styles. The interaction remained significant on each of the dependent variable when tested through univariate repeated measures ANOVA. For the attention of the teenage boy, the advertisement is most effective when emotional appeal is executed through personality symbol. The comprehension of the advertisement by the teenage boy is maximum when emotional appeal is executed through scientific/technical evidences. The teenage boy can retain the most when emotional appeal is executed through information. The attitude towards the advertisement is the highest with the teenage boy when emotional appeal is executed through slice of life. For the purchase motivation of the teenage boy, the most effective advertisement was the combination of emotional appeal and testimonial execution. So it has been observed that though the type of advertising execution styles vary in the most effective combination of advertising appeal and advertising execution style on each of the dependent variables, the emotional advertising appeal remains constant in all the combinations. Therefore, it may be inferred that emotional appeal is more effective on the teenage boy than rational appeal. Thus the present chapter gives a guideline to the advertising practitioners to

use emotional appeal while targeting the teenage boy of India. In the next section (Chapter 4.4), the advertising message preferences of the teenage girl are explored.

#### **4.4 INFORMATION PROCESSING OF ADVERTISEMENTS BY TEENAGE GIRL**

With the transition from childhood to adolescence comes a period of fast-paced physical and intellectual change. At a signal from the hypothalamus, the pituitary gland triggers the growth spurt, and puberty follows. For girls, the peak growth year is usually the eleventh or twelfth. Although in most Indian families, parents seem to place more restrictions on their teenage daughters, but in the changing social background teenage girls are emerging out as confident and independent target audience who are enjoying their new found freedom and taking their own decisions. Of course, this social picture is mainly confined to the urban and financially privileged strata. Nevertheless, in coming years this classification is likely to disappear. Therefore, the present chapter focuses on the preferred advertisement appeal of teenage girl in the age group of twelve above to nineteen years.

#### **4.4.1 Chapter Objective**

This chapter is designed to extend knowledge of cognitive processing of advertising messages by the teenage girl in India. The objective of the present chapter is to give the advertising industry a definite guideline while targeting the teenage girl. The specific objectives of the present chapter are as follows:

- i. To find out whether the difference in the teenage girl's cognitive processing of advertisements between rational and emotional appeal depends on the advertising execution style.
- ii. To explore any predominant advertising appeal or advertising execution style in the advertising preference of the teenage girl of India.

#### **4.4.2 Hypothesis**

**H<sub>0</sub>:** The attention, comprehension, retention, attitude and purchase motivation of teenage girl generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/ technical evidence, comparison, personality symbol, dramatization).

#### **4.4.3 Sample Size**

The sample of four hundred teenage girls in the age group of twelve above to nineteen years was selected from four different geographic areas in India: southern area (city of Kozhikode), western area (city of Ahmedabad), eastern area (city of Kolkata) and northern area (National Capital Region). The participation was sought through a letter attached in Appendix 2. The sample was equally divided among the four cities, i.e., in the sample of four hundred teenage girls, one hundred were from each city.

#### **4.4.4 Advertising Treatment for Teenage girl**

Four judges including two marketing academicians and two advertising practitioners selected twenty advertisements for the teenage girl through the process detailed in Chapter 3.3. The advertising treatment selected for the teenage girl comprises of the print advertisements for Lotus, Fastrack, Mirinda, Elle 18, Dairy Milk, Anne French, Pantaloons, Stayfree, Whisper Ultra, Revlon, Rexona, Ponds, Pantene, Frooti, Avon, Lakme, L'Oreal, Garnier, Oriflame and Wills Lifestyle.

#### 4.4.5 Results

To investigate the interaction between advertising appeal and advertising execution style on the teenage girl's attention, message comprehension, attitude, retention and purchase motivation a within-subjects 2 (advertising appeal)  $\times$  10 (advertising execution style) multivariate analysis of variance (MANOVA) was performed to control the overall alpha level at the desired level (.05). The within-subjects 2  $\times$  10 MANOVA revealed a significant interaction (Wilks' lambda = .59,  $F(45, 355) = 5.39$ ,  $p < .01$ ) between advertising appeal and advertising execution style on attention, comprehension, retention, attitude and purchase motivation of the teenage girl. The significant interaction effect of MANOVA indicates that there exists a significant difference among vectors of means (centroid) of teenage girl's attention, message comprehension, retention, attitude and purchase motivation across different levels of message strategies and advertising execution style. Thus the result provides sufficient statistical evidence that the differences in the teenage girl's attention, comprehension, retention, attitude and purchase motivation between rational appeal and emotional appeal depend on the advertising execution styles, or, the differences among advertising execution styles vary with advertising appeal with respect to the teenage girl's attention, comprehension, retention, attitude and purchase motivation. Mauchly's test of sphericity is used in relation to meeting the assumptions of univariate models. A finding of non-significance ( $p > .05$ ) of Mauchly's W Statistic for each of the five dependent variables corresponds to concluding that assumptions are met. The initial analysis at the univariate

level involving the  $2 \times 10$  within-subjects ANOVA on attention of the teenage girl revealed a significant interaction (Wilks' lambda = .82,  $F(9, 391) = 9.4$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of the teenage girl is displayed in Table 4.4.1

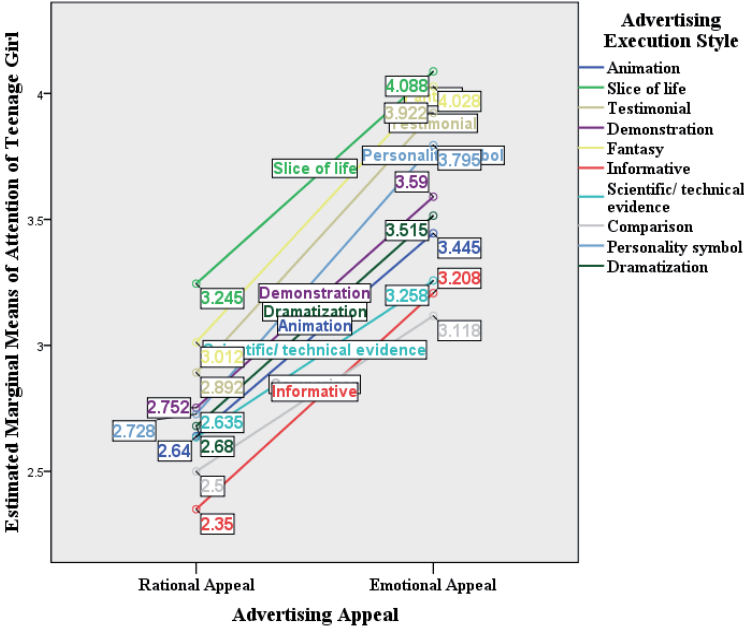
**Table 4.4.1**

**Estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of Teenage Girl**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.64	3.45	30.49
<b>Slice of life</b>	3.25	4.09	25.96
<b>Testimonial</b>	2.89	3.92	35.61
<b>Demonstration</b>	2.75	3.59	30.43
<b>Fantasy</b>	3.01	4.03	33.69
<b>Informative</b>	2.35	3.21	36.49
<b>Scientific/ technical evidence</b>	2.64	3.26	23.62
<b>Comparison</b>	2.5	3.12	24.7
<b>Personality symbol</b>	2.73	3.79	39.14
<b>Dramatization</b>	2.68	3.52	31.16

A graphical representation of Table 4.4.1, found in Figure 4.4.1, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The attention of the teenage girl in the advertisement was found to be the most effective (Mean = 4.1) when emotional appeal is executed through slice of life.

**Figure 4.4.1**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attention of Teenage Girl**





The second analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on comprehension of the teenage girl revealed a significant interaction (Wilks' lambda = .88,  $F(9, 391) = 5.98$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of the teenage girl is displayed in Table 4.4.2.

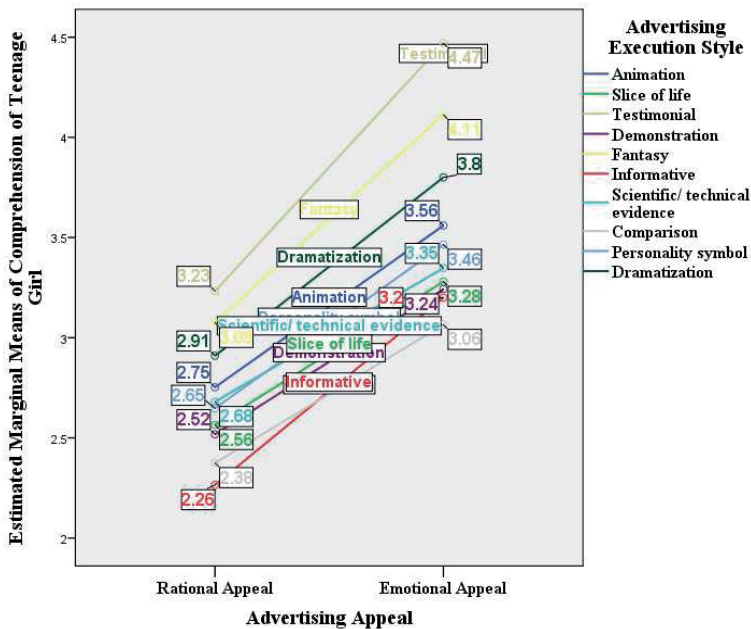
**Table 4.4.2**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of Teenage Girl**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.75	3.56	29.34
<b>Slice of life</b>	2.57	3.28	27.88
<b>Testimonial</b>	3.23	4.47	38.28
<b>Demonstration</b>	2.52	3.24	28.8
<b>Fantasy</b>	3.07	4.11	33.74
<b>Informative</b>	2.26	3.2	41.28
<b>Scientific/ technical evidence</b>	2.68	3.35	24.91
<b>Comparison</b>	2.38	3.07	29.05
<b>Personality symbol</b>	2.65	3.47	30.88
<b>Dramatization</b>	2.91	3.8	30.58

A graphical representation of Table 4.4.2, found in Figure 4.4.2, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The comprehension of the advertisement by the teenage girl is the maximum (Mean = 4.47) with the combination of emotional appeal and testimonial execution.

**Figure 4.4.2**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Comprehension of the teenage girl**



The third analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on retention of the teenage girl revealed a significant interaction (Wilks' lambda = .93,  $F(9, 391) = 3.35$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of the teenage girl is displayed in Table 4.4.3

**Table 4.4.3**

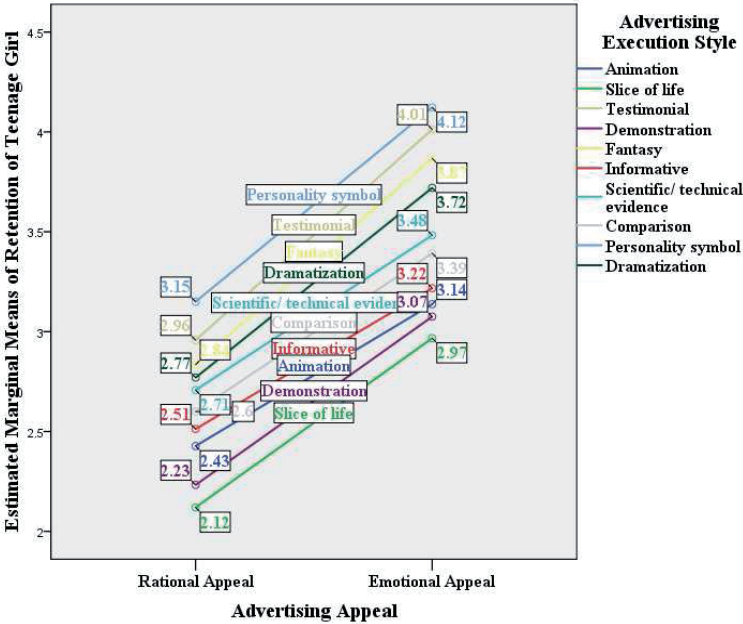
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of Teenage Girl**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.43	3.14	29.25
<b>Slice of life</b>	2.12	2.97	39.98
<b>Testimonial</b>	2.96	4.01	35.67
<b>Demonstration</b>	2.23	3.07	37.74
<b>Fantasy</b>	2.83	3.87	36.42
<b>Informative</b>	2.51	3.22	28.06
<b>Scientific/ technical evidence</b>	2.71	3.48	28.62
<b>Comparison</b>	2.6	3.39	30.48
<b>Personality symbol</b>	3.15	4.12	30.87
<b>Dramatization</b>	2.77	3.72	34.3

A graphical representation of Table 4.4.3, found in Figure 4.4.3, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The teenage girl can retain the most (Mean = 4.12) when the emotional appeal is executed through personality symbol.

Figure 4.4.3

Profile Plot for Advertising Appeal × Advertising Execution Style on Retention of the teenage girl



The fourth analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attitude of the teenage girl revealed a significant interaction (Wilks' lambda = .94,  $F(9, 391) = 2.75$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of the teenage girl is displayed in Table 4.4.4

**Table 4.4.4**

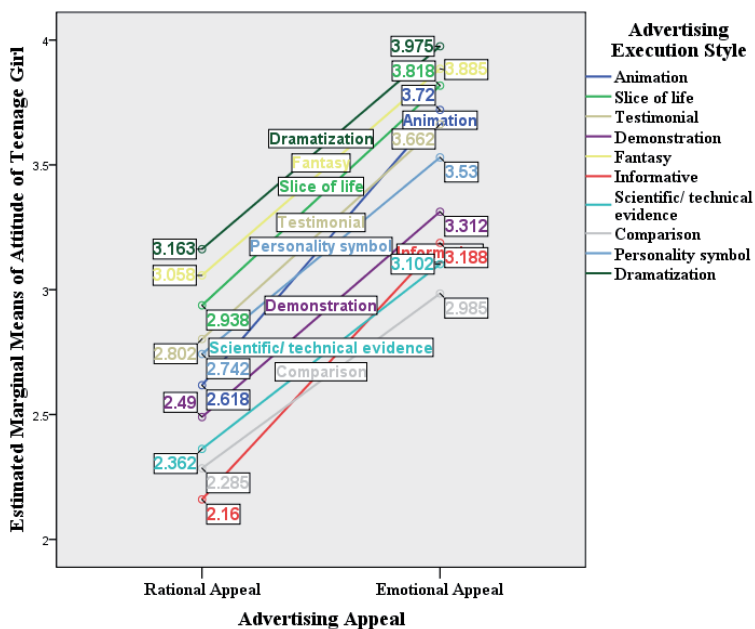
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of Teenage Girl**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.62	3.72	42.12
<b>Slice of life</b>	2.94	3.82	29.96
<b>Testimonial</b>	2.8	3.66	30.69
<b>Demonstration</b>	2.49	3.31	33.03
<b>Fantasy</b>	3.06	3.89	27.06
<b>Informative</b>	2.16	3.19	47.57
<b>Scientific/ technical evidence</b>	2.36	3.1	31.32
<b>Comparison</b>	2.28	2.98	30.63
<b>Personality symbol</b>	2.74	3.53	28.71
<b>Dramatization</b>	3.16	3.98	25.69

A graphical representation of Table 4.4.4, found in Figure 4.4.4, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The attitude towards the advertisement gets the maximum (Mean = 3.98) with the teenage girl when emotional appeal is executed through dramatization.

**Figure 4.4.4**

**Profile Plot for Advertising Appeal × Advertising Execution Style on Attitude of Teenage Girl**



The final analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on purchase motivation of the teenage girl revealed a significant interaction (Wilks' lambda = .91,  $F(9, 391) = 4.29$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of the teenage girl is displayed in Table 4.4.5

**Table 4.4.5**

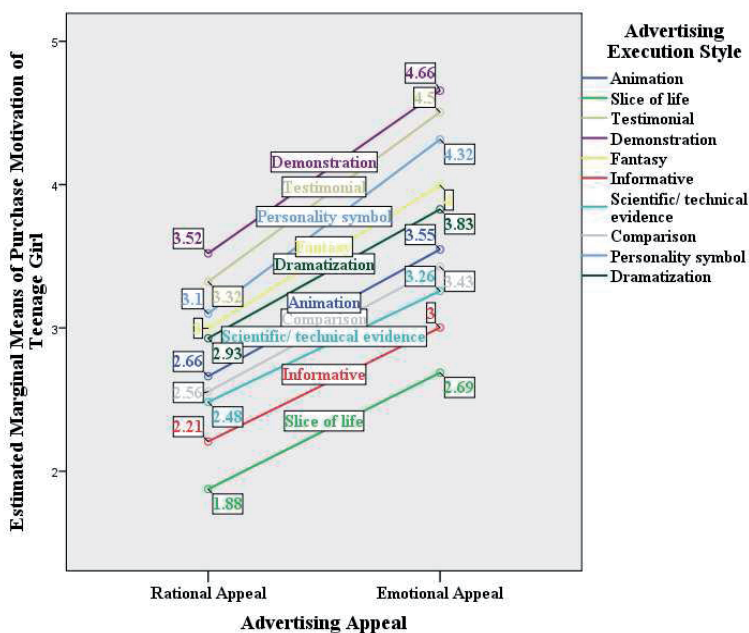
**Estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of Teenage Girl**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.66	3.55	33.24
<b>Slice of life</b>	1.87	2.69	43.33
<b>Testimonial</b>	3.32	4.51	35.59
<b>Demonstration</b>	3.52	4.66	32.24
<b>Fantasy</b>	3	4	33.28
<b>Informative</b>	2.21	3	36.01
<b>Scientific/ technical evidence</b>	2.48	3.26	31.22
<b>Comparison</b>	2.56	3.43	34.15
<b>Personality symbol</b>	3.1	4.32	39.19
<b>Dramatization</b>	2.93	3.83	30.74

A graphical representation of Table 4.4.5, found in Figure 4.4.5, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. For the purchase motivation of the teenage girl, the advertisement is most effective (Mean = 4.66) when emotional appeal is executed through demonstration.

**Figure 4.4.5**

**Profile Plot for Advertising Appeal × Advertising Execution Style on Purchase Motivation of Teenage Girl**





#### **4.4.6 Inference**

From the present chapter, it can be inferred that advertisement elements like advertising appeal and advertising execution style influence processing of advertising messages by the teenage girl of India. On testing the hypothesis with repeated measures MANOVA, it has been found that the teenage girl's attention, message comprehension, attitude, retention and purchase motivation are different across different levels of advertising appeals and advertising execution styles. The interaction remained significant on each of the dependent variable when tested through univariate repeated measures ANOVA. For the attention of the teenage girl, the advertisement was found to be the most effective when emotional appeal is executed through slice of life execution style. The comprehension of the advertisement by the teenage girl is maximum with the combination of emotional appeal and testimonial execution. The teenage girl can retain the most when emotional appeal is executed through personality symbol. The attitude towards the advertisement gets the maximum with the teenage girl when emotional appeal is executed through dramatization. For the purchase motivation of the teenage girl, the advertisement is most effective when emotional appeal is executed through demonstration. So it has been observed that though the type of advertising execution styles vary in the most effective combination of advertising appeal and advertising execution style on each of the dependent variables, the emotional advertising appeal remains constant in all the combinations. Therefore, it may be inferred that emotional appeal is more effective for the teenage girl than rational appeal. Thus the present chapter gives a guideline to

the advertising practitioners to use emotional appeal while targeting the teenage girl of India. In the next section (Chapter 4.5), the advertising message preferences of young men are explored.

#### **4.5 INFORMATION PROCESSING OF ADVERTISEMENTS BY YOUNG MEN**

Daniel Levinson (1978) interviewed 40 men (no women) over a two-year period and developed a model of the major tasks at each phase, or “season,” of adulthood. Levinson focused on four tasks for young men. Perhaps the most overarching is forming a “dream”—that is, a sense of how one will fit into the adult world. In addition, Levinson argued, the young men need to establish an intimate relationship and enter the realm of parenthood. A third task involves selecting from among one’s interests, picking out an occupation, and acquiring the skills and credentials that will foster success in that occupation. The fourth task of young adulthood is related to others: the developing adult needs to find a mentor. The mentor may serve as teacher, sponsor or counselor, facilitating the young adult’s pursuit of the “dream”. Since young men are one of the most prospective consumers with high buying potential in terms of financial capability and social responsibility, the present research focuses on the print advertisements preferred by young men in the age group of nineteen above to thirty five years.

### **4.5.1 Chapter Objective**

This chapter is designed to extend knowledge of cognitive processing of advertising messages by young men in India. The objective of the present chapter is to give the advertising industry a definite guideline while targeting the young men. The specific objectives of the present chapter are as follows:

- i. To find out whether the difference in the young men's cognitive processing of advertisements between rational and emotional appeal depends on the advertising execution style.
- ii. To explore any predominant advertising appeal or advertising execution style in the advertising preference of the young men of India.

### **4.5.2 Hypothesis**

**H<sub>0</sub>:** The attention, comprehension, retention, attitude and purchase motivation of young men generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/ technical evidence, comparison, personality symbol, dramatization).

#### **4.5.3 Sample Size**

The sample of four hundred young men in the age group of nineteen above to thirty five years was selected from four different geographic areas in India: southern area (city of Kozhikode), western area (city of Ahmedabad), eastern area (city of Kolkata) and northern area (National Capital Region). The participation was sought through a letter attached in Appendix 2. The sample was equally divided among the four cities, i.e., in the sample of four hundred young men, one hundred were from each city.

#### **4.5.4 Advertising Treatment for Young men**

Four judges including two marketing academicians and two advertising practitioners selected twenty advertisements for the young men through the process detailed in Chapter 3.3. The twenty advertising treatments selected for young men comprised of the print advertisements for Axe, Levis, Raymonds, HDFC Bank, Tata Tea, Royal Challenge, IBM, Philips, Cinthol soap, Woodland shoes, Gillette, Old Spice, Bajaj Pulsar, Skoda, Van Heusen, Hyundai Santro, Nivea Whitening moisturiser, Sony Vaio laptop, Peter England and Omega watches.

#### 4.5.5 Results

To investigate the interaction between advertising appeal and advertising execution style on the young men's attention, message comprehension, attitude, retention and purchase motivation a within-subjects 2 (advertising appeal)  $\times$  10 (advertising execution style) multivariate analysis of variance (MANOVA) was performed to control the overall alpha level at the desired level (.05). The within-subjects 2  $\times$  10 MANOVA revealed a significant interaction (Wilks' lambda = .31,  $F(45, 355) = 17.81$ ,  $p < .01$ ) between advertising appeal and advertising execution style on attention, comprehension, retention, attitude and purchase motivation of the young men. The significant interaction effect of MANOVA indicates that there exists a significant difference among vectors of means (centroid) of the young men's attention, message comprehension, retention, attitude and purchase motivation across different levels of message strategies and advertising execution style. Thus the result provides sufficient statistical evidence that the differences in the young men's attention, comprehension, retention, attitude and purchase motivation between rational appeal and emotional appeal depends on the advertising execution styles, or, the differences among advertising execution styles vary with advertising appeal with respect to young men's attention, comprehension, retention, attitude and purchase motivation. Mauchly's test of sphericity is used in relation to meeting the assumptions of univariate models. A finding of non-significance ( $p > .05$ ) of Mauchly's W Statistic for each of the five dependent variables corresponds to concluding that assumptions are met. At the univariate level, this interaction

was significant for all the five dependent variables with sphericity assumed. The initial analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attention of the young men revealed a significant interaction (Wilks' lambda = .84,  $F(9, 391) = 8.47$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of the young men is displayed in Table 4.5.1

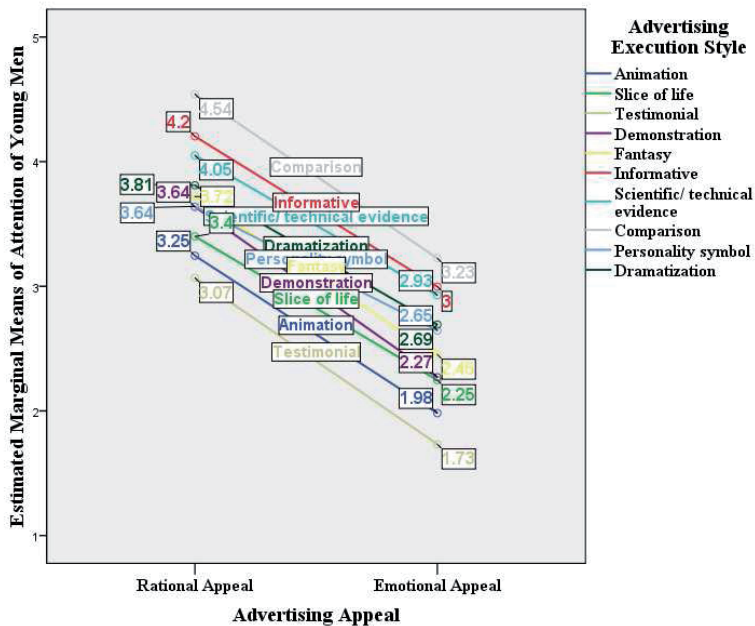
**Table 4.5.1**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of Young Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.25	1.98	63.68
<b>Slice of life</b>	3.4	2.25	51.28
<b>Testimonial</b>	3.07	1.73	77.06
<b>Demonstration</b>	3.64	2.27	60.24
<b>Fantasy</b>	3.72	2.45	51.68
<b>Informative</b>	4.2	3	40.2
<b>Scientific/ technical evidence</b>	4.05	2.93	38.34
<b>Comparison</b>	4.54	3.23	40.85
<b>Personality symbol</b>	3.64	2.65	37.62
<b>Dramatization</b>	3.81	2.69	41.5

A graphical representation of Table 4.5.1, found in Figure 4.5.1, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. For the attention of the young men, the most effective (Mean = 4.54) advertisement was found to be the rational appeal executed through comparison.

**Figure 4.5.1**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attention of Young Men**



The second analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on comprehension of the young men revealed a significant interaction (Wilks' lambda = .85,  $F(9, 391) = 7.57$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on comprehension of the young men is displayed in Table 4.5.2.

**Table 4.5.2**

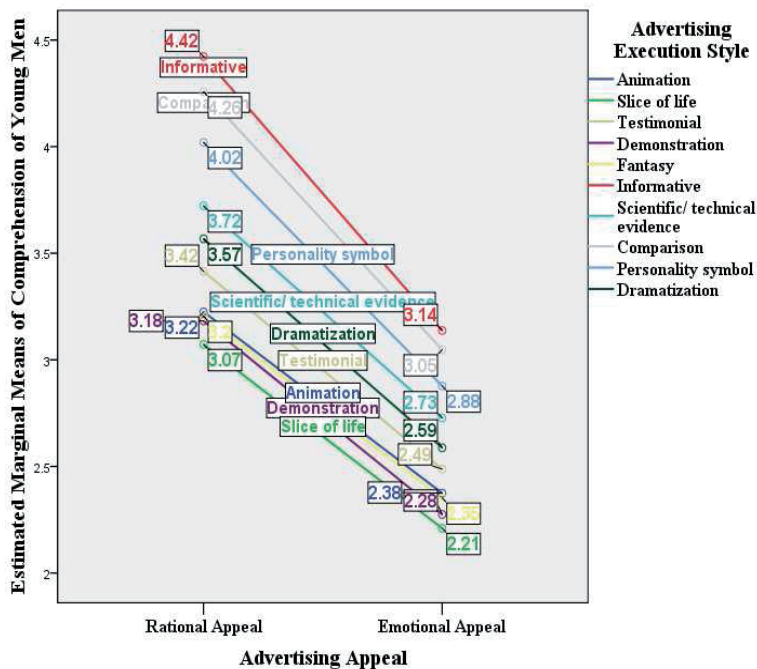
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of Young Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.23	2.38	35.79
<b>Slice of life</b>	3.07	2.21	39.03
<b>Testimonial</b>	3.41	2.49	37.29
<b>Demonstration</b>	3.18	2.28	39.89
<b>Fantasy</b>	3.21	2.35	36.24
<b>Informative</b>	4.42	3.14	40.96
<b>Scientific/ technical evidence</b>	3.72	2.73	36.48
<b>Comparison</b>	4.26	3.05	39.7
<b>Personality symbol</b>	4.02	2.88	39.7
<b>Dramatization</b>	3.57	2.59	37.87



A graphical representation of Table 4.5.2, found in Figure 4.5.2, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The comprehension of the advertisement by the young men is the maximum (Mean = 4.42) when rational appeal is executed through information.

**Figure 4.5.2**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Comprehension of Young Men**



The third analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on retention of the young men revealed a significant interaction (Wilks' lambda = .92,  $F(9, 391) = 3.5$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on retention of the young men is displayed in Table 4.5.3

**Table 4.5.3**

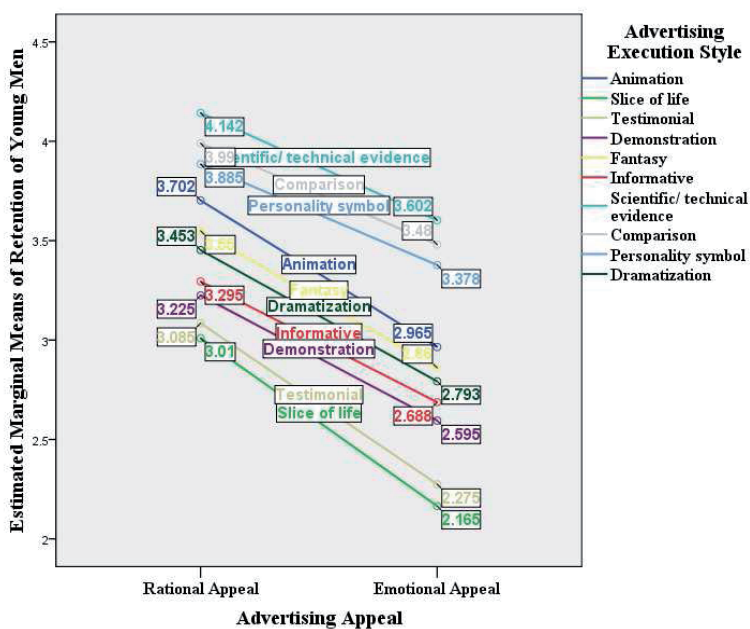
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of Young Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.7	2.96	24.87
<b>Slice of life</b>	3.01	2.16	39.03
<b>Testimonial</b>	3.08	2.27	35.6
<b>Demonstration</b>	3.22	2.59	24.28
<b>Fantasy</b>	3.55	2.86	24.13
<b>Informative</b>	3.3	2.69	22.6
<b>Scientific/ technical evidence</b>	4.14	3.6	14.99
<b>Comparison</b>	3.99	3.48	14.66
<b>Personality symbol</b>	3.89	3.38	15.03
<b>Dramatization</b>	3.45	2.79	23.63

A graphical representation of Table 4.5.3, found in Figure 4.5.3, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The young men can retain the most (Mean = 4.14) when rational appeal is executed through scientific/ technical evidences.

Figure 4.5.3

**Profile Plot for Advertising Appeal × Advertising Execution Style on Retention of Young Men**



The fourth analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attitude of the young men revealed a significant interaction (Wilks' lambda = .93,  $F(9, 391) = 3.18$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on attitude of the young men is displayed in Table 4.5.4

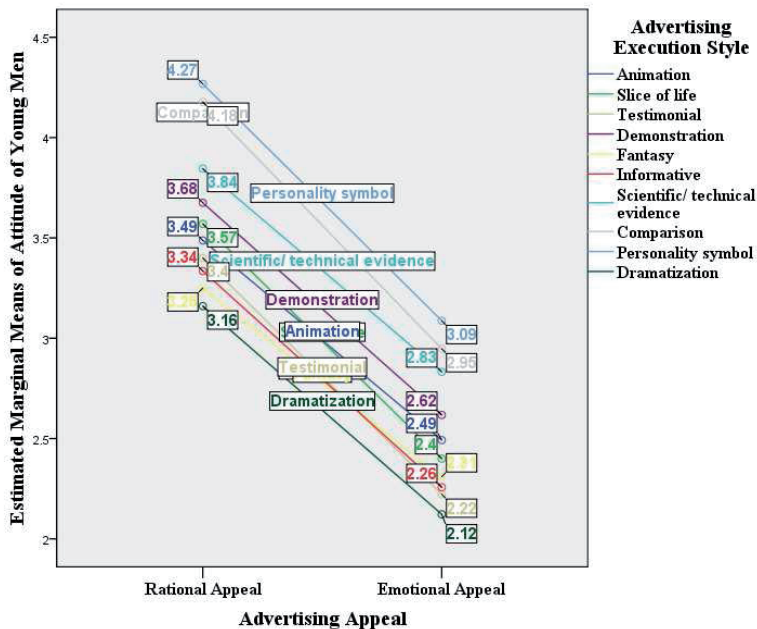
**Table 4.5.4**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of Young Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.49	2.49	39.92
<b>Slice of life</b>	3.57	2.4	48.75
<b>Testimonial</b>	3.4	2.22	52.98
<b>Demonstration</b>	3.68	2.62	40.4
<b>Fantasy</b>	3.25	2.31	40.69
<b>Informative</b>	3.33	2.26	47.73
<b>Scientific/ technical evidence</b>	3.84	2.83	35.75
<b>Comparison</b>	4.18	2.95	41.73
<b>Personality symbol</b>	4.27	3.09	38.22
<b>Dramatization</b>	3.16	2.12	48.88

A graphical representation of Table 4.5.4, found in Figure 4.5.4, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The attitude towards the advertisement gets the maximum (Mean = 4.27) with the young men when rational appeal is executed through personality symbol.

**Figure 4.5.4**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attitude of Young Men**



The final analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on purchase motivation of the young men revealed a significant interaction (Wilks' lambda = .93,  $F(9, 391) = 3.33$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on purchase motivation of the young men is displayed in Table 4.5.5

**Table 4.5.5**

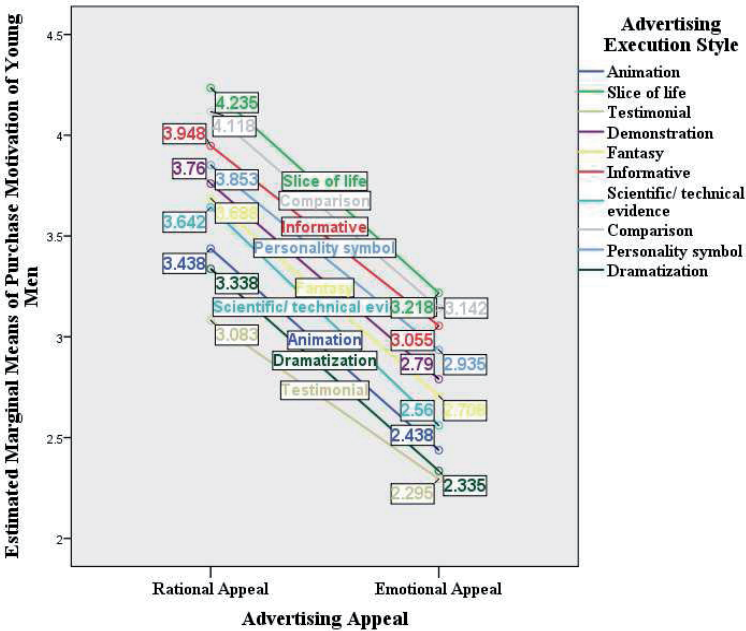
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of Young Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.44	2.44	41.03
<b>Slice of life</b>	4.24	3.22	31.62
<b>Testimonial</b>	3.08	2.3	34.31
<b>Demonstration</b>	3.76	2.79	34.77
<b>Fantasy</b>	3.69	2.71	36.2
<b>Informative</b>	3.95	3.06	29.21
<b>Scientific/ technical evidence</b>	3.64	2.56	42.29
<b>Comparison</b>	4.12	3.14	31.03
<b>Personality symbol</b>	3.85	2.94	31.26
<b>Dramatization</b>	3.34	2.34	42.93

A graphical representation of Table 4.5.5, found in Figure 4.5.5, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. For the purchase motivation of the young men, the advertisement gets most effective (Mean = 4.24) when rational appeal is executed through slice of life.

Figure 4.5.5

Profile Plot for Advertising Appeal × Advertising Execution Style on Purchase Motivation of Young Men



#### **4.5.6 Inference**

From the present chapter, it can be inferred that advertisement elements like advertising appeal and advertising execution style influence processing of advertising messages by the young men of India. On testing the hypothesis with repeated measures MANOVA, it has been found that the young men's attention, message comprehension, attitude, retention and purchase motivation are different across different levels of advertising appeals and advertising execution styles. The interaction remained significant on each of the dependent variable when tested through univariate repeated measures ANOVA. For the attention of the young men, the most effective advertisement was found to be the rational appeal executed through comparison. The comprehension of the advertisement by the young men is maximum when rational appeal is executed through information. The young men can retain the most when rational appeal is executed through scientific/technical evidences. The attitude towards the advertisement gets the maximum with the young men when rational appeal is executed through personality symbol. For the purchase motivation of the young men, the advertisement gets most effective when rational appeal is executed through slice of life. So it has been observed that though the type of advertising execution styles vary in the most effective combination of advertising appeal and advertising execution style on each of the dependent variables, the rational advertising appeal remains constant in all the combinations. Therefore, it may be inferred that rational appeal is most effective for the young men. Thus, the present chapter gives a guideline to the advertising



practitioners to use rational appeal while targeting the young men of India. In the next section (Chapter 4.6), the advertising message preferences of the young women are explored.

#### **4.6 INFORMATION PROCESSING OF ADVERTISEMENTS BY YOUNG WOMEN**

Erikson (1963) depicted young adulthood as a time of tension between isolation and intimacy. If the tension is handled well, mature love can result. Erikson stressed that commitments to others can ultimately help the society to flourish. Traditionally, this is accomplished through intimate heterosexual relationships that are socially sanctioned through marriage and expanded with the birth of children. Alternative patterns are much in evidence now; but even today there can be little doubt that forming close, stable and unselfish relationships is an important task for the young women. Presently, the young women emerge as an important target group either in terms of financially independent young professionals or self-sufficient home makers, in those of increasing number of Indian nuclear families. That's why they are currently believed as one of the most important consumer segments targeted by the advertisers. The present chapter focuses on the advertising preference of the young women in the age group of nineteen above to thirty five years.

#### **4.6.1 Chapter Objective**

This chapter is designed to extend knowledge of cognitive processing of advertising messages by young women in India. The objective of the research is to give the advertising industry a definite guideline while targeting the young women. The present research tries to bring forward the effective combination of advertising appeal and advertising execution style for the young women. The specific objectives of the present chapter are as follows:

- i. To find out whether the difference in young women's cognitive processing of advertisements between rational and emotional appeal depends on the advertising execution style.
- ii. To explore any predominant advertising appeal or advertising execution style in the advertising preference of the young women of India.

#### **4.6.2 Hypothesis**

**H<sub>0</sub>:** The attention, comprehension, retention, attitude and purchase motivation of the young women generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/ technical evidence, comparison, personality symbol, dramatization).

### **4.6.3 Sample Size**

The sample of four hundred young women in the age group of nineteen above to thirty five years was selected from four different geographic areas in India: southern area (city of Kozhikode), western area (city of Ahmedabad), eastern area (city of Kolkata) and northern area (National Capital Region). The participation was sought through a letter attached in Appendix 2. The sample was equally divided among the four cities, i.e., in the sample of four hundred young women, one hundred were from each city.

### **4.6.4 Advertising Treatment for Young Women**

Four judges including two marketing academicians and two advertising practitioners selected twenty advertisements for the young women through the process detailed in Chapter 3.3 The twenty advertising treatments selected for the young women comprises of the print advertisements for Platinum, Tanishq, Junior Horlicks, Garden Fabrics, Perk chocolate, Ponds, Dove, Femina, Kurl-on mattress, Lakme, Revlon, Sunsilk, Baskin Robbins, Kodak, Westside, Women's Horlicks, Citizen watches, Whisper, Stayfree and Panasonic microwave ovens.

#### 4.6.5 Results

To investigate the interaction between advertising appeal and advertising execution style on the young women's attention, message comprehension, attitude, retention and purchase motivation a repeated measures 2 (advertising appeal)  $\times$  10 (advertising execution style) Multivariate analysis of variance (MANOVA) was performed to control the overall alpha level at the desired level (.05). The within-subjects 2  $\times$  10 MANOVA revealed a significant interaction (Wilks' lambda = .6,  $F(45, 355) = 5.19$ ,  $p < .01$ ) between advertising appeal and advertising execution style on attention, comprehension, retention, attitude and purchase motivation of the young women. The significant interaction effect of MANOVA indicates that there exists a significant difference among vectors of means (centroid) of the young women's attention, message comprehension, retention, attitude and purchase motivation across different levels of message strategies and advertising execution style. Thus the result provides sufficient statistical evidence that the differences in the young women's attention, comprehension, retention, attitude and purchase motivation between rational appeal and emotional appeal depend on the advertising execution styles, or, the differences among advertising execution styles vary with advertising appeal with respect to young men's attention, comprehension, retention, attitude and purchase motivation. Mauchly's test of sphericity is used in relation to meeting the assumptions of univariate models. It tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variable is proportional to an identity matrix. A finding of non-significance ( $p$

> .05) of Mauchly's W Statistic for each of the five dependent variables corresponds to concluding that assumptions are met. The initial analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attention of the young women revealed a significant interaction (Wilks' lambda = .95,  $F(9, 391) = 2.27$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of the young women is displayed in Table 4.6.1.

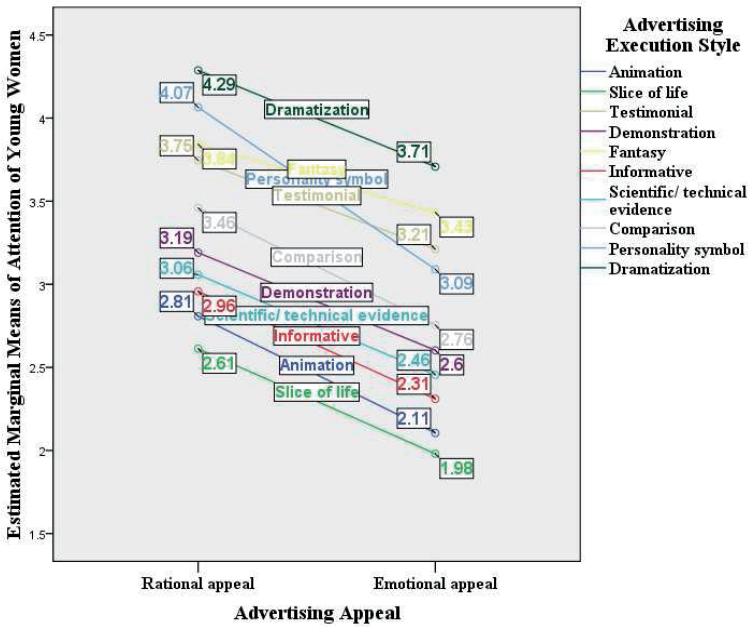
**Table 4.6.1**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of Young Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	2.81	2.1	33.37
<b>Slice of life</b>	2.61	1.98	31.94
<b>Testimonial</b>	3.74	3.21	16.67
<b>Demonstration</b>	3.19	2.6	22.57
<b>Fantasy</b>	3.84	3.43	11.94
<b>Informative</b>	2.96	2.31	28.03
<b>Scientific/ technical evidence</b>	3.06	2.45	24.54
<b>Comparison</b>	3.46	2.75	25.59
<b>Personality symbol</b>	4.06	3.09	31.55
<b>Dramatization</b>	4.29	3.71	15.64

A graphical representation of Table 4.6.1, found in Figure 4.6.1, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. For the attention of the young women, the most effective (Mean = 4.29) advertisement comes with the rational appeal executed through dramatization.

**Figure 4.6.1**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attention of Young Women**



The second analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on comprehension of the young women revealed a significant interaction (Wilks' lambda = .92,  $F(9, 391) = 3.86$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on comprehension of the young women is displayed in Table 4.6.2.

**Table 4.6.2**

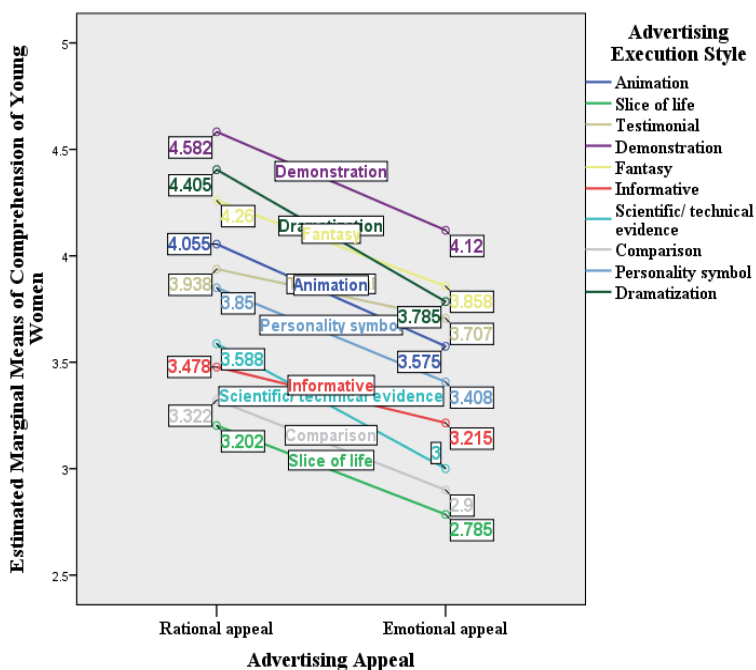
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of Young Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	4.06	3.58	13.43
<b>Slice of life</b>	3.2	2.79	14.99
<b>Testimonial</b>	3.94	3.71	6.275
<b>Demonstration</b>	4.58	4.12	11.23
<b>Fantasy</b>	4.26	3.86	10.43
<b>Informative</b>	3.48	3.21	8.165
<b>Scientific/ technical evidence</b>	3.59	3	19.58
<b>Comparison</b>	3.32	2.9	14.57
<b>Personality symbol</b>	3.85	3.41	12.99
<b>Dramatization</b>	4.41	3.79	16.38

A graphical representation of Table 4.6.2, found in Figure 4.6.2, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The comprehension of the advertisement by the young women is the maximum (Mean = 4.58) when rational appeal is executed through demonstration.

**Figure 4.6.2**

**Profile Plot for Advertising Appeal × Advertising Execution Style on Comprehension of Young Women**





The third analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on retention of the young women revealed a significant interaction (Wilks' lambda = .94,  $F(9, 391) = 2.82$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on retention of the young women is displayed in Table 4.6.3.

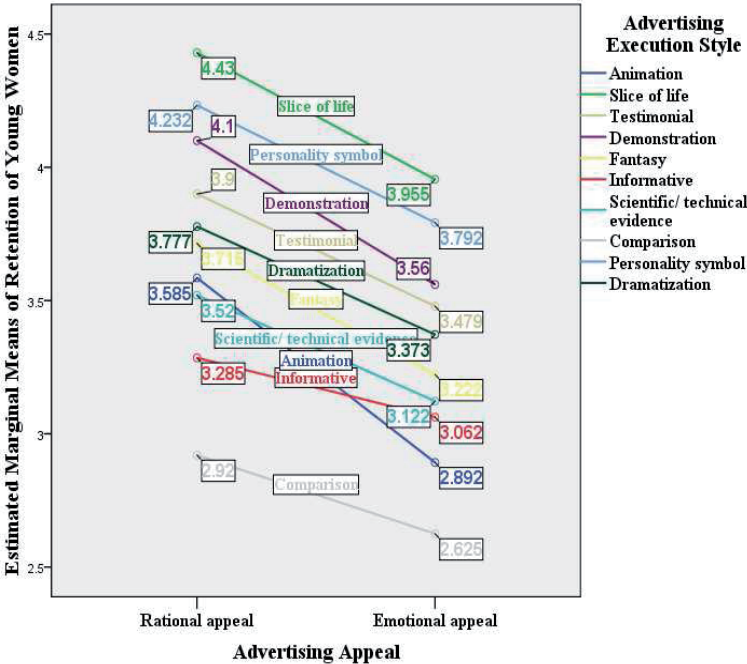
**Table 4.6.3**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of Young Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.59	2.89	23.94
<b>Slice of life</b>	4.43	3.96	12.01
<b>Testimonial</b>	3.9	3.48	12.15
<b>Demonstration</b>	4.1	3.56	15.17
<b>Fantasy</b>	3.72	3.22	15.28
<b>Informative</b>	3.29	3.06	7.27
<b>Scientific/ technical evidence</b>	3.52	3.12	12.73
<b>Comparison</b>	2.92	2.63	11.24
<b>Personality symbol</b>	4.23	3.79	11.6
<b>Dramatization</b>	3.78	3.37	12.01

A graphical representation of Table 4.6.3, found in Figure 4.6.3, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The young women can retain the most (Mean = 4.43) when rational appeal is executed through slice of life.

**Figure 4.6.3**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on Retention of Young Women**



The fourth analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attitude of the young women revealed a significant interaction (Wilks' lambda = .94,  $F(9, 391) = 2.69$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on attitude of the young women is displayed in Table 4.6.4

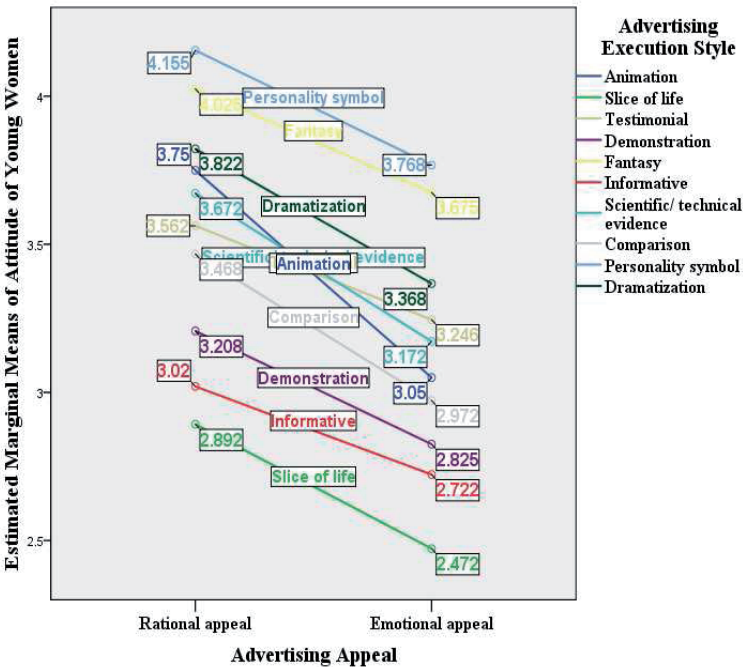
**Table 4.6.4**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of Young Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.75	3.05	22.95
<b>Slice of life</b>	2.89	2.47	16.99
<b>Testimonial</b>	3.56	3.24	9.954
<b>Demonstration</b>	3.21	2.83	13.54
<b>Fantasy</b>	4.03	3.68	9.524
<b>Informative</b>	3.02	2.72	10.93
<b>Scientific/ technical evidence</b>	3.67	3.17	15.76
<b>Comparison</b>	3.47	2.97	16.65
<b>Personality symbol</b>	4.16	3.77	10.29
<b>Dramatization</b>	3.82	3.37	13.51

A graphical representation of Table 4.6.4, found in Figure 4.6.4, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The attitude towards the advertisement gets the maximum (Mean = 4.16) with the young women when rational appeal is executed through personality symbol.

**Figure 4.6.4**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attitude of Young Women**



The final analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on purchase motivation of the young women revealed a significant interaction (Wilks' lambda = .93,  $F(9, 391) = 3.51$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on purchase motivation of the young women is displayed in Table 4.6.5.

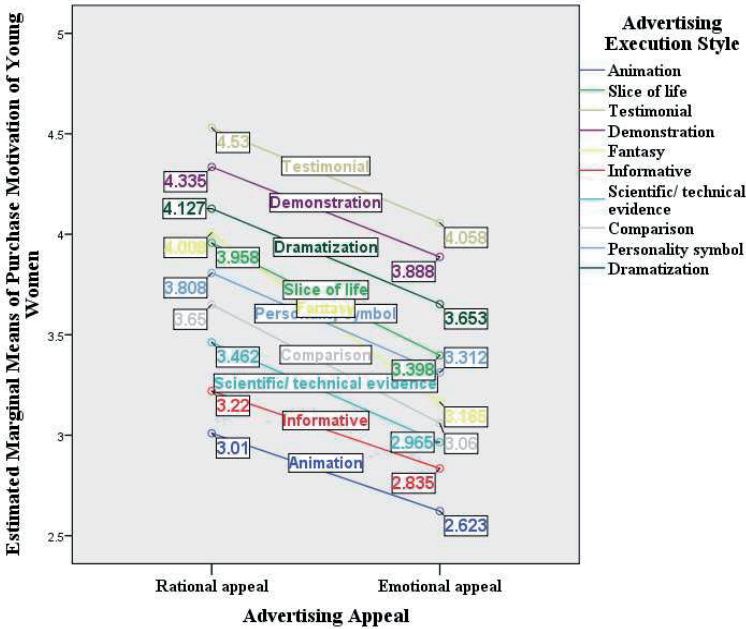
**Table 4.6.5**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of Young Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.01	2.62	14.78
<b>Slice of life</b>	3.96	3.4	16.48
<b>Testimonial</b>	4.53	4.06	11.71
<b>Demonstration</b>	4.33	3.89	11.51
<b>Fantasy</b>	4.01	3.16	26.62
<b>Informative</b>	3.22	2.83	13.58
<b>Scientific/ technical evidence</b>	3.46	2.96	16.78
<b>Comparison</b>	3.65	3.06	19.28
<b>Personality symbol</b>	3.81	3.31	14.94
<b>Dramatization</b>	4.13	3.65	13

A graphical representation of Table 4.6.5, found in Figure 4.6.5, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. For the purchase motivation of the young women, the advertisement is most effective (Mean = 4.53) when rational appeal is executed through testimonial.

**Figure 4.6.5**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Purchase Motivation of Young Women**



#### **4.6.6 Inference**

From the present chapter, it can be inferred that advertisement elements like advertising appeal and advertising execution style influence processing of advertising messages by the young women of India. On testing the hypothesis with repeated measures MANOVA, it has been found that the young women's attention, message comprehension, attitude, retention and purchase motivation are different across different levels of advertising appeals and advertising execution styles. The interaction remained significant on each of the dependent variable when tested through univariate repeated measures ANOVA. For the attention of the young women, the most effective advertisement comes with the rational appeal executed through dramatization. The comprehension of the advertisement by the young women is maximum when rational appeal is executed through demonstration. The young women can retain the most when rational appeal is executed through slice of life. The attitude towards the advertisement gets the maximum with the young women when rational appeal is executed through personality symbol. For the purchase motivation of the young women, the advertisement is most effective when rational appeal is executed through testimonial. So it has been observed that though the type of advertising execution styles vary in the most effective combination of advertising appeal and advertising execution style on each of the dependent variables, the rational advertising appeal remains constant in all the combinations. Therefore, it can be inferred that rational appeal is more effective for the young women than emotional appeal. Thus, the present

chapter gives a guideline to the advertising practitioners to use rational appeal while targeting the young women of India. In the next section (Chapter 4.7), the advertising message preferences of the middle aged men are explored.

#### **4.7 INFORMATION PROCESSING OF ADVERTISEMENTS BY MIDDLE AGED MEN**

According to Erikson (1963), adults in their middle years confront a core conflict between generativity and stagnation. The generative adult is productive, and involved in preparing the next generation for life within the culture. The adult who fails to generate in these ways may show a stunting of personal growth, a sort of psychological shrivelling that Erikson called “stagnation”. Levinson (1978) described the midlife transition as a period stretching from the late thirties to early forties and involving two fundamental tasks: (1) a reappraisal of one’s life as it is being lived and (2) a decision about whether to “stay the course” or shift to new patterns. At this point, some may shift to new career tracks, new marital relationships. However, midlife crisis is a controversial notion that many do not accept. On the basis of these studies it can be assumed that this internal dilemma or the notion of it, that has been discussed earlier, is exploited by the advertisers trying to sell products ranging from life insurance policy to hair colour to the middle aged men as this age group is considered to be possibly the most influential consumer segment. On the contrary there is speculation in the advertisers’ side that which advertising appeal will be preferred by this target group and the current chapter explores the advertising preferences of middle aged men.



### **4.7.1 Chapter Objective**

This chapter is designed to extend knowledge of cognitive processing of advertising messages by middle-aged men in India. The objective of the present chapter is to give the advertising industry a definite guideline while targeting the middle-aged men. The specific objectives of the present chapter are as follows:

- i. To find out whether the difference in the middle aged men's cognitive processing of advertisements between rational and emotional appeals depend on the advertising execution style.
- ii. To explore any predominant advertising appeal or advertising execution style in the advertising preference of the middle aged men of India.

### **4.7.2 Hypothesis**

**H<sub>0</sub>:** The attention, comprehension, retention, attitude and purchase motivation of the middle-aged men generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/technical evidence, comparison, personality symbol, dramatization).

### **4.7.3 Sample Size**

The sample of four hundred middle aged men in the age group of thirty five above to fifty years was selected from four different geographic areas in India: southern area (city of Kozhikode), western area (city of Ahmedabad), eastern area (city of Kolkata) and northern area (National Capital Region). The participation was sought through a letter attached in Appendix 2. The sample was equally divided among the four cities, i.e., in the sample of 400 middle aged men 100 were from each city.

### **4.7.4 Advertising Treatment for Middle Aged Men**

Four judges including two marketing academicians and two advertising practitioners selected twenty advertisements for the middle aged men through the process detailed in Chapter 3.3 The twenty advertising treatment selected for middle aged men comprised of the print advertisements for Parker pen, United India Insurance, Godrej, The Times of India, Gelusil, Kotak Mahindra, McDonalds, Bharat Petroleum, HDFC, Voltas, Onida, BMW, Nokia, Colgate, MF Global Sify securities, Dell, Digjam, Audi, Louis Philippe and Voltas.

#### 4.7.5 Results

To investigate the interaction between advertising appeal and advertising execution style on the middle aged men's attention, message comprehension, attitude, retention and purchase motivation a within-subjects 2 (advertising appeal)  $\times$  10 (advertising execution style) multivariate analysis of variance (MANOVA) was performed to control the overall alpha level at the desired level (.05). The within-subjects 2  $\times$  10 MANOVA revealed a significant interaction (Wilks' lambda = .58,  $F(45, 355) = 5.54$ ,  $p < .01$ ) between advertising appeal and advertising execution style on attention, comprehension, retention, attitude and purchase motivation of the middle aged men. The significant interaction effect of MANOVA indicates that there exists a significant difference among vectors of means (centroid) of the middle aged men's attention, message comprehension, retention, attitude and purchase motivation across different levels of message strategies and advertising execution style. Thus the result provides sufficient statistical evidence that the differences in the middle-aged men's attention, comprehension, retention, attitude and purchase motivation between rational appeal and emotional appeal depend on the advertising execution styles, or, the differences among advertising execution styles vary with advertising appeal with respect to middle aged men's attention, comprehension, retention, attitude and purchase motivation. Mauchly's test of sphericity is used in relation to meeting the assumptions of univariate models. It tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variable is proportional to an identity matrix. A

finding of non-significance ( $p > .05$ ) of Mauchly's W Statistic for each of the five dependent variables corresponds to concluding that assumptions are met. The initial analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attention of the middle aged men revealed a significant interaction (Wilks' lambda = .94,  $F(9, 391) = 2.55$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of the middle aged men is displayed in Table 4.7.1.

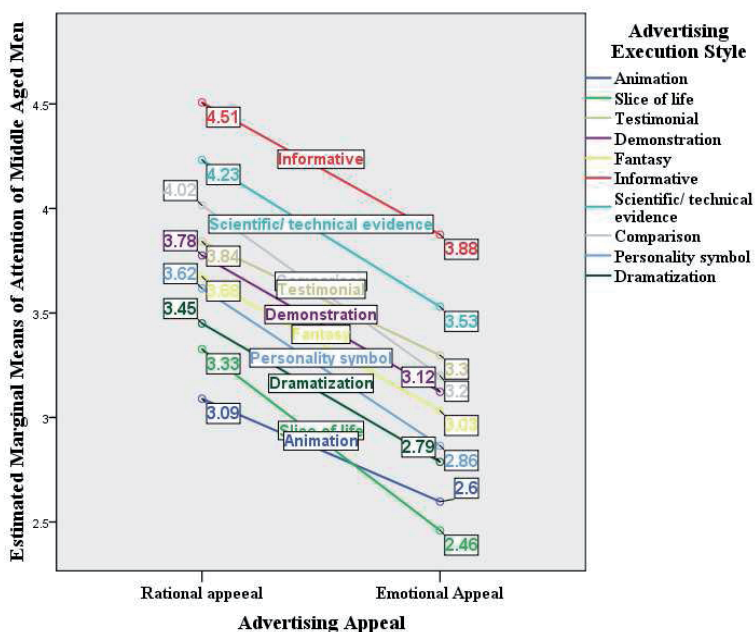
**Table 4.7.1**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of Middle Aged Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.09	2.6	18.96
<b>Slice of life</b>	3.33	2.46	35.26
<b>Testimonial</b>	3.84	3.3	16.53
<b>Demonstration</b>	3.78	3.12	20.9
<b>Fantasy</b>	3.68	3.03	21.19
<b>Informative</b>	4.51	3.88	16.32
<b>Scientific/ technical evidence</b>	4.23	3.53	19.9
<b>Comparison</b>	4.02	3.2	25.47
<b>Personality symbol</b>	3.62	2.87	26.27
<b>Dramatization</b>	3.45	2.79	23.77

A graphical representation of Table 4.7.1, found in Figure 4.7.1, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. For the attention of the middle-aged men, the most effective advertisement (Mean = 4.51) was found to be the combination of rational appeal and informative execution.

**Figure 4.7.1**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attention of Middle Aged Men**



The second analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on comprehension of the middle aged men revealed a significant interaction (Wilks' lambda = .92,  $F(9, 391) = 3.76$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on comprehension of the middle aged men is displayed in Table 4.7.2.

**Table 4.7.2**

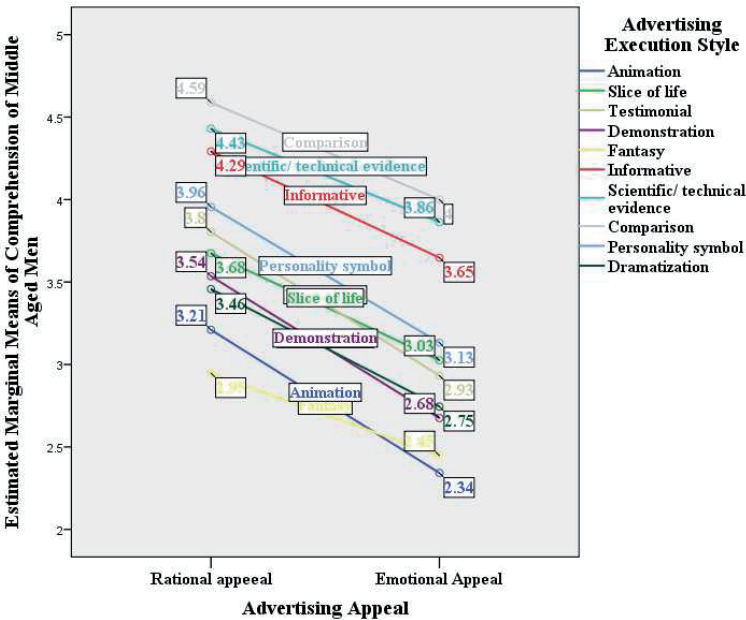
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of Middle Aged Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.21	2.34	37.03
<b>Slice of life</b>	3.68	3.03	21.49
<b>Testimonial</b>	3.8	2.93	29.67
<b>Demonstration</b>	3.54	2.68	32.15
<b>Fantasy</b>	2.95	2.45	20.43
<b>Informative</b>	4.29	3.65	17.68
<b>Scientific/ technical evidence</b>	4.43	3.86	14.69
<b>Comparison</b>	4.59	4	14.69
<b>Personality symbol</b>	3.96	3.13	26.26
<b>Dramatization</b>	3.46	2.75	25.96

A graphical representation of Table 4.7.2, found in Figure 4.7.2, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The comprehension of the advertisement by the middle-aged men is the maximum (Mean = 4.59) when rational appeal is executed through comparison.

Figure 4.7.2

Profile Plot for Advertising Appeal × Advertising Execution Style on Comprehension of Middle Aged Men



The third analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on retention of the middle aged men revealed a significant interaction (Wilks' lambda = .91,  $F(9, 391) = 4.23$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on retention of the middle-aged men is displayed in Table 4.7.3

**Table 4.7.3**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of Middle Aged Men**

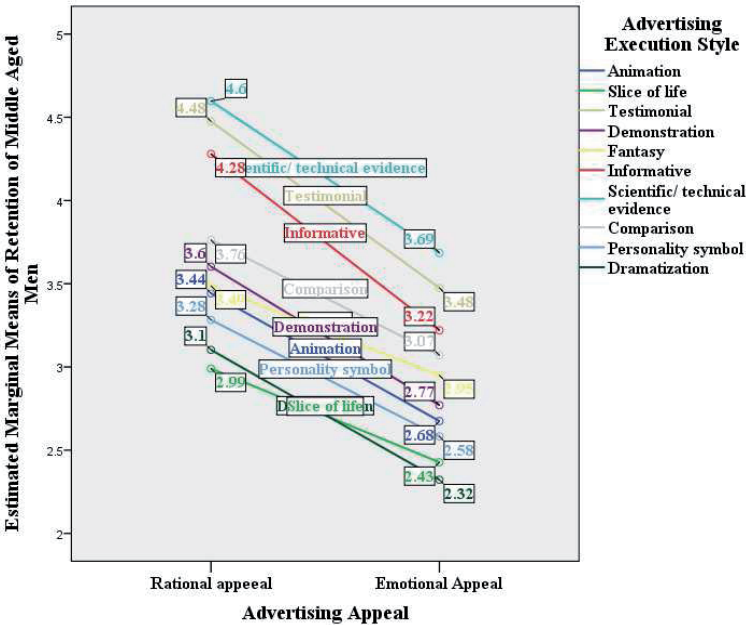
<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.44	2.68	28.69
<b>Slice of life</b>	2.99	2.43	23.17
<b>Testimonial</b>	4.48	3.48	28.78
<b>Demonstration</b>	3.6	2.77	30.05
<b>Fantasy</b>	3.49	2.95	18.22
<b>Informative</b>	4.28	3.22	32.92
<b>Scientific/ technical evidence</b>	4.6	3.69	24.76
<b>Comparison</b>	3.76	3.07	22.56
<b>Personality symbol</b>	3.28	2.58	27.11
<b>Dramatization</b>	3.1	2.32	33.58



A graphical representation of Table 4.7.3, found in Figure 4.7.3, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The middle-aged men can retain the most (Mean = 4.6) when rational appeal is executed through scientific/technical evidence.

Figure 4.7.3

Profile Plot for Advertising Appeal × Advertising Execution Style on Retention of Middle Aged Men



The fourth analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attitude of the middle aged men revealed a significant interaction (Wilks' lambda = .93,  $F(9, 391) = 3.14$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on attitude of the middle-aged men is displayed in Table 4.7.4

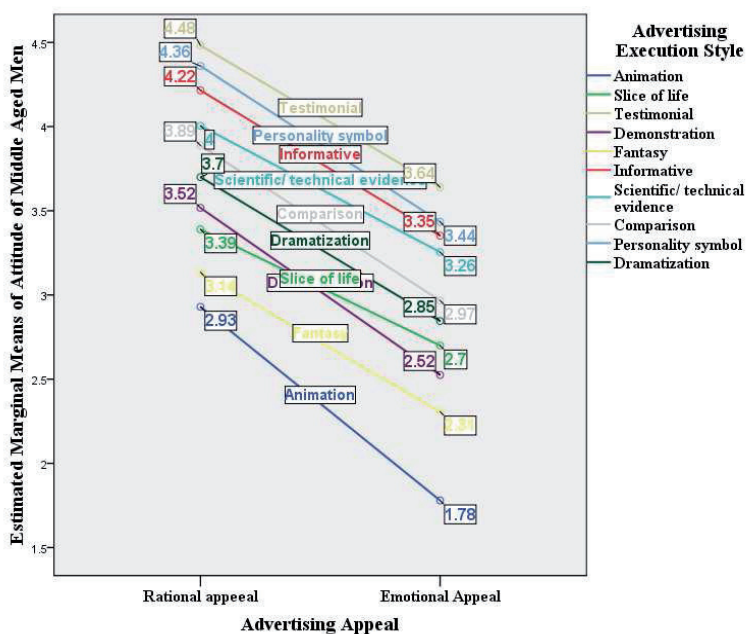
**Table 4.7.4**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of Middle Aged Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	2.93	1.78	64.61
<b>Slice of life</b>	3.39	2.7	25.56
<b>Testimonial</b>	4.48	3.64	23.15
<b>Demonstration</b>	3.52	2.53	39.31
<b>Fantasy</b>	3.14	2.31	35.86
<b>Informative</b>	4.22	3.35	25.73
<b>Scientific/ technical evidence</b>	4.01	3.26	23.04
<b>Comparison</b>	3.89	2.97	31
<b>Personality symbol</b>	4.36	3.44	26.93
<b>Dramatization</b>	3.7	2.85	30.05

A graphical representation of Table 4.7.4, found in Figure 4.7.4, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The attitude towards the advertisement gets the maximum (Mean = 4.48) with the middle-aged men when rational appeal is executed through testimonial.

**Figure 4.7.4**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attitude of Middle Aged Men**



The final analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on purchase motivation of the middle aged men revealed a significant interaction (Wilks' lambda = .89,  $F(9, 391) = 4.98$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on purchase motivation of the middle-aged men is displayed in Table 4.7.5

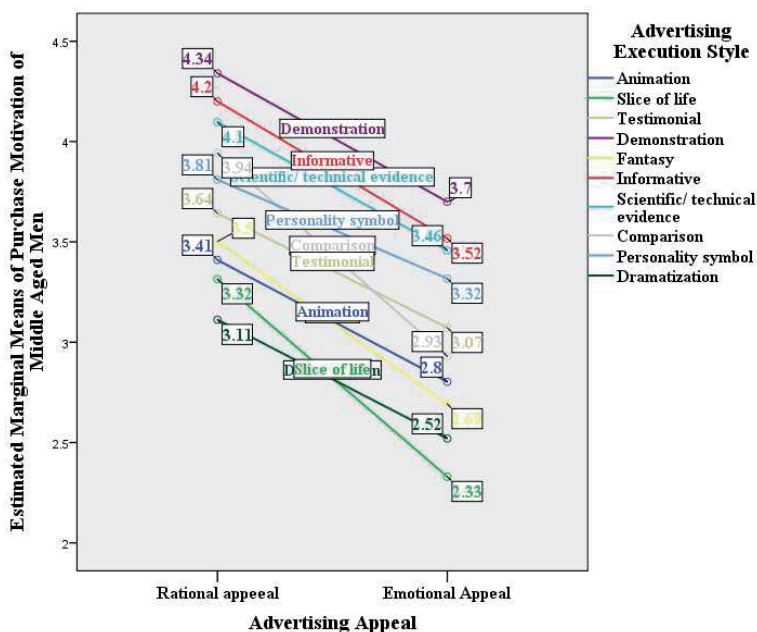
**Table 4.7.5**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of Middle Aged Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.41	2.8	21.68
<b>Slice of life</b>	3.32	2.33	42.27
<b>Testimonial</b>	3.64	3.07	18.55
<b>Demonstration</b>	4.34	3.7	17.3
<b>Fantasy</b>	3.5	2.69	30.08
<b>Informative</b>	4.2	3.52	19.4
<b>Scientific/ technical evidence</b>	4.1	3.46	18.51
<b>Comparison</b>	3.94	2.93	34.56
<b>Personality symbol</b>	3.81	3.32	14.85
<b>Dramatization</b>	3.11	2.52	23.51

A graphical representation of Table 4.7.5, found in Figure 4.7.5, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. For the purchase motivation of the middle-aged men, the advertisement was most effective (Mean = 4.34) when rational appeal was executed through demonstration.

**Figure 4.7.5**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Purchase Motivation of Middle Aged Men**



#### **4.7.6 Inference**

From the present chapter, it can be inferred that advertisement elements like advertising appeal and advertising execution style influence processing of advertising messages by the middle aged men of India. On testing the hypothesis with repeated measures MANOVA, it has been found that the middle aged men's attention, message comprehension, attitude, retention and purchase motivation are different across different levels of advertising appeals and advertising execution styles. The interaction remained significant on each of the dependent variable when tested through univariate repeated measures ANOVA. For the attention of the middle-aged men, the most effective advertisement was found to be the combination of rational appeal and informative execution. The comprehension of the advertisement by the middle-aged men is maximum when rational appeal is executed through comparison. The middle-aged men can retain the most when rational appeal is executed through scientific/technical evidence. The attitude towards the advertisement gets the maximum with the middle-aged men when rational appeal is executed through testimonial. For the purchase motivation of the middle-aged men, the advertisement was most effective when rational appeal is executed through demonstration. So it has been observed that though the type of advertising execution styles vary in the most effective combination of advertising appeal and advertising execution style on each of the dependent variables, the rational advertising appeal remains constant in all the combinations. Therefore, it may be inferred that rational appeal is more effective for the middle aged men than emotional appeal. Thus, the present

chapter gives a guideline to the advertising practitioners to use rational appeal while targeting the middle aged men of India. In the next section (Chapter 4.8), the advertising message preferences of middle aged women are explored.

#### **4.8 INFORMATION PROCESSING OF ADVERTISEMENTS BY MIDDLE AGED WOMEN**

As discussed in the introduction of middle aged men, Levinson (1978) described the middle adult years as a period when crisis is very likely. He described the midlife crisis as a period of self-examination, self-recrimination and questions like: How did I fail? How can I break out of this unbearable lifestyle? Where do I go from here? The crisis is depicted as a time of lost illusions. An alternate viewpoint held by many psychologists (Brim, 1976; Costa & McCrae, 1980) is that midlife crisis is the exception, not the rule. Most carefully done longitudinal studies have not found midlife crisis to be a common occurrence. Similar findings have emerged from cross-sectional research with large samples. It would be a good starting point for the future research if this particular group is looked upon as an important target audience as they portray a prominent role in society as well as in family and takes decision on buying products. They might make decision from the viewpoint of social stereotypes or in changed economical background they take decisions on their own as they are gaining the power to choose and reject independently. The present research focuses on the advertising preferences of middle aged women in the age group of thirty five above to fifty years.

### 4.8.1 Chapter Objective

This chapter is designed to extend knowledge of cognitive processing of advertising messages by middle aged women in India. The objective of the present chapter is to give the advertising industry a definite guideline while targeting the middle aged women. The specific objectives of the present chapter are as follows:

- i. To find out whether the difference in the middle-aged women's cognitive processing of advertisements between rational and emotional appeals depend on the advertising execution style.
- ii. To explore any predominant advertising appeal or advertising execution style in the advertising preference of the middle-aged women of India.

### 4.8.2 Hypothesis

**H<sub>0</sub>:** The attention, comprehension, retention, attitude and purchase motivation of the middle-aged women generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/technical evidence, comparison, personality symbol, dramatization).



#### **4.8.3 Sample Size**

The sample of four hundred middle aged women in the age group of thirty five above to fifty years was selected from four different geographic areas in India: southern area (city of Kozhikode), western area (city of Ahmedabad), eastern area (city of Kolkata) and northern area (National Capital Region). The participation was sought through a letter attached in Appendix 2. The sample was equally divided among the four cities, i.e., in the sample of four hundred middle aged women, one hundred were from each city.

#### **4.8.4 Advertising Treatment for Middle Aged women**

Four judges including two marketing academicians and two advertising practitioners selected twenty advertisements for the middle aged women through the process detailed in Chapter 3.3. The advertising treatment selected for middle aged women comprised of the print advertisements for Women Horlicks, Suffola, Dr. Scholl's foot care, Liquid Lifebuoy, Complian, Ariel, Kelvinator, Nalli Sarees, Nirma, Vim, Dabur Chawanprash, Gili Jewellery, Surf, Viveks Home Appliances, Asmi Diamonds, Johnson & Johnson, Ujala, Mortein, Big Bazaar and Dove.

#### 4.8.5 Results

To investigate the interaction between advertising appeal and advertising execution style on the middle-aged women's attention, message comprehension, attitude, retention and purchase motivation a within-subjects 2 (advertising appeal)  $\times$  10 (advertising execution style) multivariate analysis of variance (MANOVA) was performed to control the overall alpha level at the desired level (.05). The within-subjects 2  $\times$  10 MANOVA revealed a significant interaction (Wilks' lambda = .63,  $F(45, 355) = 4.61$ ,  $p < .01$ ) between advertising appeal and advertising execution style on attention, comprehension, retention, attitude and purchase motivation of the middle aged women. The significant interaction effect of MANOVA indicates that there exists a significant difference among vectors of means (centroid) of the middle-aged women's attention, message comprehension, retention, attitude and purchase motivation across different levels of message strategies and advertising execution style. Thus the result provides sufficient statistical evidence that the differences in the middle-aged women's attention, comprehension, retention, attitude and purchase motivation between rational appeal and emotional appeal depend on the advertising execution styles, or, the differences among advertising execution styles vary with advertising appeal with respect to the middle-aged women's attention, comprehension, retention, attitude and purchase motivation. Mauchly's test of sphericity is used in relation to the meeting the assumptions of univariate models. It tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variable is proportional to an identity matrix. A

finding of non-significance ( $p > .05$ ) of Mauchly's W Statistic for each of the five dependent variables corresponds to concluding that assumptions are met. The first analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attention of the middle aged women revealed a significant interaction (Wilks' lambda = .94,  $F(9, 391) = 2.68$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of the middle-aged women is displayed in Table 4.8.1

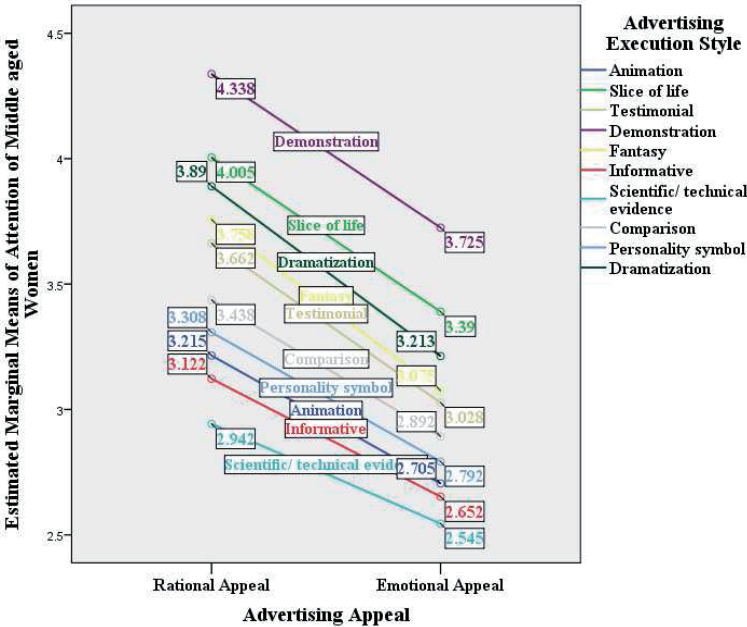
**Table 4.8.1**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of Middle Aged Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.22	2.71	18.85
<b>Slice of life</b>	4.01	3.39	18.14
<b>Testimonial</b>	3.66	3.03	20.97
<b>Demonstration</b>	4.34	3.72	16.44
<b>Fantasy</b>	3.76	3.07	22.2
<b>Informative</b>	3.12	2.65	17.72
<b>Scientific/ technical evidence</b>	2.94	2.55	15.62
<b>Comparison</b>	3.44	2.89	18.84
<b>Personality symbol</b>	3.31	2.79	18.44
<b>Dramatization</b>	3.89	3.21	21.09

A graphical representation of Table 4.8.1, found in Figure 4.8.1, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. For the attention of the middle aged women, the advertisement is most effective (Mean = 4.34) when rational appeal is executed through demonstration.

**Figure 4.8.1**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attention of Middle Aged Women**



The second analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on comprehension of the middle aged women revealed a significant interaction (Wilks' lambda = .93,  $F(9, 391) = 3.19$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on comprehension of the middle-aged women is displayed in Table 4.8.2

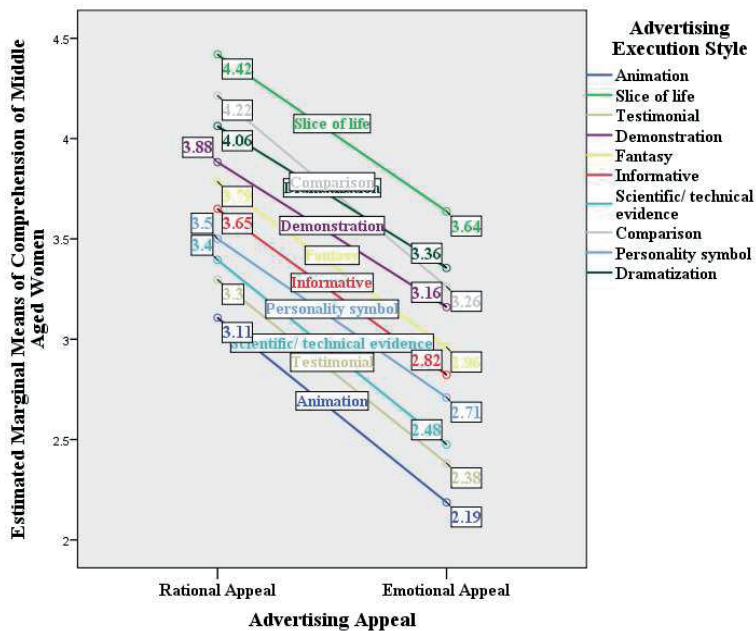
**Table 4.8.2**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of Middle Aged Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.11	2.19	42.06
<b>Slice of life</b>	4.42	3.64	21.51
<b>Testimonial</b>	3.3	2.38	38.41
<b>Demonstration</b>	3.88	3.16	22.86
<b>Fantasy</b>	3.79	2.96	27.87
<b>Informative</b>	3.65	2.82	29.32
<b>Scientific/ technical evidence</b>	3.4	2.48	37.17
<b>Comparison</b>	4.22	3.26	29.2
<b>Personality symbol</b>	3.5	2.71	29.15
<b>Dramatization</b>	4.06	3.36	21.09

A graphical representation of Table 4.8.2, found in Figure 4.8.2, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The comprehension of the advertisement by the middle aged women is the maximum (Mean = 4.42) when rational appeal is executed through slice of life.

**Figure 4.8.2**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Comprehension of Middle Aged Women**



The third analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on retention of the middle aged women revealed a significant interaction (Wilks' lambda = .95,  $F(9, 391) = 2.19$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on retention of the middle aged women is displayed in Table 4.8.3

**Table 4.8.3**

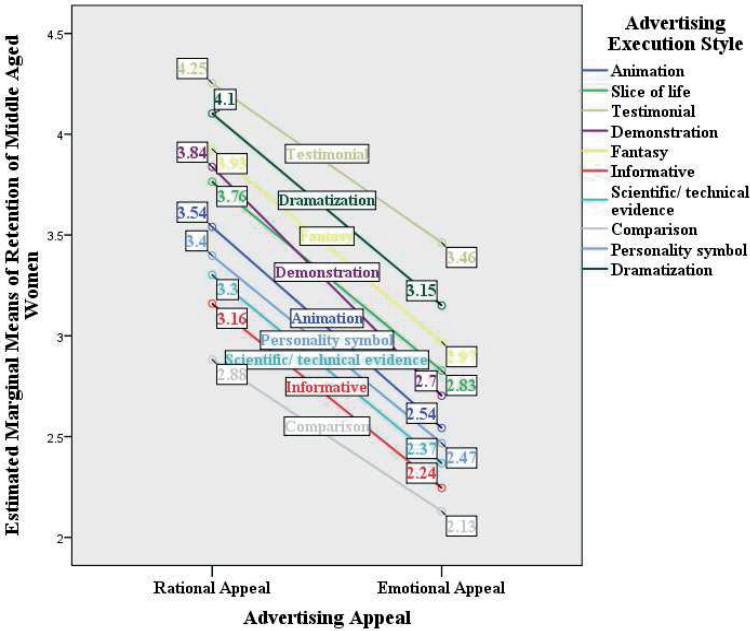
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of Middle Aged Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.54	2.54	39.23
<b>Slice of life</b>	3.76	2.83	33.16
<b>Testimonial</b>	4.25	3.46	22.82
<b>Demonstration</b>	3.84	2.7	42
<b>Fantasy</b>	3.93	2.97	32.24
<b>Informative</b>	3.16	2.24	40.76
<b>Scientific/ technical evidence</b>	3.3	2.37	39.49
<b>Comparison</b>	2.88	2.13	35.33
<b>Personality symbol</b>	3.4	2.47	37.69
<b>Dramatization</b>	4.1	3.15	30.24

A graphical representation of Table 4.8.3, found in Figure 4.8.3, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The middle-aged women can retain the most (Mean = 4.25) when rational appeal is executed through testimonial.

Figure 4.8.3

Profile Plot for Advertising Appeal × Advertising Execution Style on Retention of Middle Aged Women





The fourth analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attitude of the middle aged women revealed a significant interaction (Wilks' lambda = .9,  $F(9, 391) = 4.52$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on attitude of the middle aged women is displayed in Table 4.8.4

**Table 4.8.4**

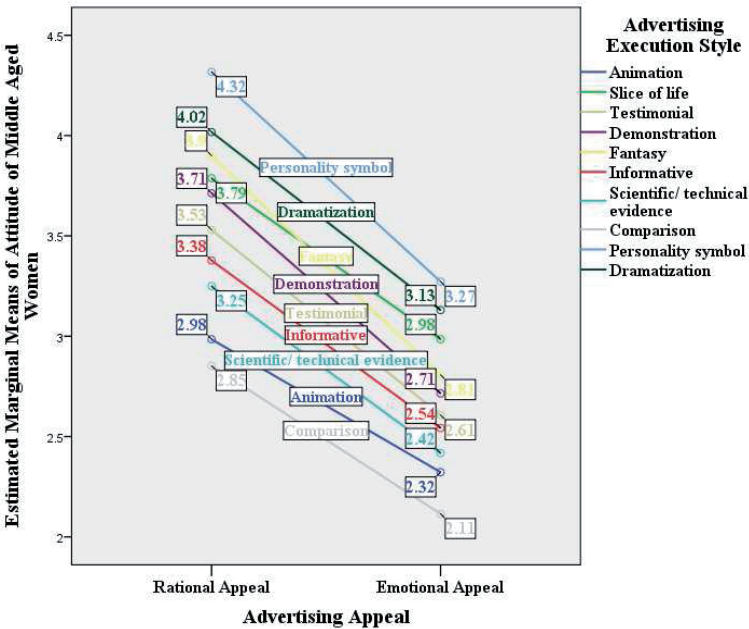
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of Middle Aged Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	2.98	2.32	28.53
<b>Slice of life</b>	3.79	2.99	26.88
<b>Testimonial</b>	3.53	2.61	35.38
<b>Demonstration</b>	3.71	2.71	36.74
<b>Fantasy</b>	3.9	2.81	38.91
<b>Informative</b>	3.38	2.54	32.84
<b>Scientific/ technical evidence</b>	3.25	2.42	34.44
<b>Comparison</b>	2.85	2.11	34.87
<b>Personality symbol</b>	4.32	3.27	31.93
<b>Dramatization</b>	4.02	3.13	28.35

A graphical representation of Table 4.8.4, found in Figure 4.8.4, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. The attitude towards the advertisement gets the maximum (Mean = 4.32) with the middle aged women when rational appeal is executed through personality symbol.

Figure 4.8.4

Profile Plot for Advertising Appeal × Advertising Execution Style on Attitude of Middle Aged Women



The final analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on purchase motivation of the middle aged women revealed a significant interaction (Wilks' lambda = .92,  $F(9, 391) = 3.66$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on purchase motivation of the middle aged women is displayed in Table 4.8.5.

**Table 4.8.5**

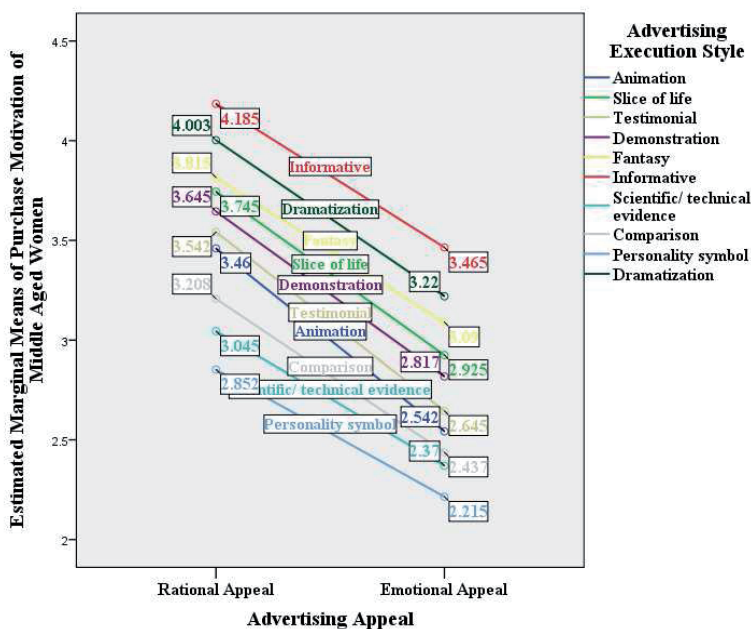
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of Middle Aged Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Emotional to Rational Appeal</b>
<b>Animation</b>	3.46	2.54	36.09
<b>Slice of life</b>	3.74	2.93	28.03
<b>Testimonial</b>	3.54	2.64	33.93
<b>Demonstration</b>	3.64	2.82	29.37
<b>Fantasy</b>	3.81	3.09	23.46
<b>Informative</b>	4.19	3.46	20.78
<b>Scientific/ technical evidence</b>	3.04	2.37	28.48
<b>Comparison</b>	3.21	2.44	31.59
<b>Personality symbol</b>	2.85	2.21	28.78
<b>Dramatization</b>	4	3.22	24.3

A graphical representation of Table 4.8.5, found in Figure 4.8.5, indicates that rational appeal is preferred to emotional appeal in all cases of advertising execution styles. For the purchase motivation of the middle-aged women, the most effective advertisement (Mean = 4.18) was the combination of rational appeal and informative execution style.

**Figure 4.8.5**

**Profile Plot for Advertising Appeal × Advertising Execution Style on Purchase Motivation of Middle Aged Women**



#### **4.8.6 Inference**

From the present chapter, it can be inferred that advertisement elements like advertising appeal and advertising execution style influence processing of advertising messages by the middle aged women of India. On testing the hypothesis with repeated measures MANOVA, it has been found that the middle aged women's attention, message comprehension, attitude, retention and purchase motivation are different across different levels of advertising appeals and advertising execution styles. The interaction remained significant on each of the dependent variable when tested through univariate repeated measures ANOVA. For the attention of the middle aged women, the advertisement is most effective when rational appeal is executed through demonstration. The comprehension of the advertisement by the middle aged women is maximum when rational appeal is executed through slice of life. The middle aged women can retain the most when rational appeal is executed through testimonial. The attitude towards the advertisement gets the maximum with the middle aged women when rational appeal is executed through personality symbol. For the purchase motivation of the middle aged women, the most effective advertisement was the combination of rational appeal and informative execution style. So it has been observed that though the type of advertising execution styles vary in the most effective combination of advertising appeal and advertising execution style on each of the dependent variables, the rational advertising appeal remains constant in all the combinations. Therefore, it may be inferred that rational appeal is more effective for the middle aged women than emotional appeal. Thus, the present

chapter gives a guideline to the advertising practitioners to use rational appeal while targeting the middle aged women of India. In the next section (Chapter 4.9), the advertising message preferences of senior men are explored.

#### **4.9 INFORMATION PROCESSING OF ADVERTISEMENTS BY SENIOR MEN**

Demographic studies consistently show that the “mature adult market” (the 50+ market) has a much greater proportion of disposable income than its younger counterparts. This factor alone makes consumers over the age of 50 years a critical market segment for products and services that they buy for themselves, for their adult children and for their grandchildren. Research on working (short term) memory of senior citizens indicates that older people seem to be able to retain about as much information in this limited capacity system as young ones—seven to nine separate items (Poon & Fozard, 1980). A stream of research on gerontology, however, suggests that the ability to transfer information from working memory to long term memory may decrease with age (Hunt, 1993). A related finding is that older persons perform more poorly than younger ones if they are made to carry out several working memory tasks in a row. In such cases, older persons show a greater decline on later tasks than young persons (Shimamura & Jurica, 1994). This suggests that as we grow older, our ability to deal with the effects of proactive interference, interference with materials we are currently entering into

working memory from materials we entered earlier, declines (Shimamura et al., 1995). However, such effects may also stem from a general slowing in cognitive systems that occurs with increasing age (Park et al., 1996). In the light of the past research on the information processing of senior men, the present research explores the advertising preferences of senior men in the age group of above fifty years.

#### **4.9.1 Chapter Objective**

This chapter is designed to extend knowledge of cognitive processing of advertising messages by senior men in India. The objective of the present chapter is to give the advertising industry a definite guideline while targeting the senior men. The specific objectives of the present chapter are as follows:

- i. To find out whether the difference in the senior men's cognitive processing of advertisements between rational and emotional appeals depend on the advertising execution style.
- ii. To explore any predominant advertising appeal or advertising execution style in the advertising preference of the senior men of India.

#### **4.9.2 Hypothesis**

**H<sub>0</sub>:** The attention, comprehension, retention, attitude and purchase motivation of the senior men generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/ technical evidence, comparison, personality symbol, dramatization).

#### **4.9.3 Sample Size**

The sample of four hundred senior men of above fifty was selected from four different geographic areas in India: southern area (city of Kozhikode), western area (city of Ahmedabad), eastern area (city of Kolkata) and northern area (National Capital Region). The participation was sought through a letter attached in Appendix 2. The sample was equally divided among the four cities, i.e., in the sample of four hundred senior men, one hundred were from each city.



#### **4.9.4 Advertising Treatment for Senior Men**

Four judges including two marketing academicians and two advertising practitioners selected twenty advertisements for the senior men through the process detailed in Chapter 3.3 The advertising treatment selected for the senior men comprised of the print advertisements for Zandu Kesari Jivan, Voveran, Wockhardt pharmaceuticals, Gillette, Baidyanath-Ashwagandharishta, Kellogg, Sugar Free, Woodland, Indian Oil, Godrej Safety, Britannia, Amul, HDFC Standard Life, Amway, Coca Cola, Navaratna, Hutch Delhi Half Marathon, Threptin, Penguin Publishing House (retro section) and Travelguru.com

#### **4.9.5 Result**

To investigate the interaction between advertising appeal and advertising execution style on the senior men's attention, message comprehension, attitude, retention and purchase motivation a within-subjects 2 (advertising appeal)  $\times$  10 (advertising execution style) multivariate analysis of variance (MANOVA) was performed to control the overall alpha level at the desired level (.05). The within-subjects 2  $\times$  10 MANOVA revealed a significant interaction (Wilks' lambda = .62,  $F(45, 355) = 4.93$ ,  $p < .01$ ) between advertising appeal and advertising execution style on attention, comprehension, retention, attitude and purchase motivation of the senior men. The significant interaction effect of MANOVA indicates that there exists a significant difference among vectors of means (centroid) of senior men's

attention, message comprehension, retention, attitude and purchase motivation across different levels of message strategies and advertising execution style. Thus the result provides sufficient statistical evidence that the differences in the senior men's attention, comprehension, retention, attitude and purchase motivation between rational appeal and emotional appeal depend on the advertising execution styles, or, the differences among advertising execution styles vary with advertising appeal with respect to the senior men's attention, comprehension, retention, attitude and purchase motivation. Mauchly's test of sphericity is used in relation to meeting the assumptions of univariate models. A finding of non significance ( $p > .05$ ) of Mauchly's W Statistic for each of the five dependent variables corresponds to concluding that assumptions are met. The first analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attention of the senior men revealed a significant interaction (Wilks' lambda = .95,  $F(9, 391) = 2.46$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of the senior men is displayed in Table 4.9.1

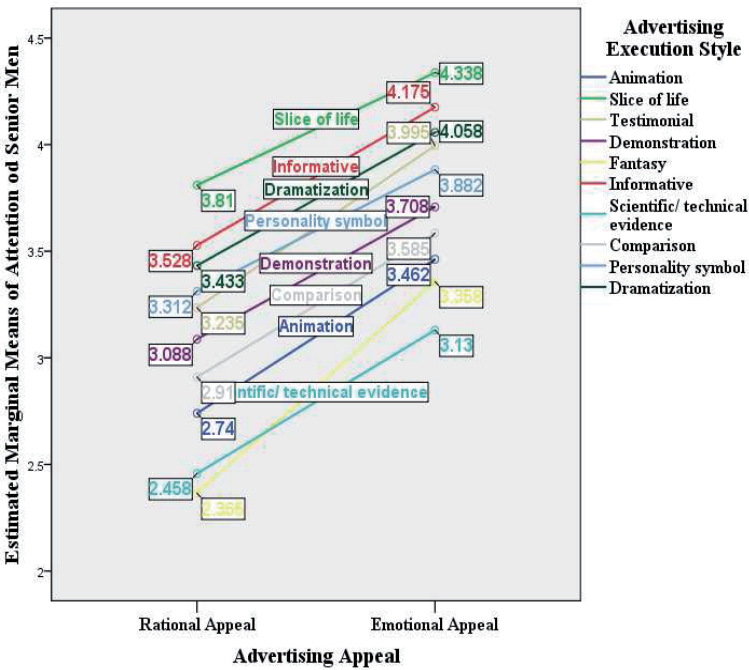
**Table 4.9.1**

**Estimated Marginal Means for Advertising Appeal × Advertising Execution Style on Attention of Senior Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.74	3.46	26.37
<b>Slice of life</b>	3.81	4.34	13.85
<b>Testimonial</b>	3.24	4	23.49
<b>Demonstration</b>	3.09	3.71	20.08
<b>Fantasy</b>	2.37	3.36	41.97
<b>Informative</b>	3.53	4.18	18.36
<b>Scientific/ technical evidence</b>	2.46	3.13	27.37
<b>Comparison</b>	2.91	3.59	23.2
<b>Personality symbol</b>	3.31	3.88	17.21
<b>Dramatization</b>	3.43	4.06	18.21

A graphical representation of Table 4.9.1, found in Figure 4.9.1, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. For the attention of the senior men, the advertisement was most effective (Mean = 4.34) when emotional appeal was executed through slice of life.

**Figure 4.9.1**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attention of Senior Men**



The second analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on comprehension of the senior men revealed a significant interaction (Wilks' lambda = .94,  $F(9, 391) = 3.04$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on comprehension of the senior men is displayed in Table 4.9.2

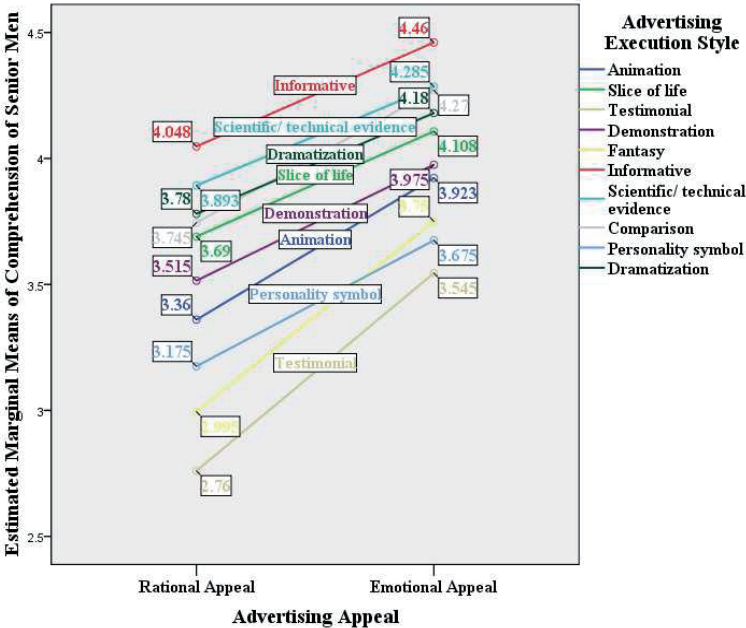
**Table 4.9.2**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of Senior Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.36	3.92	16.74
<b>Slice of life</b>	3.69	4.11	11.31
<b>Testimonial</b>	2.76	3.55	28.44
<b>Demonstration</b>	3.52	3.98	13.09
<b>Fantasy</b>	3	3.75	25.21
<b>Informative</b>	4.05	4.46	10.19
<b>Scientific/ technical evidence</b>	3.89	4.29	10.08
<b>Comparison</b>	3.75	4.27	14.02
<b>Personality symbol</b>	3.18	3.68	15.75
<b>Dramatization</b>	3.78	4.18	10.58

A graphical representation of Table 4.9.2, found in Figure 4.9.2, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The comprehension of the advertisement by the senior men is the maximum (Mean = 4.46) when emotional appeal is executed through information.

**Figure 4.9.2**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Comprehension of Senior Men**



The third analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on retention of the senior men revealed a significant interaction (Wilks' lambda = .91,  $F(9, 391) = 4.16$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on retention of the senior men is displayed in Table 4.9.3.

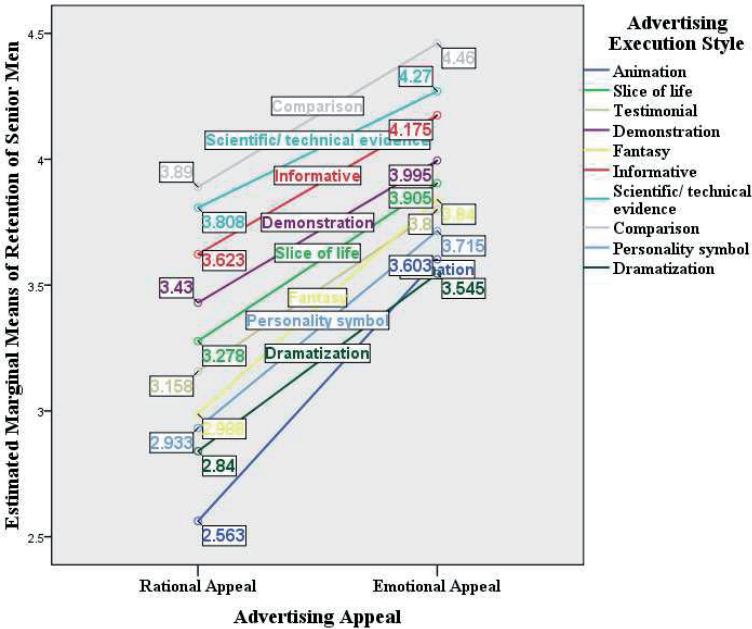
**Table 4.9.3**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of Senior Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.56	3.6	40.59
<b>Slice of life</b>	3.28	3.91	19.15
<b>Testimonial</b>	3.16	3.8	20.35
<b>Demonstration</b>	3.43	4	16.47
<b>Fantasy</b>	2.99	3.84	28.54
<b>Informative</b>	3.62	4.18	15.25
<b>Scientific/ technical evidence</b>	3.81	4.27	12.15
<b>Comparison</b>	3.89	4.46	14.65
<b>Personality symbol</b>	2.93	3.72	26.68
<b>Dramatization</b>	2.84	3.55	24.82

A graphical representation of Table 4.9.3, found in Figure 4.9.3, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The senior men can retain the most (Mean = 4.46) when emotional appeal is executed through comparison.

**Figure 4.9.3**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on Retention of Senior Men**





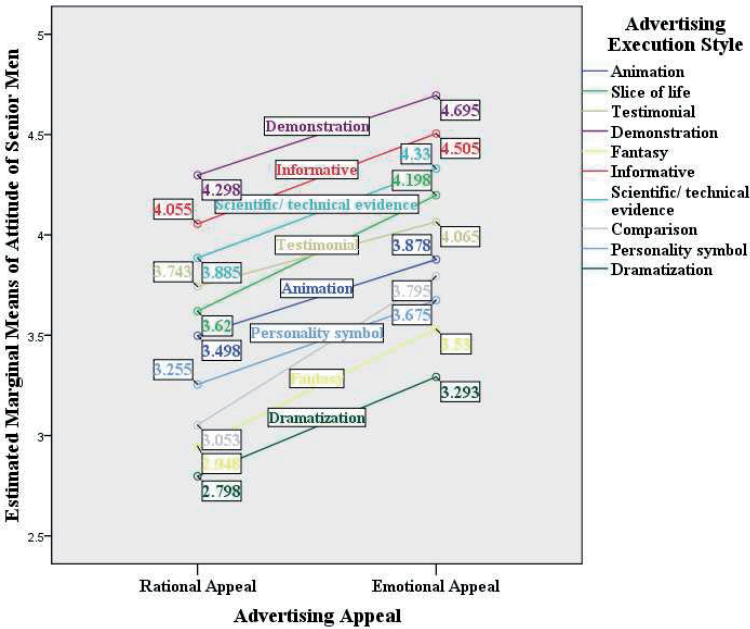
The fourth analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attitude of the senior men revealed a significant interaction (Wilks' lambda = .92,  $F(9, 391) = 3.66$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on attitude of the senior men is displayed in Table 4.9.4

**Table 4.9.4**  
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of Senior Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.5	3.88	10.86
<b>Slice of life</b>	3.62	4.2	15.95
<b>Testimonial</b>	3.74	4.07	8.617
<b>Demonstration</b>	4.3	4.7	9.25
<b>Fantasy</b>	2.95	3.53	19.76
<b>Informative</b>	4.06	4.51	11.1
<b>Scientific/ technical evidence</b>	3.89	4.33	11.45
<b>Comparison</b>	3.05	3.8	24.32
<b>Personality symbol</b>	3.26	3.68	12.9
<b>Dramatization</b>	2.8	3.29	17.69

A graphical representation of Table 4.9.4, found in Figure 4.9.4, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The attitude towards the advertisement gets the maximum (Mean = 4.7) with the senior men when emotional appeal is executed through demonstration.

**Figure 4.9.4**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attitude of the Senior Men**



The final analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on purchase motivation of the senior men revealed a significant interaction (Wilks' lambda = .94,  $F(9, 391) = 2.71$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on purchase motivation of the senior men is displayed in Table 4.9.5

**Table 4.9.5**

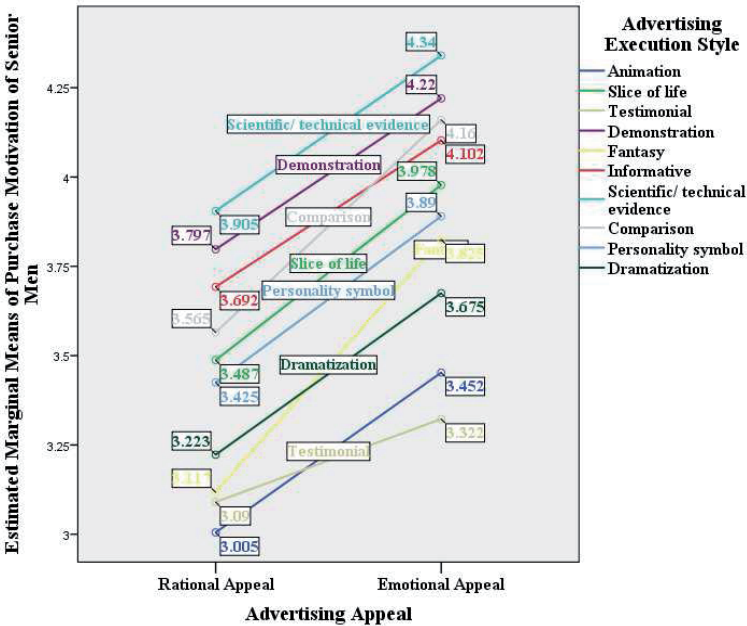
**Estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of Senior Men**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3	3.45	14.89
<b>Slice of life</b>	3.49	3.98	14.05
<b>Testimonial</b>	3.09	3.32	7.524
<b>Demonstration</b>	3.8	4.22	11.13
<b>Fantasy</b>	3.12	3.82	22.69
<b>Informative</b>	3.69	4.1	11.1
<b>Scientific/ technical evidence</b>	3.9	4.34	11.14
<b>Comparison</b>	3.56	4.16	16.69
<b>Personality symbol</b>	3.42	3.89	13.58
<b>Dramatization</b>	3.22	3.68	14.04

A graphical representation of Table 4.9.5, found in Figure 4.9.5, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. For the purchase motivation of the senior men, the advertisement is most effective (Mean = 4.34) when emotional appeal is executed through scientific/ technical evidence.

Figure 4.9.5

Profile Plot for Advertising Appeal × Advertising Execution Style on Purchase Motivation of Senior Men



#### **4.9.6 Inference**

From the present chapter, it can be inferred that advertisement elements like advertising appeal and advertising execution style influence processing of advertising messages by the senior men of India. On testing the hypothesis with repeated measures MANOVA, it has been found that the senior men's attention, message comprehension, attitude, retention and purchase motivation are different across different levels of advertising appeals and advertising execution styles. The interaction remained significant on each of the dependent variable when tested through univariate repeated measures ANOVA. For the attention of the senior men, the advertisement was most effective when emotional appeal is executed through slice of life. The comprehension of the advertisement by the senior men is maximum when emotional appeal is executed through information. The senior men can retain the most when emotional appeal is executed through comparison. The attitude towards the advertisement gets the maximum with the senior men when emotional appeal is executed through demonstration. For the purchase motivation of the senior men, the advertisement is most effective when emotional appeal is executed through scientific/ technical evidence. So it has been observed that though the type of advertising execution styles vary in the most effective combination of advertising appeal and advertising execution style on each of the dependent variables, the emotional advertising appeal remains constant in all the combinations. Therefore, it can be inferred that emotional appeal is more effective for the senior men than rational appeal.

Thus, the present chapter gives a guideline to the advertising practitioners to use emotional appeal while targeting the senior men of India. In the next section (Chapter 4.10), the advertising message preference of senior women is explored.

#### **4.10 INFORMATION PROCESSING OF ADVERTISEMENTS BY SENIOR WOMEN**

“Every man desires to live long, but no man wants to be old.” This maxim from Jonathan Swift may help to explain why, even today, old age can take us by surprise. For many women in India, one of the special delights of old age is having grandchildren. In one interesting study involving senior women, Robertson (1977) focused only on grandmothers, distinguishing between a social and a personal orientation. Grandmothers, who adopt the social orientation, focus on their perceived duties like setting a good example, encouraging the grandchild to be honest, and so on. Those who adopt the personal orientation, focus more on the joys and rewards of grandparenthood—(“grandchildren will keep me happy and youthful,” for instance). The orientation taken by any particular grandmother depends partly on the circumstances of her life. Questions regarding the information processing abilities of senior women have generated considerable interest on the part of researchers, regulators, and marketing practitioners. Attention has been focused on the ability of this demographic segment to understand, evaluate, and use product related information to make informed product choices. Age is also of concern to marketing practitioners, who face the

problem of tailoring marketing communications to fit the processing abilities of the different age groups. In addressing these concerns, research on elderly consumers has concentrated on the issue of whether or not these age groups possess the processing abilities needed to understand, critically evaluate, and use product information. Researchers have examined the elderly consumer in an effort to pinpoint the skills and deficits that characterize each group. In so doing, they have uncovered several deficiencies that present special difficulties for elderly consumers in the marketplace. Elderly adults have been pictured as more easily persuaded and deceived (Phillips & Sternthal, 1977; Waddell, 1975), less aware of unfair business practices (Zaltman, Srivastava, & Deshpande, 1978), using fewer informational aids such as unit pricing and open-dating (Bearden & Mason, 1979), processing information at a slower rate (Phillips & Sternthal, 1977) and remembering less product-related information than younger adults (Cole, 1983; Stephens, 1982; Stephens & Warrens, 1984; Zeithaml, 1982). Little attention, however, has been directed towards the equally important issue of when elderly consumers can be expected to exhibit these processing abilities and deficits. Researchers have viewed this group as either having or not having certain processing abilities without considering the possibility that they may exhibit different ability levels in different task situations. Elderly consumers may have no difficulty comprehending advertising if it is presented in a self-paced medium such as print rather than an externally paced medium such as television. In the light on the past research on the information processing of senior women, the present research focuses on the advertising preferences of senior women in the age group of above fifty years.

#### **4.10.1 Chapter Objective**

This chapter is designed to extend knowledge of cognitive processing of advertising messages by senior women in India. The objective of the present chapter is to give the advertising industry a definite guideline while targeting the senior women. The specific objectives of the present chapter are as follows:

- i. To find out whether the difference in the senior women's cognitive processing of advertisements between rational and emotional appeals depends on the advertising execution style.
- ii. To explore any predominant advertising appeal or advertising execution style in the advertising preferences of the senior women of India.

#### **4.10.2 Hypothesis**

**H<sub>0</sub>:** The attention, comprehension, retention, attitude and purchase motivation of senior women generated during advertising exposure will remain same in different advertising appeals (rational appeal and emotional appeal) and with different advertising execution styles (animation, slice of life, testimonial, demonstration, fantasy, informative, scientific/ technical evidence, comparison, personality symbol, dramatization).



#### **4.10.3 Sample Size**

The sample of four hundred senior women in the age group of above fifty years was selected from four different geographic areas in India: southern area (city of Kozhikode), western area (city of Ahmedabad), eastern area (city of Kolkata) and northern area (National Capital Region). The participation was sought through a letter attached in Appendix 2. The sample was equally divided among the four cities, i.e., in the sample of four hundred senior women, one hundred were from each city.

#### **4.10.4 Advertising Treatment for Senior Women**

Four judges including two marketing academicians and two advertising practitioners selected twenty advertisements for the senior women through the process detailed in Chapter 3.3. The advertising treatment selected for senior women comprised of the print advertisements for Nakshatra diamonds, Wheel, Parachute, Bank of India, State Bank of India, Pears, Boroline, Coca Cola, Amrutanjan Balm, Dabur Amla, Iodex, Rin, Surf, Medimix, Crocin, Relaxo, Liberty, BSNL, Horlicks and Dettol.

#### 4.10.5 Result

To investigate the interaction between advertising appeal and advertising execution style on the senior women's attention, message comprehension, attitude, retention and purchase motivation a within-subjects  $2$  (advertising appeal)  $\times$   $10$  (advertising execution style) multivariate analysis of variance (MANOVA) was performed to control the overall alpha level at the desired level (.05). The within-subjects  $2 \times 10$  MANOVA revealed a significant interaction (Wilks' lambda = .55,  $F(45, 355) = 6.47$ ,  $p < .01$ ) between advertising appeal and advertising execution style on attention, comprehension, retention, attitude and purchase motivation of the senior women. The significant interaction effect of MANOVA indicates that there exists a significant difference among vectors of means (centroid) of the senior women's attention, message comprehension, retention, attitude and purchase motivation across different levels of message strategies and advertising execution style. Thus the result provides sufficient statistical evidence that the differences in the senior women's attention, comprehension, retention, attitude and purchase motivation between rational appeal and emotional appeal depend on the advertising execution styles, or, the differences among advertising execution styles vary with advertising appeal with respect to senior women's attention, comprehension, retention, attitude and purchase motivation. Mauchly's test of sphericity is used in relation to meeting the assumptions of univariate models. It tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variable is proportional to an identity matrix. A finding of non-significance ( $p > .05$ ) of

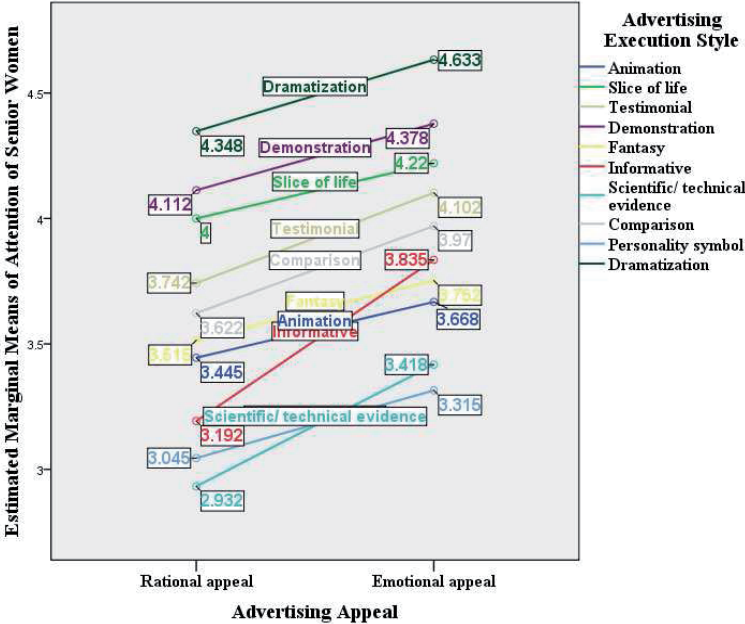
Mauchly's W Statistic for each of the five dependent variables corresponds to concluding that assumptions are met. The initial analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attention of the senior women revealed a significant interaction (Wilks' lambda = .91,  $F(9, 391) = 3.99$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of the senior women is displayed in Table 4.10.1.

**Table 4.10.1**  
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attention of Senior Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	3.44	3.67	6.46
<b>Slice of life</b>	4	4.22	5.5
<b>Testimonial</b>	3.74	4.1	9.62
<b>Demonstration</b>	4.11	4.38	6.44
<b>Fantasy</b>	3.51	3.75	6.76
<b>Informative</b>	3.19	3.83	20.1
<b>Scientific/ technical evidence</b>	2.93	3.42	16.5
<b>Comparison</b>	3.62	3.97	9.59
<b>Personality symbol</b>	3.04	3.31	8.87
<b>Dramatization</b>	4.35	4.63	6.56

A graphical representation of Table 4.10.1, found in Figure 4.10.1, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. For the attention of the senior women, the most effective advertisement (Mean = 4.63) was found to be the combination of emotional appeal executed through dramatization.

**Figure 4.10.1**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attention of Senior Women**



The second analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on comprehension of the senior women revealed a significant interaction (Wilks' lambda = .9,  $F(9, 391) = 4.84$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on comprehension of the senior women is displayed in Table 4.10.2

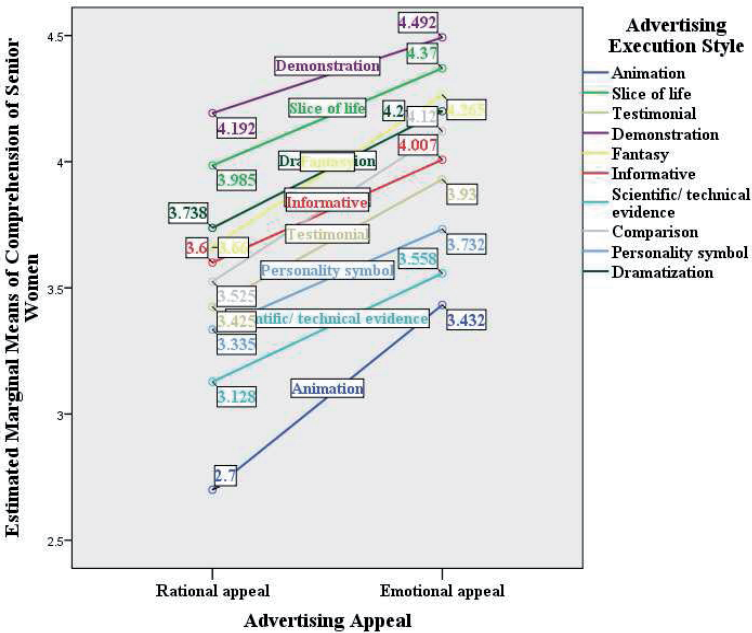
**Table 4.10.2**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Comprehension of Senior Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.7	3.43	27.1
<b>Slice of life</b>	3.99	4.37	9.66
<b>Testimonial</b>	3.43	3.93	14.7
<b>Demonstration</b>	4.19	4.49	7.16
<b>Fantasy</b>	3.66	4.27	16.5
<b>Informative</b>	3.6	4.01	11.3
<b>Scientific/ technical evidence</b>	3.13	3.56	13.7
<b>Comparison</b>	3.53	4.12	16.9
<b>Personality symbol</b>	3.34	3.73	11.9
<b>Dramatization</b>	3.74	4.2	12.4

A graphical representation of Table 4.10.2, found in Figure 4.10.2, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The comprehension of the advertisement by the senior women is the maximum (Mean = 4.49) when emotional appeal is executed through demonstration.

**Figure 4.10.2**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Comprehension of Senior Women**



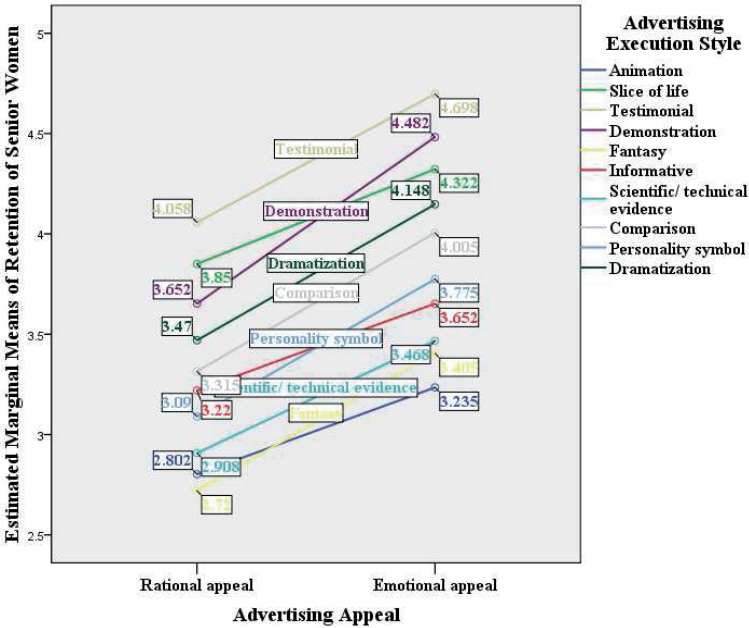
The third analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on retention of the senior women revealed a significant interaction (Wilks' lambda = .91,  $F(9, 391) = 4.1$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on retention of the senior women is displayed in Table 4.10.3

**Table 4.10.3**  
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Retention of Senior Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.8	3.24	15.4
<b>Slice of life</b>	3.85	4.32	12.3
<b>Testimonial</b>	4.06	4.7	15.8
<b>Demonstration</b>	3.65	4.48	22.7
<b>Fantasy</b>	2.72	3.41	25.2
<b>Informative</b>	3.22	3.65	13.4
<b>Scientific/ technical evidence</b>	2.91	3.47	19.3
<b>Comparison</b>	3.32	4.01	20.8
<b>Personality symbol</b>	3.09	3.78	22.2
<b>Dramatization</b>	3.47	4.15	19.5

A graphical representation of Table 4.10.3, found in Figure 4.10.3, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The senior women can retain the most (Mean = 4.69) when emotional appeal is executed through testimonial.

**Figure 4.10.3**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on Retention of Senior Women**





The fourth analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on attitude of the senior women revealed a significant interaction (Wilks' lambda = .94,  $F(9, 391) = 2.85$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on attitude of the senior women is displayed in Table 4.10.4

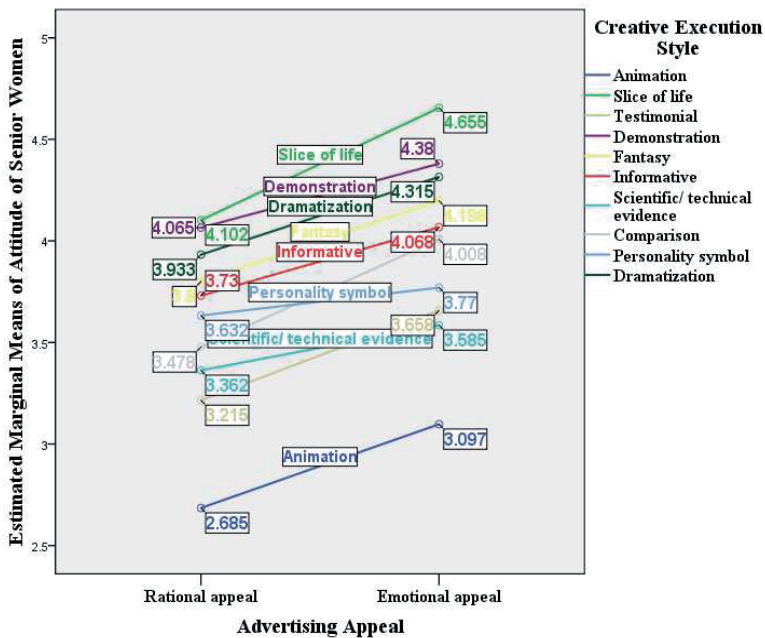
**Table 4.10.4**

**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Attitude of Senior Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.68	3.1	15.4
<b>Slice of life</b>	4.1	4.66	13.5
<b>Testimonial</b>	3.22	3.66	13.8
<b>Demonstration</b>	4.06	4.38	7.75
<b>Fantasy</b>	3.8	4.2	10.5
<b>Informative</b>	3.73	4.07	9.05
<b>Scientific/ technical evidence</b>	3.36	3.59	6.62
<b>Comparison</b>	3.48	4.01	15.2
<b>Personality symbol</b>	3.63	3.77	3.79
<b>Dramatization</b>	3.93	4.32	9.73

A graphical representation of Table 4.10.4, found in Figure 4.10.4, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. The attitude towards the advertisement gets the maximum (Mean = 4.655) with the senior women when emotional appeal is executed through slice of life.

**Figure 4.10.4**  
**Profile Plot for Advertising Appeal × Advertising Execution Style on**  
**Attitude of Senior Women**



The final analysis at the univariate level involving the  $2 \times 10$  within-subjects ANOVA on purchase motivation of the senior women revealed a significant interaction (Wilks' lambda = .89,  $F(9, 391) = 4.86$ ,  $p < .01$ ) between advertising appeal and advertising execution style. The estimated marginal means for Advertising Appeal  $\times$  Advertising Execution Style on purchase motivation of the senior women is displayed in Table 4.10.5

**Table 4.10.5**

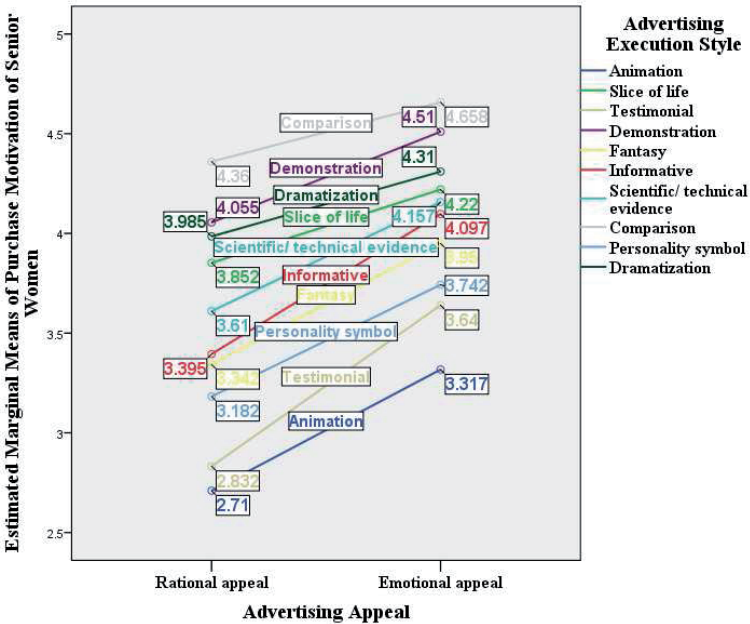
**Estimated Marginal Means for Advertising Appeal  $\times$  Advertising Execution Style on Purchase Motivation of Senior Women**

<b>Advertising Execution Style</b>	<b>Rational Appeal</b>	<b>Emotional Appeal</b>	<b>Percent Increase from Rational to Emotional Appeal</b>
<b>Animation</b>	2.71	3.32	22.4
<b>Slice of life</b>	3.85	4.22	9.54
<b>Testimonial</b>	2.83	3.64	28.5
<b>Demonstration</b>	4.05	4.51	11.2
<b>Fantasy</b>	3.34	3.95	18.2
<b>Informative</b>	3.39	4.1	20.7
<b>Scientific/ technical evidence</b>	3.61	4.16	15.2
<b>Comparison</b>	4.36	4.66	6.82
<b>Personality symbol</b>	3.18	3.74	17.6
<b>Dramatization</b>	3.99	4.31	8.16

A graphical representation of Table 4.10.5, found in Figure 4.10.5, indicates that emotional appeal is preferred to rational appeal in all cases of advertising execution styles. For the purchase motivation of the senior women, the advertisement gets most effective (Mean = 4.65) when emotional appeal is executed through comparison.

Figure 4.10.5

Profile Plot for Advertising Appeal × Advertising Execution Style on Purchase Motivation of Senior Women



#### **4.10.6 Inference**

From the present chapter, it can be inferred that advertisement elements like advertising appeal and advertising execution style influence processing of advertising messages by the senior women of India. On testing the hypothesis with repeated measures MANOVA, it has been found that the senior women's attention, message comprehension, attitude, retention and purchase motivation are different across different levels of advertising appeals and advertising execution styles. The interaction remained significant on each of the dependent variable when tested through univariate repeated measures ANOVA. For the attention of the senior women, the most effective advertisement was found to be the combination of emotional appeal executed through dramatization. The comprehension of the advertisement by the senior women is maximum when emotional appeal is executed through demonstration. The senior women can retain the most when emotional appeal is executed through testimonial. The attitude towards the advertisement gets the maximum with the senior women when emotional appeal is executed through slice of life. For the purchase motivation of the senior women, the advertisement gets most effective when emotional appeal is executed through comparison. So it has been observed that though the type of advertising execution styles vary in the most effective combination of advertising appeal and advertising execution style on each of the dependent variables, the emotional advertising appeal remains constant in all the combinations. Therefore, it may be inferred that emotional appeal is more effective for the senior women than rational appeal. Thus, the present chapter gives a guideline

to the advertising practitioners to use emotional appeal while targeting the senior women of India.

## **CHAPTER 5**

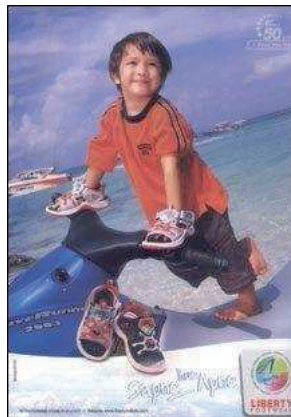
### **RESULTS AND DISCUSSION**

The previous chapter presented the data analysis and results of the hypothesis testing and interaction effects. This section will provide a general analysis of advertising preference of every demographic segment and results explanation. Since the advertising researchers are becoming increasingly concerned about the impact of sex and age differences on consumers' response to advertising, the present research explored a pattern in consumers' changing advertising preferences. Boys and girls differ on a number of issues like information processing styles (Hendon, McGann, & Hendon, 1978). However, previous research indicated no significant differences between boys and girls with respect to their comprehension and preference of the selling intent of commercials (Macklin, 1987). The finding of the present study is consistent with the study of Macklin (1987) and also supports the gender neutral preference of advertisements by children. Both the boy child and the girl child prefer emotional appeals in the advertisements though their choices vary in terms of execution styles. The affection of a boy child for a specific set of advertisements may be attributed to their affinity towards the funny and playful cartoon characters and they enjoy the advertisements the most when the message is given in an emotionally appealing package. Most likely, for this age group the processing is not supported by adequate social exposure

and practical experiences. This age group is rather vulnerable to emotional appeal like affection, happiness or simple humour and loves to see the brighter side of life. The advertisements depicting some celebrated moments with colourful pictures and simple words seem to be more appealing to them than the rationally explained message based advertisements. One of the five preferred advertisements by boy child is the advertisement of Liberty shoes exhibited in Figure 5.1

**Figure 5.1**

**Preferred Advertisement by Boy Child – Liberty Shoes**



The advertisement of Liberty shoes for the boy child segment features a little boy playing on a sea beach on a sunny day. He is visibly amused as he puts on his shoes on his hands. His smile reveals that he is enjoying the freedom



and living his dream. The punch line reads “Sapne Hue Apne”. The advertisement was highly liked by the respondents as they were being inspired and encouraged to live the way they wanted to. No rational aspect was presented in the ad, still the ad scored high among the boy child segment aged between five to twelve years. Similarly, for a girl, the emotion also plays the key role in terms of advertising appeal. One of the five preferred advertisements by girl child is the advertisement of Rasna exhibited in Figure 5.2

**Figure 5.2**

**Preferred Advertisement by Girl Child – Rasna**

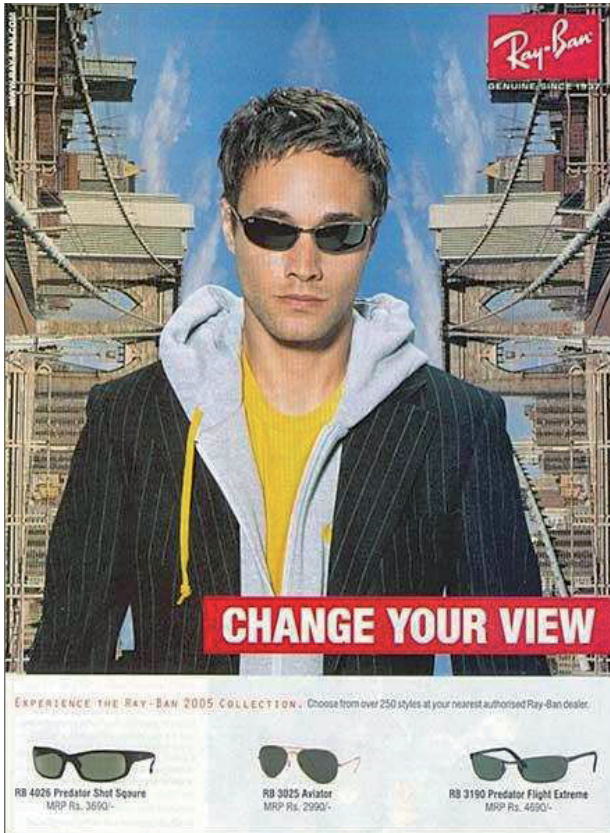


The advertisement portraying a little girl as the protagonist, expresses the love of the girl for the soft drink concentrate called Rasna. The girl is wishing the summer to stay forever so that she can get the opportunity to drink Rasna. The advertisement shows the girl drinking the last drop of Rasna and professing her fondness for the drink in the simplest possible words. Again, no rational processing is involved, the advertisement does not talk about the nutritional value of drinking or the economical advantage of purchasing Rasna, but only the unbiased love and loyalty for an orange coloured drink is expressed and executed through a little girl which definitely works well with the target audience aged between five to twelve years.

The teenage group plays a very important role in the decision making process of a family for buying a particular product. The present research has substantiated the fact that emotional advertisements win the hearts in case of the teenagers. The response from both the boys and girls of age group above twelve to nineteen years shows the preference for advertisements, which boost up their emotional aspirations and enhance their desire to be socially accepted. The analysis of this kind of response shows a conscious effort of creating a better self-image, which is led by their emotional faculty. One of the five preferred print advertisements by teenage boys was that of the sunglass brand called Rayban, exhibited in Figure 5.3

**Figure 5.3**

**Preferred Advertisement by Teenage Boy – Ray-Ban**



The advertisement shows an attractive teenage boy wearing that particular sunglass and asking the viewers to change their view towards the world which is shown in the form of inverted skyline of the city behind the model. This advertisement has the subtle message that wearing that sunglass will make the world change its view towards the person who is wearing it. The advertisement does not talk about any scientific information about the product and the benefit of using the sunglass, a comparative analysis with the competitive brands is also not present. However, the advertisement assures the prospective buyers that it will enhance their look and image. This approach actually emotionally synchronizes with the audience. One of the five preferred advertisements by the teenage girls was of Elle 18 exhibited in Figure 5.4

**Figure 5.4**

**Preferred Advertisement by Teenage Girl – Elle 18**



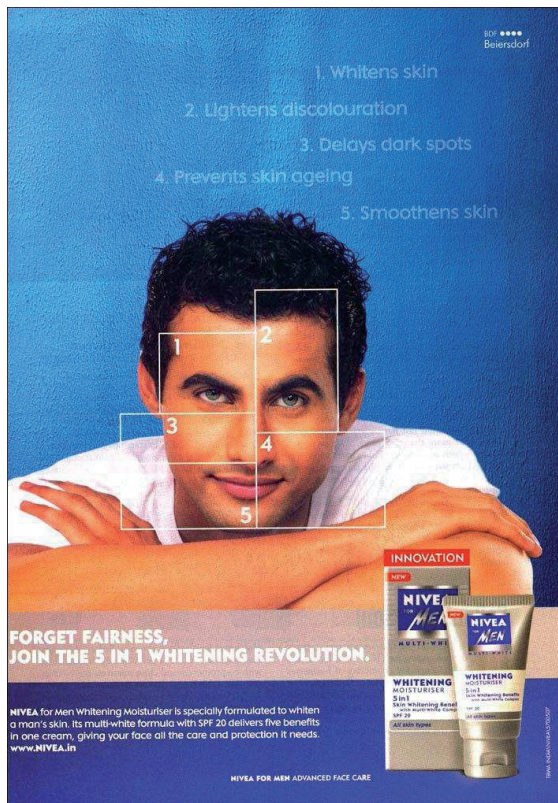
The advertisement of Elle 18 shows a girl promoting the various flavoured lip-glosses because they will make her more desirable to her boyfriend.

Though the advertisement has the tag line of “be yourself”, ironically the advertisement is actually promoting the lip gloss to manipulate one’s self attributes in order to be accepted by the opposite sex. Clearly this advertisement is using double-edged strategy, which simultaneously caters to the viewer’s self-ego and social image through the emotional perspective.

For the next age group i.e. young men and women, the appealing pattern of advertisement shifts from the emotional to the rational. People of this age group i.e. above nineteen to thirty five years are prone to like the advertisements with rational appeal, which might be caused by the increased exposure to social-personal interface and value for money approach towards the marketed goods. This rational response was again gender non-specific as the same trend was observed among both the sexes. This transition from emotional to rationally appealing advertisements holds scope for further research and seems to be crucial for categorizing the target audience. For most of the advertisements preferred by the young men and women as the potential buyers, informative and scientifically or economically justified messages are provided. Moreover, even if an emotional outcome is expected from the viewer of a particular advertisement, that too is maneuvered to be executed by triggering the rational processing. Most of them were self-sufficient in terms of money and are capable of purchasing after getting influenced by advertisements. The research has found that both for young men and women rational advertising appeal works the best. In the current socio-economic perspective, most of these young men exhibit practical approach as they are always facing the cutting edge competition in both

professional and financial areas and presumably on the personal front as well. Their choice of advertisement may be a result of this scenario. One of the five preferred advertisements by young men was that of “Nivea for Men” whitening moisturizer exhibited in Figure 5.5

**Figure 5.5**  
**Preferred Advertisement by Young Men – “Nivea for Men”**

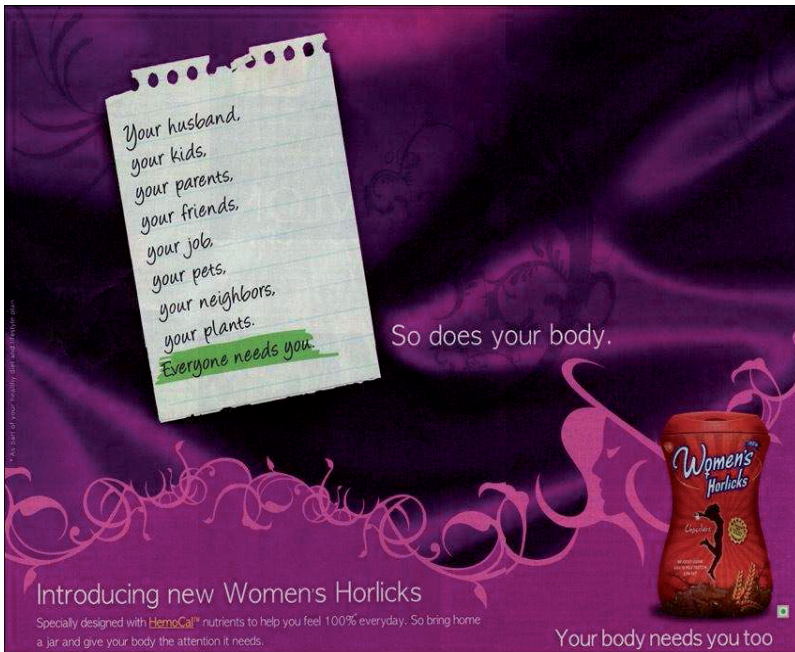


The advertisement of 'Nivea for Men' whitening moisturizer where the lotion is targeting the young men who are aspiring to get a fairer skin tone, is clearly stating all the attributes and advantages of the lotion in a matter-of-fact manner. The mechanism of the lotion is stated point wise and the deep blue colour of the background represents both the brand Nivea and the formal professional look of the advertisement. No prominent emotional tool has been used and yet the ad was preferred by the desired target audience. This is in stark contrast to the pattern observed among the previous two sample groups. For advertisements meant for young women of age twenty to thirty four, it was observed that the rationally appealing ads were preferred by them. Radically changed social and economic scenarios demand a very different array of responsibilities from women. Young women comprise such a group which is forced by social, personal or situational demand to take up completely opposite and complex responsibilities. This situation makes them to think sharply before taking decisions rationally. Advertisements, which support their practical viewpoint and appeal to their rational self, become attractive to them. One of the five preferred advertisements by young women is "Women's Horlicks" which is exhibited in Figure 5.6



**Figure 5.6**

**Preferred Advertisement by Young Women – Women's Horlicks**



The advertisement of “Women’s Horlicks” clearly says that it is specially prepared to meet the needs of the modern day woman. The text associated with the advertisement lists all the different aspects of life which demand equal importance from women and the message tries to remind the reader to ponder over the huge task and devotion she needs to render towards her

surroundings. Lastly, it reminds of the most important but greatly ignored fact that women's health requires serious attention too. To nourish her body and take care of herself she needs proper nutrients and Women's Horlicks will specially fulfill that need on a hectic day. Objective observation of the situation and a rational conclusion has helped this ad to become popular among the young women.

The study with the next sample segment of middle-aged men and women from age group above thirty five to fifty years has again showed similar appealing pattern, which prefers the advertisements stimulating the rational processing. Although this particular age group can be divided into at least two subgroups for a further study, there exist some particular traits for the majority of individuals belonging between the lower and upper limit of this group. This can be singled out as increased social and financial responsibility as well as the long-term benefit approach towards a particular brand. For this age group advertisements that are answering their needs from a practical viewpoint and assuring them of a true value for money service are preferred the most. This kind of response is evoked by conscious rational thinking, which is again compelled by the social strata they belong to. For the middle-aged man, who is almost invariably the main earning pillar of the society, it has been found that a rational way is the most appealing one. For the middle-aged women population segment, which comprises both financially independent and dependent subgroups, it shows preference towards the advertisements that can pass the test of the rational process of judgment. For both the subgroups there is a long list of responsibilities that

they have to bear either in terms of finance or family or both. This factor may impart a role in their choice of rationally appealing advertisements. As the study suggests, for middle-aged men the rational appeal of the advertisements is very important for the same to be liked. Even when the emotional appeal is negligible but the advertisement presents the product in a rationally acceptable manner, the middle-aged men are more likely to think about it. One of the five preferred advertisements by the middle-aged men is that of “MF Global Sify Securities” which is exhibited in Figure 5.7



In “MF Global Sify Securities” advertisement the viewer is told that although the financial service provider supports its customer to access various exchange markets and other related services, it is ultimately ones hard work and dedication accompanied by the capability to choose the right option that are more important in creating success. By stating this, the advertisement also subtly indicates the importance of choosing the right service provider. However, it is proposed in a smart and rational manner and again the rational self of the viewer is appreciated. This advertisement was liked by a majority of middle-aged men. One of the five preferred advertisements by the middle-aged women is the advertisement of “Dabur Chawanprash” which is exhibited in Figure 5.8

Figure 5.8

Preferred Advertisement by Middle Aged Women – Dabur Chawanprash



**Dabur**

*It's a lot harder than it looks.  
Try living your husband's life for a day. You'll know  
why he needs Dabur Chyawanprash.*

Reaching office on time in spite of car trouble and crowded buses, extreme work load accompanied by stressful deadlines and late night meetings. Your husband's life is far from easy and that's why he needs the strength and protection of Dabur Chyawanprash. This unique preparation of Ayurveda promotes inner strength, keeps common ailments at bay and improves stamina. It contains:-

🌿 **Amla:** One of the richest sources of Vitamin C, Amla increases our immunity against common ailments. 🌿 **Guduchi:** It makes us stronger, both physically and mentally. 🌿 **Pippali:** It helps in cough and other respiratory problems and also strengthens lung function. What's more, Dabur Chyawanprash has a healthy mix of many other herbs that immensely benefits the young and old alike. Surely, now you know why your husband needs Dabur Chyawanprash. Right?

It's a scientifically proven fact that regular consumption of Dabur Chyawanprash by men increases resistance.

*Sabko Zameer hai*

*Dabur Chyawanprash  
The same strength from within, now Sugar Free*

To know more from our health experts, email us at [andromedok@dabur.com](mailto:andromedok@dabur.com), log on to [www.dabur.com/chyawanprash](http://www.dabur.com/chyawanprash) or write to: Dabur Chyawanprash, Dabur India Ltd., P.O. Box No. 3, Siddhapur, Gurgaon-201018 (U.P.).

The advertisement of “Dabur Chawanprash” exhibited in Figure 5.8 features a certain middle aged woman trying hard to change the tyre of her collapsed car on a deserted road. Such kind of task requires a high level of physical energy and most of the urban men face such situations in their day-to-day life. Beside this imagery, the text associated with the ad compels the target audience to imagine themselves in that very situation which their husbands face frequently. This evokes the rational thought of the necessity of proper nutrition to combat the stressful life of working men. As a result, the women are compelled to think rationally as a responsible wife and provide their husbands with the required energy booster to fight the mental and physical stress. Along with this, the text also states the different ingredients of the preparation and their roles in strengthening the immunity system. The whole message is conveyed by a hugely popular personality who symbolizes trust and authenticity. The processing of this advertisement is guided by rational thinking and it is one of the most preferred and convincing advertisements targeted towards the middle-aged women.

Interestingly, the study with the next segment of senior men and women of the age group above fifty years indicates a different appealing pattern of the advertisements. Individuals of this age group are found to prefer the advertisements, which require the involvement of the emotional faculty in the processing. This finding again shows a transition from the processing pattern of the young and middle aged groups and further study will be helpful in deciphering this shifting trend. This group is found to be more emotionally vulnerable. After leading an eventful life full of responsibility and hard work

they have gathered enough experiences to deal with the surroundings in a rational manner but interestingly this rational experience stimulates them to validate their personal need and interpersonal communication in an emotional aspect. Most probably their shifted priority and changed outlook towards life triggers the emotional inclination of thought processing and decision-making. One of the five preferred advertisements by the senior men is the advertisement of “Hutch Delhi Half Marathon 2007” which is exhibited in Figure 5.9




**Figure 5.9**

**Preferred Advertisement by Senior Men – Hutch Delhi Half Marathon 2007**

www.hutch.in

मेरा नाम आर के वशिष्ठ है  
रिटायर्ड ऑफिसर हूँ  
बच्ये बड़े होकर विदेश चले गए  
अब पौधों को पाल पोस कर  
बड़ा कर रहा हूँ  
कॉलेज में सेमिनियन हुआ करता था  
फुटबॉल, वॉलीबॉल, सब खेलता था  
दौड़ लगाए एक अरसा बीत गया  
आँखें धुँधला गईं  
घुटने कमजोर हो गए  
पर मंज़िल, अब भी साफ नज़र आ रही है.  
हच दिल्ली हॉफ मैराथन 2007, अक्टूबर 28  
दौड़ने के लिए बस दिल चाहिए

 **Hutch**  
Delhi Half  
Marathon 2007  
October 28

Vodafone Essar

रजिस्टर करवाने के लिए कॉल करें 99999 99999

In the advertisement of “Hutch Delhi Half Marathon 2007” the protagonist, a senior man tells about himself in such a way that the people of that age group connect easily with the person. He reminds the target group of the good old college days, the youthful days and also talks about his current loneliness and

physical problems associated with aging. After this testimonial, the ad says “Dourne ke lie dil chahie”, thus emphasizing on the emotional power, which overcomes the practical difficulties. This advertisement was one of the most preferred ads in the senior men category. The same response was received from the women of senior age group as the advertisements with emotional appeal received more preference than those demanding rational processing. Family values, interpersonal relationships become important, as people want to embrace the little things in life more strongly. One of the five preferred advertisements by the senior women is the advertisement of “Coca Cola” which is exhibited in Figure 5.10

Figure 5.10

Preferred Advertisement by Senior Women – Coca Cola

We can't turn back the clock.  
But we will help you keep in touch  
with your childhood.

Think about the good times. Chances are that each time there's been a moment of joy, an occasion to celebrate or just an instance of fun, we played a little part in it. Our sparkling beverages enliven the instant. Our tea and coffee refresh the moment. Our juices and water replenish you. For one little second. One drop at a time.

To know more about how we spread joy, log on to [www.coca-colaindia.com](http://www.coca-colaindia.com) @CocaColaIndia The Life

*Coca-Cola India*  
little drops of joy

This advertisement features a group of elderly women celebrating a joyride together as the advertised soft drink allures the readers to feel nostalgic and indulge themselves in the long forgotten fun of younger times. This advertisement of Coca Cola says that the effect of the drink will help the seniors to keep in touch with their childhood. Colourful photographs, warm hues, bubbles used in the advertisement obviously try to create a background of emotional retrospection and as the study suggests it actually gets the same response from its target audience. It is relevant to note here that the past studies also suggest the emotional nature of old people. Older adults report experiencing emotional experiences as rich and intense as younger ones (Carstensen & Charles, 1998), and when experiencing specific emotions they show facial expressions and patterns of psychological reactions that are virtually identical to those of younger adults (Levenson, Carstensen, Friesen, & Ekman, 1991).

## **CHAPTER 6**

### **CONCLUSION**

In view of the findings of the present research, advertising message strategy leaves a significant impact on consumer's cognitive processing of advertisements. There exists significant interaction between advertising appeals and advertising execution styles on the attention, comprehension, retention, attitude and purchase motivation of consumers from all demographic segments, differentiated by age and sex. This clearly indicates that the differences in consumer's attention, comprehension, retention, attitude and purchase motivation generated through rational appeal and emotional appeal depend upon the levels of advertising execution styles.

The research further explored the advertising message preference of the consumers differentiated by age and sex. It has also been found that emotional appeal leaves a more significant impact on children than rational appeal, irrespective of their sex. The same is true for teenagers also. Both the teenage boys and the teenage girls prefer emotional appeals more than rational appeals. However there is a change in preference of advertising appeal in case of young people. Both the young men and young women prefer rational appeal more than emotional appeal. Similarly both the middle-aged men and

women prefer rational appeal to emotional appeal. With further advancement in age, there is again a change in the preference of advertising appeal. The senior citizens, irrespective of their sex, prefer emotional appeals to rational appeals.

Finally, a pattern in the preference of advertising appeal was observed from the findings of the present research. Children and teenagers prefer emotional advertisements more than rational advertisements. The preference changes to rational advertisements with the increase of age in case of young people and middle aged people. The preference again changes back to emotional appeal in case of senior citizens. So there exists a distinct pattern in the change of consumer preference in terms of advertising appeal. It starts with the liking of emotional advertisements, changes to rational advertisements with the increase in age and again turns to emotional advertisements with old age. So it's a journey from emotional to rational and again back to emotional with the passage of time.

## **6.1 MANAGERIAL IMPLICATIONS**

The results of the present research open up a new vista in the advertising horizon. Advertising managers can work wonders in their promotional efforts on successful implementation of the findings of the present research. The copywriters and art directors may incorporate emotional appeal in creating the advertisements while targeting children and teenagers

to make advertisements more effective. While targeting the young and middle aged people, rational appeal may be integrated in the advertisement to make them more effective. To create effective advertisements for the senior people, emotional appeal may be included in the advertisement. The application of the findings of the present research will make print advertisements far more effective and contribute in paving the way for the development of print advertisements in India.

## **6.2 LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH**

Although the study was conducted with utmost dedication and sincerity, still there exist a number of limitations which will briefly be addressed only to be taken care of in future research. The first involves the use of print advertisements alone. In future, the studies may include commercials from broadcast, outdoor and internet media. A second issue which might be considered was the limitation in the types of advertising appeal and advertising execution style incorporated in the present research. Advertising appeals like transformational advertising, reminder advertising, sex appeal, teaser advertising, combinations of rational-emotional appeals and many other appeals were not considered in the present research. Similarly, many advertising execution styles like humour, the combinations of different advertising execution styles and many other advertising execution styles were not considered in the present research. Future research may employ all the levels of advertising message strategy and advertising execution style to

improve the results. Thirdly, data collection based on the stratified random sampling procedure proves to be problematic. Though every effort was made to collect sample randomly from the four cities by dint of electoral rolls, phone numbers and household sampling, sometimes practical constraints compelled to collect data on the basis of convenience. However, the large sample size comprising four hundred sampling units from each demographic segment randomizes any bias occurred due to convenience sampling. Fourthly, the present research picks stimuli from existing advertisements. While this adds to the external validity of the study, a major downside of that approach is that along with advertising appeal and advertising execution style, the product type, brand, and a host of other factors have also varied. Future empirical tests should control these differences more carefully, for instance, by creating different types of advertisements for different brands.

The statistical tool, within-subjects MANOVA, is also not free from its limitations. There are two potential problems with this design that can provide alternative explanations for the observed differences in the dependent variables. One potential problem is that, when subjects are asked to complete the same task repeatedly under different conditions, their performance might improve considerably over time, not because of the conditions but because of memory or practice effects. Scores may also decline, however, because of fatigue. A second potential problem that might occur is that, after being exposed to one condition or treatment, the effect of that treatment carries over to the next treatment or condition. Sometimes such carryover effects occur only when a certain order of treatments is provided. Such differential-order effects are not possible to control.



Further objectivity can be brought into future research by measuring the rational functions of consumers through brain scanning devices like Magnetic resonance imaging (MRI), Electroencephalography (EEG) and Magnetoencephalography (MEG) while they watch the advertisements. The problem of the subjective measure used in the present study is that the consumer is not capable of exactly expressing how long the ad attracted his attention, which means that the measurement's validity is not totally adequate (Pechmann & Stewart, 1990). The future academic researchers may use eye-camera and pupilometer for objective measurements of attention. Another improvisation over the present research can be made through further research on industry specific advertisements, which can yield sector specific results. Besides sex and age, other parameters could also be employed as per the segmentation variable of that particular product or service.

A number of research extensions like aggregated effect analysis, might be considered from the vast data collected. It would be useful to have an aggregated ad execution effectiveness index, averaging across the five stages of consumer behavior. It could also be studied how this aggregated ad execution effectiveness varies by age cohort (collapsing gender). Further, the variation by region of the respondent (east, west, north and south) can also be explored. Similarly, the variation by gender (collapsing age cohorts) can also be studied. The aggregated analysis would help provide general guidelines, which then can be refined based on the more fine grained analysis. Last but not the least, significance levels of the marginal effects can be studied in future research, to determine whether the dominating factors are also significantly different from the less dominating ones.

## APPENDIX 1

### GLOSSARY OF TERMS

**Advertising** Any paid form of non-personal communication about an organization, product, service or idea by an identified sponsor.

**Advertising agency** Firms that specialize in the creation, production and placement of advertising messages and may provide other services that facilitate the marketing communication process.

**Advertising appeal** An advertising approach that connects with some need, want or emotion that makes the product message attractive, attention getting or interesting.

**Advertising execution style** The advertising execution style is the way a particular appeal is turned into an advertising message presented to the consumer.

**Alpha ( $\alpha$ )** Significance level associated with the statistical testing of the differences between two or more groups. Typically, small values, such as .05 or .01 are specified to minimize the possibility of making a Type 1 error.

**Analysis of variance (ANOVA)** A statistical method for making simultaneous comparisons between two or more means (i.e. do the group means differ significantly?).

**Animation** An advertising execution approach in which animated scenes are drawn by artists or created on the computer, and cartoons, puppets, or other types of fictional characters may be used.

**Art director** For print ads, the art director and graphic designers prepare layouts, which are drawings that show what the ad will look like and from which the final artwork will be produced.

**Attention** Attention is defined as the degree of mental activity designated to a given task and the amount of time allocated for directed focus.

**Child development** Child development is the study of development between conception and adolescence.

**Cognitive** Mental process such as thinking, remembering, perceiving, planning and choosing.

**Cognitive development** The growth and changes in thinking, memory, perceiving, planning, and choosing which occur through the life span; Piaget's theory of cognitive development has been influential.

**Cognitive processing** Special mental operations occurring in perception, learning or problem solving.

**Cognitive Science** The scientific discipline comprising computer science, neuroscience and cognitive psychology.

**Cohort** A group of people who were born about the same time and thus may have had many experiences in common.

**Comparison executions** Comparison execution style or comparative advertising is the practice of both directly or indirectly naming competitors in an ad and comparing one or more specific attributes. It offers a direct way of communicating a brand's particular advantage over its competitors or positioning a new or lesser-known brand with industry leaders. Comparison executions are often used to execute competitive advantage appeals.

**Comprehension** The comprehension involves the integration of salient advertising cues and the assignment of meaning.

**Consciousness** An awareness of events or stimuli in the environment and of cognitive phenomena such as memories, thoughts and bodily sensations.

**Consumer Behaviour** The behaviour that consumers display in searching for, purchasing, using, evaluating and disposing of products, services and ideas.

**Copywriters** The individuals who help conceive the ideas for ads and commercials and write the headlines, subheads and body copy (the words constituting the message) are known as copy writers.

**Demonstration** Demonstration advertising is designed to illustrate the key advantages of the product/ service by showing it in actual use or in some staged situation. Demonstration executions can be very effective in convincing consumers of a product's utility or quality and of the benefits of owning or using the brand.

**Dependent variable** The variable whose value depends, or may depend, on the value of the independent variable.

**Dramatization** An execution technique where the focus is on telling a short story with the product or service with suspense and excitement. The purpose of using drama is to draw the viewer into the action it portrays. Advocates of drama note that when it is successful, the audience becomes lost in the story and experiences the concerns and feelings of the characters.

**Elaboration Likelihood Model (ELM)** A theory that suggests that a person's level of involvement during message processing is a critical factor in determining which route to persuasion is likely to be effective.

**Emotional appeal** Emotional appeal relate to the consumer's social and/or psychological needs for purchasing a product or service. Many consumers' motives for their purchase decisions are emotional, and their feelings about a brand can be more important than knowledge of its features or attributes. Many advertisers believe that appeals to consumers' emotions work better at selling brands that do not differ markedly from competing brands, since rational differentiation of them is difficult.

**Experimental design** Research plan in which the researcher directly manipulates or controls one or more independent variables and assesses their impact on dependent variables.

**Ex post facto research** An experiment in which the researcher examines the effects of a naturalistic occurring treatment after that treatment has occurred rather than creating the treatment itself.

**Fantasy** An execution technique in which the advertisement becomes an escape for the viewer into another lifestyle.

**Independent variable** A condition selected or manipulated by an experimenter to see whether it will have an effect on the dependent variable.

**Information processing model** A model proposing that information is processed through a series of stages, each of which performs unique operations. Each stage receives information from preceding stages and passes the transformed input along to other stages for further processing.

**Information processing theory** A view of cognitive activity stressing the input of information, its transformation, its storage, and its eventual output.

**Informative** This type of advertisement relies on a straightforward presentation of information concerning the product or service and its specific attributes and/or benefits.

**Interaction Effect** In factorial designs, the joint effects of two treatment variables. This means that the difference between groups on one treatment variable varies depending on the level of second treatment variable.

**Language** A system of communication in which thoughts are transmitted by means of sounds or symbols.

**Limbic system** A group of structures forming a ring around the lower portion of the forebrain; concerned with emotion, motivation and memory.

**Logic** The science of thinking based on laws that determine the validity of a conclusion.

**Long term memory (LTM)** The relatively permanent memory store of information which is categorized in various ways and can be drawn upon as needed.

**Market Segment** Identifiable groups of customers sharing similar needs, wants or other characteristics that make them likely to respond in a similar fashion to a marketing program.

**Mauchly's test of sphericity** Sphericity relates to the equality of the variances of the differences between levels of the repeated measures factor. Sphericity is an assumption of an ANOVA with a repeated measures factor. Thus, results from ANOVAs violating this assumption cannot be trusted. Mauchly's sphericity test is a special case of a test that the covariance matrix of a multivariate normal distribution is proportional to a given matrix, in this case the identity matrix. The test is based on the likelihood ratio criterion and involves a scaled comparison between the determinant and the trace of the sample covariance matrix. When the significance level of the Mauchly's test is  $< 0.05$ , then sphericity cannot be assumed. Corrections for violations of sphericity include the Greenhouse-Geisser, the Huynh-Feldt and the Lower-bound corrections.



**MANOVA** Multivariate analysis of variance (MANOVA) is used to perform an ANOVA style analysis on several dependent variables simultaneously. MANOVA uses one or more categorical independents as predictors, like ANOVA, but unlike ANOVA, there is more than one dependent variable. Where ANOVA tests the differences in means of the interval dependent for various categories of the independent(s), MANOVA tests the differences in the centroid (vector) of means of the multiple interval dependents, for various categories of the independent(s).

**Measurement** The assignment of numbers to objects or events according to certain rules.

**Memory** Storage of information from past experiences.

**Midlife transition** A period of life from the late 30s to the early 40s characterized by reappraisal of one's life as it is being lived and a decision about whether to shift to a new career or lifestyle.

**Mood** The emotional background that is relatively long-lasting and colours an individual's outlook on the world.

**Multivariate normal distribution** Generalization of the univariate normal distribution to the case of  $p$  variables. A multivariate normal distribution of sample groups is a basic assumption required for the validity of the significance tests in MANOVA.

**Neuroscience** Neuroscience helps to get the understanding of how the human brain supports thought, perception, affection, action, social process and other aspects of cognition and behaviour, including how such processes develop and change in the brain and through time.

**Null hypothesis** Hypothesis with samples that come from populations with equal means (i.e. the group means are equal) for either a dependent variable (univariate test) or a set of dependent variables (multivariate test). The null hypothesis can be accepted or rejected depending on the results of a test of statistical significance.

**Ordinal interaction** The interaction effect in which the magnitudes of differences between groups vary but the group's relative positions remain constant. It is graphically represented by plotting mean values and observing nonparallel lines that do not intersect.

**Outlier** An observation that is substantially different from other observations (i.e., has an extreme value) on one or more characteristics (variables).

**Perception** The branch of psychology that deals with the detection and interpretation of sensory stimuli.

**Personality** The various enduring and distinctive patterns of behaviour and thought those are characteristic of a particular person.

**Personality Symbol** A type of advertising execution involves developing a central character or personality symbol that can deliver the advertising message and with which the product or service can be identified.

**Primacy effect** In impression formation, weighing more heavily the information obtained first. The tendency to remember relatively well those items encountered first in a to-be-remembered list; said to contribute to the serial position effect.

**Psychology** The science of human and animal behaviour, including the application of science to human problems.

**Puberty** The period during which the capability for sexual reproduction is attained; it is marked by changes in both primary and secondary sexual characteristics, and is dated from menarche in girls and the emergence of pigmented pubic hairs in boys.

**Rational appeal** Rational appeal focuses on the consumer's practical, functional or utilitarian need for the product or service and/or the benefits or reasons for owning or using a particular brand. The content of these messages emphasizes facts, learning and the logic of persuasion. Rational-based appeals tend to be informative and advertisers using them generally attempt to convince consumers that their product or service has a particular attribute(s) or provides a specific benefit that satisfies their needs.

**Recall** A standard way of measuring memory in which people after being exposed to the memory to-be-remembered items, are asked to call back the items from memory.

**Recency effect** Items encountered most recently are remembered relatively well; said to contribute to the serial-position effect.

**Recognition** A way of measuring memory in which a person is asked to recognize the to-be-remembered items when they are presented along with incorrect items.

**Scientific/Technical Evidence** An execution technique where scientific or technical evidences are presented in the advertisement. Advertisers often cite technical information, results of scientific or laboratory studies, or endorsements by scientific bodies or agencies to support the advertising claim.

**Sleeper effect** The tendency for persuasive communication to lose the impact of source credibility over time (i.e., the influence of a message from a high credibility source tends to decrease over time; the influence of a message from a low credibility source tends to increase over time).

**Slice of Life** This type of ad is generally based on a problem/solution approach. This type of ad portrays a problem or conflict that consumers might face in their daily lives. The ad then shows how the advertiser's product or service can resolve the problem.

**Testimonial** Many advertisers prefer to have their message presented by way of a testimonial, where a person praises the product or service on the basis of his or her personal experience with it.

**Thinking** The general process of considering an issue in the mind, which results in the formation of a new mental representation.

**Treatment** Treatment comprise the independent variable (factor) that a researcher manipulates to see the effect (if any) on the dependent variables. The treatment variable may have several levels. In the present research, the treatment of advertising appeal has got two levels and the treatment of advertising execution style has got ten levels.

**Variable** An event or condition which can have different values; ideally, in experiments, an event or condition which can be measured and which varies quantitatively.

**Wilks' Lambda** The ratio of the within-groups sum of squares to the total sum of squares. This is the proportion of the total variance not explained by differences among groups. A lambda of 1.00 occurs when observed group means are equal (all the variance is explained by factors other than difference between these means), whereas a small lambda occurs when within-groups variability is small compared to the total variability. A small lambda indicates that group means appear to differ. The associated significance values indicate whether the difference is significant.

**Within-group design** In within-groups design, the level of factor(s) varies within the subjects. This is done by exposing the same subject to different levels of the factor(s).

**Working memory** Working memory consists of a number of parts which help human beings to manipulate information for solving complex cognitive tasks such as thinking (also decision making), comprehension, learning and reasoning. It is a temporal storage and works parallel to the long term memory. The activity of working memory is localized between the prefrontal cortex and associative areas of the posterior cortex.

## **APPENDIX 2**

### **EXPERIMENT PARTICIPATION INVITATION LETTER**

Dear Madam/ Sir,

This is an invitation for you to participate in an academic research in the area of advertising. I am a research scholar at G.B. Technical University, Lucknow. As a requirement for my doctoral studies I am conducting a research on the advertising effectiveness of different advertising copies. I am looking for voluntary participation in the survey. The following experiment procedure will be employed. You will be shown some advertisements and asked to fill a questionnaire while watching the advertisements. If you feel like contributing some of your precious time to the research, please contact me as soon as possible at:

Tuhin Chattopadhyay

Mobile: +91-9250674214

E-mail: [dr.tuhin.chattopadhyay@gmail.com](mailto:dr.tuhin.chattopadhyay@gmail.com)

Address: K – 2089, 2<sup>nd</sup> Floor, Chittaranjan Park, New Delhi – 110 019

Your participation will be greatly appreciated. Confidentiality is guaranteed.  
Thanking you in anticipation.

With warm regards,

Tuhin Chattopadhyay

Research Scholar

G.B. Technical University, Lucknow

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Signature of Researcher

---

Date



### **APPENDIX 3**

#### **CONSENT FORM FOR PARENTS OR GUARDIANS OF CHILDREN**

Dear Sir/ Madam,

The research study is being conducted by Tuhin Chattopadhyay as part of the requirements for doctoral studies in Management at G.B. Technical University, Lucknow. The study has been reviewed and approved by G.B. Technical University, Lucknow. The study has no risks for children or for families. The questionnaire does not have sensitive questions or ones that invite children to tell private things about your family. Taking part is voluntary, and your child may choose to quit at any time or not to answer the questions. The questionnaire will be treated with professional standards of confidentiality. Your child will receive a small token (such as a pencil, sticker etc.) as a thank you for taking part. Thanking you in anticipation.

Tuhin Chattopadhyay

---

Signature of Researcher

---

Date

### **Consent Form**

I give consent to my child to take part in this study which examines the children's responses to print advertising. Being in this study will involve my child participating in a session of approximately an hour that will take place at his or her school.

Please write your child's full name \_\_\_\_\_

\_\_\_\_\_

Signature of Child

\_\_\_\_\_

Date

\_\_\_\_\_

Signature of Parent or guardian

\_\_\_\_\_

Date

## **APPENDIX 4**

### **SURVEY INSTRUMENT USED FOR THE MAIN EXPERIMENT**

Data Sheet No. \_\_\_\_\_

Kindly fill the entries given below:

Name: \_\_\_\_\_ Sex: \_\_\_\_\_

Address: \_\_\_\_\_

Age: \_\_\_\_\_ years \_\_\_\_\_ months, Educational Qualification: \_\_\_\_\_

Designation: \_\_\_\_\_, Organization: \_\_\_\_\_

Contact No.: \_\_\_\_\_

Do's:

Watch each of the 20 advertisements carefully.

Rate each of the advertisements in the table as per the instructions given in the following five questions.

Don'ts:

Do not rate the advertisements on the basis of your preference of the product which is advertised.

**Advertisement No.:**\_\_\_\_\_; **Advertised brand:** \_\_\_\_\_

➤ Please indicate your **attention** towards the advertisement you just saw.

(Circle the number which best represent your attention where 1 = strongly disagree, 2 = somewhat disagree, 3 = undecided, 4 = somewhat agree and 5 = strongly agree).

- I paid attention to the content of the ad.

1      2      3      4      5

- I carefully read the content of the ad.

1      2      3      4      5

- When I saw the ad, I concentrated on its contents.

1      2      3      4      5

- I expended effort looking at the content of this ad.

1      2      3      4      5

➤ Please indicate your **comprehension** of the advertisement you just saw.

(Circle the number which best represent your comprehension level)

▪ This ad is  
difficult to understand    1       2       3       4       5       easy to understand

▪ This ad is  
pretty confusing    1       2       3       4       5       pretty understandable

➤ Please indicate your **attitude** towards the advertisement you just saw.

(Circle the number which best represent your attitude)

My overall attitude towards the advertisement I saw is ...

▪ This ad was unpleasant    1       2       3       4       5       This ad was pleasant

▪ This ad was not useful    1       2       3       4       5       This ad was useful

▪ This ad was not entertaining    1       2       3       4       5       This ad was entertaining

▪ This ad was uninteresting    1       2       3       4       5       This ad was interesting

▪ I disliked this advertisement    1       2       3       4       5       I liked this advertisement

- Imagine a situation in which you need to buy the advertised brand right then and indicate **how likely you would be to purchase the brand** you just saw in the advertisement.

(Circle the number which best represents your purchase intention where 1 = strongly disagree, 2= somewhat disagree 3 = undecided, 4 = somewhat agree and 5 = strongly agree)

- I would definitely intend to buy the advertised brand  
1      2      3      4      5
- I would absolutely consider buying the advertised brand  
1      2      3      4      5
- I would definitely expect to buy the advertised brand  
1      2      3      4      5
- I would absolutely plan to buy the advertised brand  
1      2      3      4      5

- Please indicate **whether you have seen the present advertisement** when the advertisements were previously shown to you.

(Circle the number which best represents your retention of the advertisements where 1 = positive the advertisement was not presented, 2 = fairly certain the advertisement was not presented, 3 = undecided, 4 = fairly certain the item was presented, and 5 = positive the item was presented)

- 1      2      3      4      5

## APPENDIX – 5

### LIST OF PUBLICATIONS OF THE RESEARCHER'S WORK

1. Chattopadhyay, T. (October, 2010). The information processing of advertisements by urban young men of India. *Global Business Review*, 11(3), 449-462.
2. Chattopadhyay, T. (August, 2010). The information processing of print advertisements by middle-aged women. *Decision*. 37(2), 79-99.
3. Chattopadhyay, T. (2010). The effects of message strategy and execution framework on male teenagers' processing of print advertisements in India. *International Journal of Business Science and Applied Management*, 5(2), 17-28.
4. Chattopadhyay, T. (2009). Information processing of print advertisement by young urban women of India. *Management & Change*, 13(1), 147-168.

5. Chattopadhyay, T. (2009). Managing creativity in formulating advertising strategy: An empirical study with male child. In B. Gupta, & S.K. Singh (Eds.), *Building blocks of organizational Creativity* (pp.99-122). Macmillan Publishers India Ltd.
6. Chattopadhyay, T. (2008). The effects of message strategy and execution framework on girl child's processing of print advertisements. *Prabandhiki*, 2(1), 80-95.
7. Chattopadhyay, T. (2008). A multivariate analysis of information processing of print advertisements by senior women. *Chintan*, 1(2), 66-76.



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