

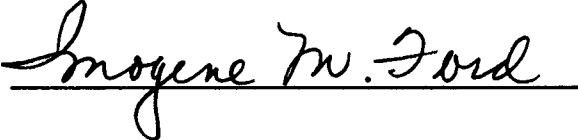
To the Graduate Council:

I am submitting herewith a dissertation written by Evelyn Louise Brannon entitled "Temperament's Thumbprint: Dispositional Factors in the Formation of Attitude-Toward-the-Ad." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Communications.

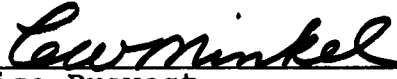

M. Mark Miller, Major Professor

We have read this dissertation
and recommend its acceptance:





Accepted for the Council:


Vice Provost
and Dean of The Graduate School

TEMPERAMENT'S THUMBPRINT:
DISPOSITIONAL FACTORS
IN THE FORMATION OF ATTITUDE-TOWARD-THE-AD

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Evelyn L. Brannon

May 1989

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For Mom, Dad, and Tom
who turned dreams into possibilities.

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ABSTRACT

Consumers faced with a rushed, cluttered advertising message environment and complex messages may make purchase decisions based on affect alone. In low involvement situations, affective responses--preferences, attitudes, attraction, and aesthetic judgments--to ad execution and the emotional content of the ad may be more influential than product attributes.

Attitude-toward-the-ad (Aad) or ad liking is used to explore the affective response of different types of consumers to contrasting advertising appeals. The antecedents of Aad for both central (high involvement) and peripheral (low involvement) processing have been identified. Temperament type is likely to influence ad perception in central processing and mood in peripheral processing.

Temperament type, the characteristic way an individual approaches, modifies, simplifies and reacts to the environment, is posited as an essential part of the emotional criteria used to screen ads. Participants were classified into four temperament type groups--Artisans, Rationals, Guardians, and Idealists--using the Keirsey Temperament Sorter.

A convenience sample of college-aged females responded to each of six ads on a series of bipolar adjective scales representing the three dimensions of Aad--overall liking, liking for ad execution, liking for emotional content. The ads were chosen as exemplars of the ad types--utilitarian, symbolic, and hedonic--by a panel similar demographically to the subjects. The ads represented three product types--utilitarian (skin moisturizer), symbolic (fashion shoes), and hedonic (fragrance).

A series of multivariate analysis of variance (MANOVA) using Aad components as dependent variables provides support for the hypothesis that temperament types differ in their response to ads and that these differences form a characteristic affective response pattern. However, a suspected confound between ad type and product type gives impetus to further research.

This study suggests replacing the speculation that individual differences such as a positive or negative outlook on life may influence the formation of Aad with a revised model reflecting the influence of individual differences such as temperament on both the ad perception and mood subsystem. Findings indicate that individual differences can be specified and empirically demonstrated as moderators of Aad.

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CHAPTER I

STATEMENT OF THE PROBLEM

Visualize the way people customarily encounter and evaluate advertising. Flipping through a magazine, clicking around the the TV dial--in an instant a decision is made to attend an ad or ignore it. Understanding the factors acting during consumers' initial contact with a persuasive message is important to theoreticians in communications and consumer behavior and advertising practitioners alike.

Today's world of consumer products is characterized by "parity products" (Alsop, 1988), that is by products that cannot be distinguished by special product benefits. Product quality, once the distinguishing feature among products, is no longer a factor when consumers assume the quality of most products in a price range are equal (The Public Pulse, 1987). Thus, advertisers must differentiate their products from the competition by referring to features other than attributes and performance.

Advertisers spend fortunes to establish an image for their products overlaid with emotional content--content that is ignored by most advertising research (McCollum Speilman, 1985). But recent summaries of priority questions in advertising have highlighted the need for research on the emotional, non-verbal, intangible aspects

of products and advertising and their impact on buyer behavior (Schmalensee, 1983; Vaughn, 1986). Marketers need to explore both the rational and the emotional criteria used by consumers to discriminate between messages and products (Axelrod and Wybenga, 1985).

Although advertising messages are a pervasive part of the everyday environment, few messages receive attention. Individuals bombarded with hundreds of ads per day control their acquisition process in two ways--by allocating the scarce resource attention and by determining the depth of processing. That is, they attend to only a small portion of the messages available. Of those they attend, some information is processed with full attention and other information peripherally. As Batra and Ray (1983) point out, if processing occurs the situation is likely to be uninvolving, rushed, and cluttered and the information unordered for retrieval and inconvenient for use. Therefore, learning from advertising messages is, at best, incidental and limited.

Further, advertising sends complex messages. Advertisements can be conceptualized as on a continuum with "feeling" ads at one end and "hard sell" at the other. Feeling ads seem "designed simply to create an emotional reaction in the consumer" (Mitchell, 1986, page 623). These feeling ads appeal to fantasy, wish fulfillment,

nostalgia, sentiment, status, sensuality, idealism, and other such arational concepts. Hard sell and "real people" ads evolve around selling points, product attributes, and market positioning. Arrayed between these extremes are ads of all types from humorous soft sell to celebrity endorser ads (McCollum Speilman, 1985).

Given the rushed, cluttered advertising message environment, the complexity of the message, and the control people exert over information acquisition through allocating attention and determining processing strategy:

- What affective and cognitive processes occur on exposure to persuasive messages like ads?
- Why are people motivated to become aware of some information and not others?
- How do people select information for processing?
- How do individual differences influence both attention and processing strategy?

Demographics and psychographics tell only part of the story.

Today's emerging model of how consumers process advertising messages assumes that high involvement with ads is a rarity and that low involvement situations are more common. The model--precognitive, mere-exposure-based affect--holds that in low involvement/peripheral processing situations, awareness not attitudes determines purchase intention. Affective response to an ad encompasses

preferences, attitudes, attraction, and aesthetic judgments. These powerful responses may form before any cognition takes place to create an approach-avoidance reaction that determines whether the ad will receive further attention and processing.

In initial processing situations, cues in the ad may act as triggers for invoking guiding schema or inferences. Subsequent consumer decisions may be made on the basis of "affect-referral," that is overall affect, not component attributes. Affect-referral can be seen as a voluntary "simplifier" given the number of messages available for processing or as "heuristic" given the demands of a situation (pressure to make a decision).

Two factors are involved in the cognitive processing of ads--attention and processing strategy. Processing strategy is conceptualized as consisting of two tracks, one with full attention (central processing) and the other peripheral processing. In peripheral processing cues in the stimuli rather than rational consideration of content is thought to influence behavior. Research indicates that even in high involvement situations central processing may do no more than supplement the dominant peripheral processing mode (Lutz, MacKenzie, and Belch, 1983). Thus, understanding effects associated with the visual, emotional, and non-verbal aspects of messages becomes more

important especially given that individual differences among consumers affect both attention and processing strategy.

Recognition of the prevalence of low-involvement processing leads naturally to an interest in consumers' affective reactions to advertising (preferences, emotional reactions, and feelings) as a line of inquiry within research on advertising effects. Much of the literature involves the variable attitude-toward-the-ad (Aad).

Aad can be defined most simply as liking for the ad. Aad may be result from 1) an overall evaluation of the ad, 2) evaluation of executional factors or 3) reaction to emotional content of the ad. The response crystallizes as attitude-toward-the-ad, transfers to brand and influences purchase intention directly and indirectly. If consumers make purchase decisions based on affect only, executional elements and emotional content in ads tend to be more influential than product attributes in persuasion.

Researchers have proposed a model of antecedents to the formation of Aad using the central and peripheral processing framework. Two systems within the model are likely to be especially sensitive to individual differences--the ad perception subsystem in central processing and the mood subsystem in peripheral processing. The ad perception subsystem seeks to explain the consumer's perception of advertising stimulus including ad execution

but excluding attitudes and beliefs about the brand. Mood as an antecedent of Aad is seen as a 'state' variable resulting from 'trait' variables (individual differences). As Gardner (1985b) points out, while mood is a transient feeling state that acts subtly to "color" and "influence" attentional processes, other "invariant feeling states" such as personality dispositions are also acting (page 282).

Personality characteristics are often suggested as variables related to consumer behavior. However, as Horton (1979) points out, general patterns of behavior are difficult to relate to specific consumer choices. He suggests that the key to the relationship between personality and consumer behavior is more likely to be found in the ways consumers approach, modify, simplify and react to their marketing environment. One approach is to identify consumers as discrete types for market segmentation (Midgley, 1983).

Type theory springs from the insights of Jung. Jung (1923) suggested that while the psyche is not inalterable, there is a definite character that is inborn. Based on that idea he developed a typology of personality type. Myers (1980a) translated that typology (with modifications) into questionnaire form to create "the most widely-used

personality measure for non-psychiatric populations" (page xii)--the Myers-Briggs Type Indicator (also known as the MBTI).

People who take the MBTI are classified by a four letter code indicating their preferences on four scales--Extroversion versus Introversion, Sensing versus Intuition, Thinking versus Feeling, and Judging versus Perceiving. Classification by this method results in sixteen personality types.

Keirsey (1987) reinterprets the Jung-Myers conceptual framework to highlight temperament and identifies four temperament types. In his approach temperament is defined as a consistent personal set of actions observable throughout the lifecycle. Keirsey reasons that since behavior relates to satisfying needs, activity patterns grow up around themes and values specific to each temperament type. Kroeger and Thuesen (1988) find temperament types "useful because they afford the widest base of accurate behavioral predictions" (page 50).

Although arising from a different tradition and emphasizing a different concept of personality structure, Keirsey's temperament types can be classified using the MBTI. However, Keirsey also devised a shorter measure that can be scored by anyone (only qualified psychologists can administer and score the MBTI).

The four temperament types according to Keirsey's conceptual framework are: 1) Artisans, hedonic types motivated by freedom and action; 2) Guardians, believers motivated by duty and responsibility; 3) Rationals, logical types motivated by the search for power, competence, and knowledge; 4) Idealists, romantics motivated by idealism and dedicated to people-oriented values.

Keirsey's temperament type approach lends itself to research into the ways different types of consumers react to the marketing environment because:

- 1) the typology focuses on activity patterns and communication aspects associated with each type.
- 2) the Keirsey Temperament Sorter is easy to administer and score and can be used in research situations where the time frame must accommodate other data-gathering activities.

Studies (Carlson and Levy, 1973; Carlson, 1980) indicate that personality types do in fact differ in their representations of the personal world and in memory, social perception and social action. If types differ in their perception of the outer world and the construction of their inner world, it can be supposed that they will differ in the way they respond to the complex and ambiguous flood of advertising messages. If types differ in the way they interpret stimuli then ad appeals and executions may impact

on types differentially. It may thus be possible to identify patterns of affective response according to type.

Patterns of affective response according to type can help practitioners in identifying and targeting audience segments. As Boote (1981) found, demographics and psychographics are not enough. Personal values are instrumental in the formation of attitudes and are more general and durable than the attitudes themselves. A model that connects attitudes to brand choice "without the inclusion of values (or some other underlying dispositional state), has relatively little strategic value" (page 30).

According to Allport (1961), "temperament refers to the characteristic phenomena of an individual's emotional nature, including his susceptibility to emotional stimulation, his customary strength and speed of response, the quality of his prevailing mood, and all the peculiarities of fluctuation and intensity of mood, these phenomena being regarded as dependent upon constitutional make-up and therefore largely hereditary in origin" (page 34). Thus, temperament type reflects the characteristic way an individual approaches, modifies, simplifies and reacts to the environment. In this light, predispositions in the form of temperament type can be seen as an essential part of the emotional criteria used by consumers to determine which ads to attend and which to ignore. Because

temperament type ties together values and actions, such a classification by type may provide valuable insights into audience segments along the lines of preferences and other affective responses. However, to be useful such segmentation must be linked to advertising message strategies.

Research on response to ad appeals usually classifies appeals into a dichotomy--emotional versus rational or abstract versus concrete or thinking versus feeling. Such approaches oversimplify today's advertising environment. Emotional content exists in all ads given the context, models, non-verbal, visual and verbal content. Other concept pairs often used in advertising research are equally deficient (Preston, 1987).

The nine ads used in this study are exemplars of three appeal and execution strategies--the utilitarian, symbolic, and hedonic. To remove researcher bias ads were select by a panel similar demographically to study subjects. Considering the headline, visual, and copy, the ad types are defined as follows:

- Utilitarian Ads

Ads that refer to physical, tangible features and performance of the product in appeals and execution.

- Symbolic Ads

Ads that refer to the characteristics of the consumer or the social context in appeals and execution.

- Hedonic Ads

Ads that refer to the emotional satisfaction or sensual pleasures resulting from owning or using the product in appeals and execution.

In this study, ad type is a within-subjects factor--the same experimental units (subjects) measured on different occasions. Temperament type is viewed as a between-subjects factor. Hypotheses are based on the idea that individuals use the schema associated with their temperament type to screen the verbal, visual, and nonverbal content of the ad during the first few seconds of contact. The result of that screening--an approach-avoidance reaction--can be captured by the variable attitude-toward-the-ad. The multidimensionality of attitude-toward-the-ad leads to the operationalization of three dependent variables: overall liking, liking of ad execution, and liking of the emotional content.

Using a 3 X 4 (ad type X temperament type) multivariant analysis of variance design, this study investigates temperament type as a psychological link between consumers and advertising strategies. The research question is:

Do individuals classified into the four temperament types exhibit characteristic response patterns to the images or

quality of ad appeals in a way that can be linked to the characteristics of those temperament types?

The practical value of the study lies in its usefulness to advertising practitioners. This research focuses on the initial processing of ad information during the first few seconds of contact. If a link can be shown between individuals' predispositions in terms of temperament type and ad liking, the finding provides insights useful in market segmentation and targeting and subsequent decisions on message strategy including choice of message and creative execution.

"Involvement represents the amount of arousal or interest evoked by a particular advertisement. The amount of arousal or interest determines the degree of attention devoted to an ad and also influence the processing strategy" (Shimp, 1981, page 10). Therefore, if specific individual differences can be identified as antecedents of Aad, this finding can be related to theories explaining an individual's allocation of attention and processing strategy within the framework of the emerging model for peripheral information processing.

The theoretical value of this study lies in expanding consideration of the ad type/temperament type interaction in relationship to the individual's control of the information acquisition process. Further, establishing a link between temperament and Aad fills in the model of how

Aad is formed by specifying the antecedents and moderators of relationships in the formation of Aad and identifying temperament type as a specific individual difference influence on the mood and ad perception subsystems.

Finally, the application of temperament type to advertising can be interpreted within the framework of existing literature on personality type research--specifically as characteristic affective response patterns associated with each type.

CHAPTER II

REVIEW OF LITERATURE

Affect Versus Cognition

"If we stop to consider just how much variance in the course of our lives is controlled by cognitive processes and how much by affect, and how much the one and the other influence the important outcomes in our lives, we cannot but agree that affective phenomena deserve far more attention than they have received..."

--Zajonc (1980, page 172)

With such arguments Zajonc launched a debate [see also Lazarus (1982), Zajonc (1984), Lazarus (1984), Zajonc and Markus (1982), Tsal (1985), Zajonc and Markus (1985)] on the primacy of affect versus the primacy of cognition. The crux of the debate is the question "which comes first?" Zajonc argues that affective judgments can be formed on matters such as preferences prior to any cognitive processing and that affect and cognition are independent. Such claims dispute the traditional view of psychology that "objects must be cognized before they can be evaluated" (page 151). Tsal (1985) contends that cognition and affect are always linked but such links are unreportable because the link is mediated by unconscious processes. In a review of the controversy, Peterson and Hoyer (1986) state that "the theoretical focus in consumer behavior should not be whether affect precedes cognition but rather on determining what decisions are likely to be primarily affective, what

is likely to be the strength of the affect, and what happens when affect and cognition are in conflict" (page 145-146).

Even defining affect presents a problem for the researcher. In general, affect is "treated as a synonym for feelings or emotions that are either physiologically based or at least have a physiological component" while cognition is a mental activity associated with information processing (Peterson and Hoyer, 1986, page 141). That can be problematical--distinctions between affect, feelings, and emotions need to be made. Batra (1986) defines affect as the "sorts of feelings toward a stimulus that lead to relative preferences for that stimulus out of a class of similar stimuli" (page 54).

Zajonc (1980) identifies affective reactions as:

- 1) "inescapable" (page 156). That is, affective reactions, unlike judgments, are not under voluntary control and "cannot be focused as easily as perceptual and cognitive processes."
- 2) "irrevocable" (page 157). That is, "affect often persists after a complete invalidation of its original cognitive basis."
- 3) "implicat[ing] the self" (page 157). That is, affective reactions mirror something in the self and "identify the state of the judge in relation to the object of judgment."

4) "difficult to verbalize" (page 157).

5) "not depend[ent] on cognition" (page 158).

6) sometimes "separated from content" (page 159).

Zajonc points out that in research on "preferences, attitudes, attractions, expressions, aesthetic judgments, and similar affective responses" (page 158) cognitive measures explain only about 20 percent of the total variance.

Affect Versus Cognition:

Processing Advertising Information

Traditionally, consumer decision making has been modeled as cognitively demanding and systematic--clear evaluative criteria applied to a decision making situation (for example, Howard and Sheth, 1969). The validity of such models has been questioned. Kassarian (1978) suggests that such models attribute selection processes to consumers when no prepurchase process exists. In a review of studies, Olshavsky and Granbois (1979) concluded that "for many purchases a decision process never occurs, not even on the first purchase" (page 131). Specifically critics charge that the systematic model does not take into account:

- the distinctions between functional products, hedonic products and symbolic products (Olshavsky and Granbois, 1979),

- the experiential and subjective state of consumption (Holbrook and Hirschman, 1982),
- the different motivational and cognitive patterns associated with different products (Olshavsky and Granbois, 1979; Midgley, 1983).

McGuire's (1968, 1978) information processing model, the dominant model until the mid-70s, with its hierarchy of stages--attention, comprehension, yielding, retention, and action--is based on high involvement and verbal processing. But, as Smith (1986) found, in a test of the concept that consumers acquire information by the examination of products and their attributes, such a proposition applies only under the conditions of perceived risk--that is, claim substantiation was most important for products and services with high risk.

Holbrook and Hirschman (1982) maintain that the usual information processing perspective of consumer behavior with its reliance on rational decision making ignores the "experiential view" in which consumption is a "subjective state of consciousness with a variety of symbolic meanings, hedonic responses and aesthetic criteria" (page 132). They propose a model paralleling the information processing model but expanding consideration of the consumption experience by acknowledging that consumer response is a complex result of a "multifaceted interaction between

organism and environment" (page 139). Their research explores individual differences related to consumption including sensation seeking and creativity.

In a later elaboration of that view Holbrook (1986) proposes a model of the consumption experience that bypasses the Zajonc controversy. As opposed to the traditional cognition-affect-behavior paradigm, the proposed consciousness-emotion-value model takes a more comprehensive view of human behavior. In the model (Figure 1), emotion with the components cognition, physiological responses, behavioral expression and feelings becomes the central element in the consumption experience.

Consciousness is defined as "unaltered and altered mental states varying along a continuum from unconscious to subconscious to conscious awareness and subsuming various forms of diminished consciousness" (page 27). Thus, according to Holbrook emotion depends on consciousness. Emotional processes produce output in the form of value, defined as an "interactive relativistic preference experience" (page 32)--interactive because it results from an interaction of consumer and object; relativistic because it is "comparative," "personal," and "situational;" preference because it is an affective response; experience because the "consumption experience" results not from the object but from the object's "use (extrinsic value) or appreciation (intrinsic value)" (page 32).

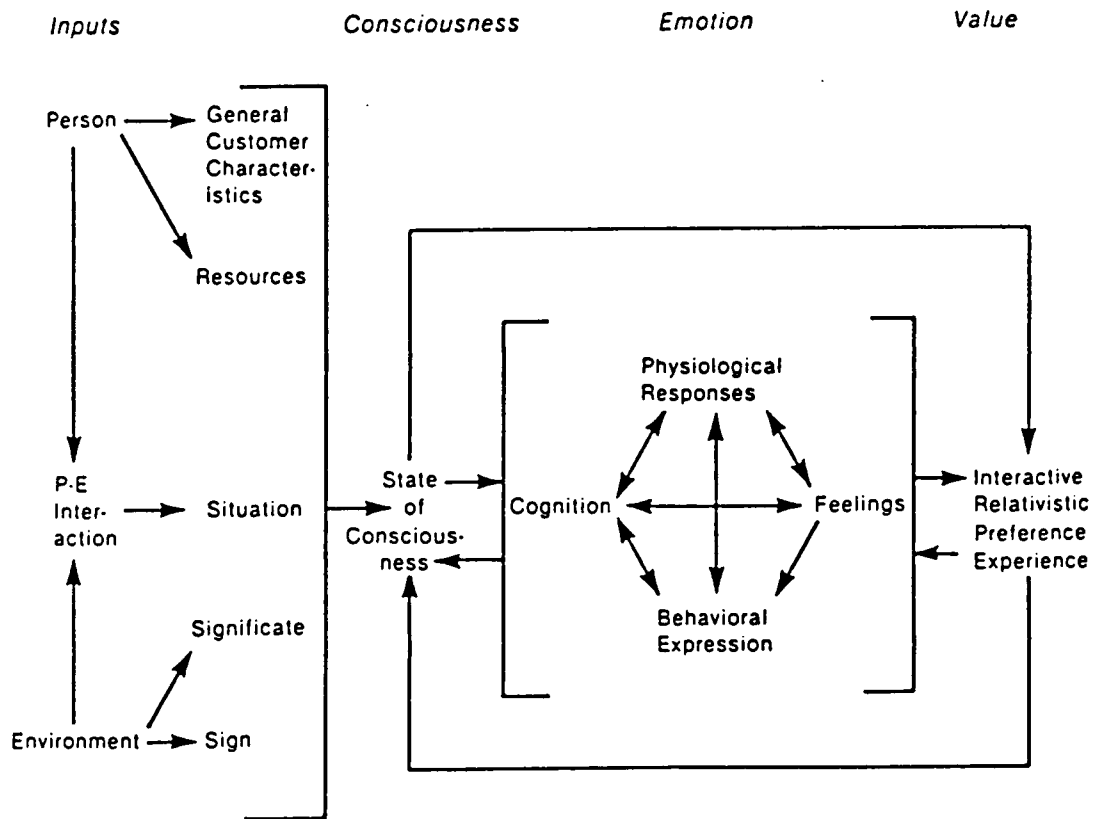


Figure 1: Holbrook's Model of Consumption

Holbrook, Morris B. (1986). Emotion in the consumption experience: Toward a new model of the human consumer. In Robert A. Peterson, Wayne D. Hoyer and Willian R. Wilson (Eds.), The Roles of Affect in Consumer Behavior (p. 26). Lexington, MA: Lexington Books.

Today's emerging models of how the consumer processes advertising begin with the assumption that high involvement with persuasive messages is the rarity and that low involvement predominates. Further, these models seek to incorporate visual, emotional, and non-verbal aspects of messages. Linear models fail to explain processing with low involvement.

Even Fishbein and Ajzen (1975) in their expectancy value theory of attitude formation see change in stages: belief formation then attitude formation then behavioral intention then behavior. As Batra and Ray (1983) point out, the Fishbein and Ajzen model assumes that beliefs are "available" for change but in "most low-involvement situations--the underlying beliefs are not retained after the global attitude has been formed" (page 139). This mirrors Zajonc's (1980) view of affect that persists after the loss of a cognitive basis for that affect.

Research with TV ads found that attitude measures were not significantly affected in low involvement situations but repetitive advertising increased ad awareness and influenced purchase intention to some degree (Ray, 1973; Ray and Sawyer, 1971; Krugman, 1965). This bypassing of attitude change on the way to behavior significantly undermines the validity of linear processing models.

Whereas the old model could be characterized as "post cognitive attitude affect" where attitude change leads to behavior given high involvement processing, the emerging model is characterized as "precognitive, mere-exposure-based affect" (Batra and Ray, 1983, page 137). In the decision strategy based on low involvement processing, "affect referral," consumers make brand choices based on "overall affect and not component attributes" (Batra and Ray, 1983, page 139). Such a processing strategy acts voluntarily as a "simplifier" given the volume of messages available for processing or as "heuristic" given the demands of the situation (pressure to make a decision).

The "systematic model" and the "affect transfer" model are combined in the concept of two track processing with its two distinct routes to persuasion. According to Petty and Cacioppo (in press), the first track is the direct or central route consisting of rational considerations of relevant arguments. The second track is the peripheral route in which some simple cue in the message induces change. Central route processing is likely to occur when the persuasion situation causes a person to consider carefully the issue-relevant arguments in the message--high elaboration likelihood. Peripheral processing is more likely in a situation where "affective associations of simple inferences [are] tied to peripheral cues in the persuasion context"--low elaboration likelihood (Petty and

Cacioppo, in press, page 85). High elaboration likelihood parallels the construct high involvement; low elaboration likelihood, low involvement.

In Petty and Cacioppo's (in press) view, cues "trigger relatively primitive affective states which become associated with the attitude object" or they "invoke guiding schemata or inferences" (page 14). The functioning of cues in attitude change are related to personal relevance/involvement--the extent to which an issue has "intrinsic importance" or "personal meaning" or "significant consequences" (page 25). Cues are more important as "determinants of persuasion when personal relevance is low rather than high" (page 42)--that is, in low involvement situations.

In addition to Petty and Cacioppo, other researchers have identified two track processing. Chaiken (1980) called the routes systematic and heuristic; Gardner, Mitchell, and Russo (1978) suggested the terms "brand processing strategy" for processing with full attention and "non-brand processing " for incidental learning or memory trace formation; Craik and Lockhart (1972) called the routes deep and shallow; Schneider and Shiffrin (1972), controlled versus automatic; Abelson (1976) and Langer, Blank and Chanswitz (1978), thoughtful versus mindless;

Mitchell (1983) categorized the two routes as intentional learning versus incidental learning.

Summarizing the emerging model of "how individuals process information from advertisements" (page 277), Alwitt and Mitchell (1985) see the following elements:

- two factors affect the cognitive processes that occur on exposure to ads--attention and processing strategy.
- processing strategy consists of two tracks, one with full attention and the other based on incidental learning, mere exposure effects, and memory trace formation.
- variables like content, prior knowledge and experience with a brand or product, executional elements, modality, and individual differences affect both factors--attention and processing strategy.

Batra and Ray (1985) in a refinement of the two track processing model suggest that "message response involvement" is a state that "actualizes" the depth of processing or amount of "cognitive elaboration" (page 19). The antecedents of that state are identified as:

- motivation to respond including "product class involvement"--the importance, care, or risk in making a brand choice.
- ability to respond including "prior usage and knowledge."
- opportunity to respond given "message pace and distraction."

Interactions are likely as antecedents "act in a multiplicative way to determine depth of processing" (page 19).

Batra and Ray (1985) propose a "percentage contribution model" to explain the variable contribution of two attitude components--"utilitarian affect" and "hedonic affect"--in determining purchase intention. The utilitarian component is defined as "an appraisal of the product's instrumentality in delivering physical attributes" and the hedonic component is defined as "an approach-avoidance feeling...toward the product as a whole" (page 18). They hypothesize that in the low involvement situation the contribution of the utilitarian component will be lower than in high involvement situations. In this model, it should be noted, "contributions refer to strength, not valence" (page 21). In a test, Batra and Ray were unable to confirm or disconfirm the model due to measurement problems. However, they conclude that there is support for the "hypothesis that the two routes to attitude formation and change do work differentially through two components" (page 18)--utilitarian affect and hedonic affect.

Affect mechanisms captured in the hedonic component of the percentage contribution model include advertising execution variables, attitude toward the ad itself, brand

familiarity, and source likeability (Batra and Ray, 1985). However, Batra (1986) cautions that an ad that delivers a status claim can be considered as a utilitarian ad since it makes a claim about an attribute. Hedonic affect by this definition refers only to a feeling that a brand is "friendly, pleasant, and warm" (page 70).

Affective reactions to advertising has emerged as a line of inquiry with special emphasis on the variable attitude-toward-the-ad (Aad). If consumers make purchase decisions based on global affect, that affect could be initially generated by the executional elements and/or emotional content of the ad, crystallized as Aad, transferred to the brand, and result in the formation of purchase intention. While interest in consumers' subjective response to ads is not new, interest in carefully specifying the role of these subjective responses in the communication process is (Edell and Burke, 1984).

Attitude-Toward-the-Ad (Aad)

Defining Aad

Mitchell and Olson (1981), in a study of advertising effects on brand attitude using Fishbein and Ajzen's model as a base, found that product attribute beliefs were not the only mediator of such effects. The consumer's "general liking for the ad itself or the visual stimulus presented in the advertisement" also influenced brand attitudes.

Lutz (1985) defines the construct Aad as "a predisposition to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion" (page 46). As such, the construct is "situationally bound," "transitory," and can be expected to "have its maximum impact on other response variables, such as brand attitude, at or immediately following the point of exposure" (page 40). Shimp (1981) in a review article of the construct attitude-toward-the-ad as a mediator of brand choice identifies two dimensions. The cognitive dimension results from consumers consciously processing executional elements of the ad. The emotional dimension results when the ad evokes an affective response without any processing of executional elements.

As Lutz (1985) points out, Aad has direct influence on consumer behavior via affect transfer and the indirect influence of Aad may persist. Gresham (1982) in an after-only test of the construct confirmed the connection between Aad and brand attitudes but not purchase intention and found that "negative affect" ads resulted in longer term effects than "positive affect" ads. Moore and Hutchinson (1983) found that direct effects can be conditioned from ad affect to brand name and that increased repetitions increase such affect. They found that ad affect influenced attitudes indirectly through increased brand familiarity.

To summarize, research on attitude-toward-the-brand led to another construct--attitude-toward-the-ad. While linked, these constructs are distinct and "our understanding of the nature of the relationship and the underlying process mechanisms is embryonic" (Edell and Burke, 1984, page 644).

Linking Attitude-toward-the-Ad and Attitude-toward-the-Brand

According to Lutz, MacKenzie, and Belch (1983), Aad acts as a mediator of advertising effectiveness in expected and unexpected ways. An empirical study of the impact of product class importance and product class knowledge on the relationship of Aad and attitude-toward-the-brand employed two subsamples--one with "high knowledge/high importance," a manipulation expected to invoke central processing strategies; the other "low knowledge/low importance," expected to invoke peripheral processing strategies. In both cases Aad was a mediator of attitude-toward-the-brand but unexpectedly Aad was a stronger influence than brand cognitions in the high knowledge/high importance case. The researchers suggest that rather than a "switch from peripheral to central processing" (page 536), central processing (where brand cognitions have a direct causal link to attitude-toward-the-brand) is a "supplement" to a dominant peripheral processing mode.

MacKenzie, Lutz, and Belch (1986) tested four alternative models of the relationship "between brand-related cognitive, affective, and conative responses and ad-related cognitive and affective responses" (page 130).

The four models are:

- 1) affect transfer--an hypothesis suggesting a "one-way causal flow" (page 132) from Aad to attitude-toward-the brand and related to the peripheral route to persuasion.
- 2) dual mediation--an hypothesis that "specifies an indirect flow of causation" from Aad through brand cognitions to attitude-toward the-brand.
- 3) reciprocal mediation--an hypothesis accounting for causation through a relationship between Aad and attitude-toward-the-brand in a balance theory system.
- 4) independent influences--an hypothesis that assumes that Aad and attitude-toward-the-brand are independent of each other and each is a determinant of purchase intention.

They found that the dual mediation hypothesis was superior in explaining the workings of Aad but there were limitations to the generalizability of the findings. The researchers suggest that the dual mediation model best explains "processes at work when consumers are confronted with an enjoyable ad for a new brand in a typical packaged good product category" (page 140).

In a thought piece on the agenda for research on Aad, Edell and Burke (1984) suggest six competing hypotheses for

the "underlying processes which the models could represent" (page 645) and which are supported at least in part by research. They suggest that the only way to distinguish between these competing hypotheses is to study effects in naturalistic settings over time. The proposed hypothetical mechanisms are:

- In the affect transfer model,
 - **classical conditioning**--affect generated by the ad or some aspect of the ad "acts as the conditioned stimulus and the brand becomes the co-stimulus, eventually eliciting the same affective response as the ad" (page 644).
 - **salient attribute hypothesis**--the ad and its evaluation are seen as an attribute of the brand as influential as other attributes.
 - **measurement artifact hypothesis**--the supposed effects of Aad result from imprecise measurement of Aad and attitude-toward-the-brand.
- In the dual mediation model,
 - **the cognitive response hypothesis**--that is, Aad impacts directly on attitude-toward-the-brand but also impacts the brand cognitions with its link to attitude-toward-the-brand. Thus, Aad has a simultaneous direct and indirect effect.

- In the reciprocal mediation model,
 - **balance theory** is hypothesized as the mechanism--that is, the consumer, the ad, and the brand form a triad. Given that the relationship between the ad and brand will always be positive, a balance exists only when the consumer either likes or dislikes both the ad and the brand.
- In the independent influences model,
 - **routine response hypothesis** based on a stable and well-formed attitude toward the brand and a less stable, more situationally-based "impersonal" attitude component that can be extended to include Aad. In that case, both Aad and attitude-toward-the-brand are independent in their effect on purchase intent.

Antecedents and Effects

Lutz (1985) and Lutz, MacKenzie, and Belch (1983) have identified the antecedents of Aad according to central and peripheral processing (Figure 2). Antecedents of Aad related to central processing are ad credibility and ad perception. Antecedents related to peripheral processing are attitude toward the advertiser, attitude toward advertising, and mood. The two parts of the model most likely to be impacted by individual differences related to

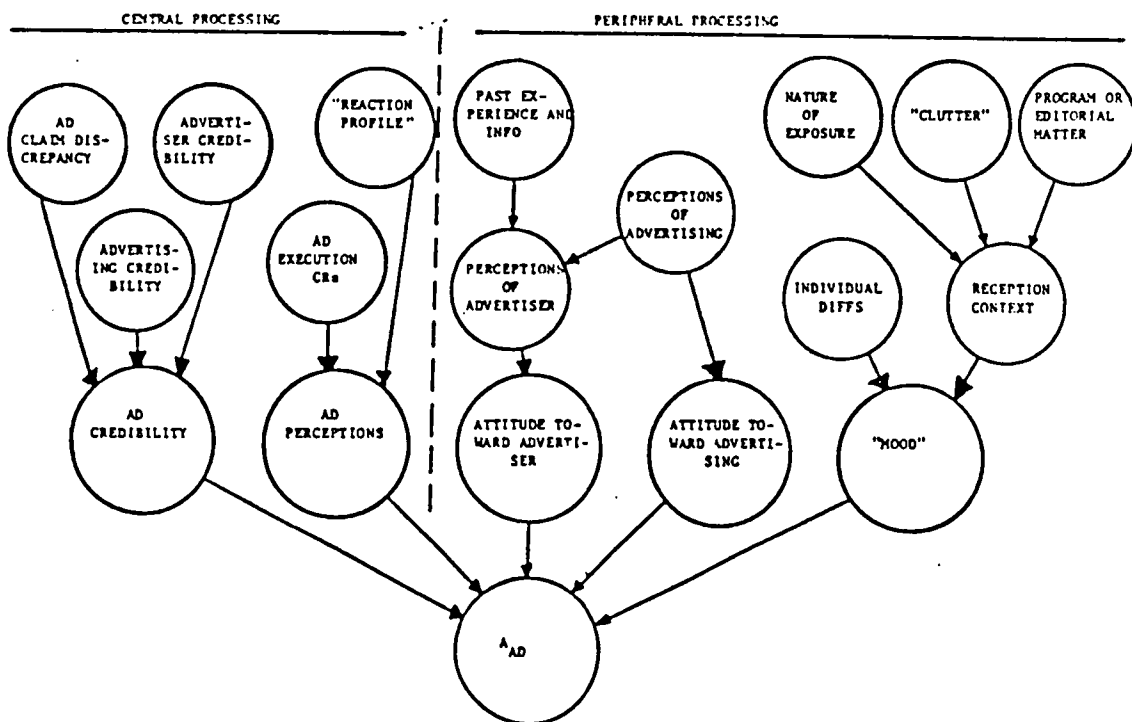


Figure 2: Antecedents of Attitude-Toward-the-Ad (Aad)

Lutz, Richard J., MacKenzie, Scott B. and Belch, George E. (1983). Attitude toward the ad as a mediator of advertising effectiveness: Determinants and consequences. In R.P. Bagozzi and A.M. Tybolt (Eds.), Advances in Consumer Research, 10 (p. 537). Ann Arbor, MI: Association of Consumer Research.

personality and temperament type are the ad perception subsystem and the mood subsystem.

In the ad perception subsystem, consideration is given to the consumer's perception of the advertising stimulus including ad execution but excluding attitudes and beliefs about the brand. Two strands of literature relate to ad perceptions--"reaction profiles" and "ad execution cognitive responses" (Lutz, 1985).

Advertising agency researchers looking for confirmation that ads did in fact convey to consumers the message desired developed reaction profiles by factor analysis of databases of consumer responses to hundreds of ads (Wells, 1964; Wells, Leavitt, and McConville, 1971; Schlinger, 1979). The set of stable factors that resulted was called the "reaction profile."

Most often agencies developed ratings scales using adjectives related to each factor and asked consumers to evaluate ads using these instruments. As Wells (1964) states in the original publication on such scales, they were designed to measure "the 'third dimension' of recall tests--the emotional appeal" (page 45).

While reaction profile research has been largely "atheoretical" (Lutz, 1985, page 50), "ad execution cognitive response" research is based on cognitive response theory. Responses are considered "mediating variables." In this type of research, free responses are collected

following exposure to ads and content analyzed into mutually exclusive and exhaustive categories. Batra and Ray (1986) developed a coding system specifically for ads with the categories source derogations, emotional feelings, liking of executional elements, and evaluation of execution. Two studies--Lutz, MacKenzie, and Belch, 1983 and MacKenzie and Lutz, 1983--found a strong relationship between "ad execution cognitive responses" and Aad.

In comparing the two approaches, "reaction profiles" are more convenient for repeated large-scale applications than the open-ended "ad cognition response" data gathering methods. In both approaches there has been inconsistency from study to study--different sets of factors and adjectives in "reaction profile" studies, different content categories in "ad cognition response" studies. Thus, Lutz (1985) concludes that "no universal set of perceptual dimensions can be said to represent" the ad perceptions subsystem. However, there is "evidence of a strong relationship between Ad Perceptions and Aad" (page 52). The relationship can be viewed as a value consumers attach to a perceptual dimension of ad execution when involvement levels are high enough to trigger central processing to at least a limited degree.

In the mood subsystem on the peripheral processing side of the model, the precursors of "mood" are given as

reaction context and individual differences. Lutz, MacKenzie, and Belch (1983) specify individual differences as an "outlook on life" that varies from positive to negative. Therefore, mood as an antecedent of Aad is "a 'state' variable, resulting from a 'trait' (individual difference) and contextual factors (page 538).

Gardner (1985b) in her critical review of research related to mood states and consumer behavior points out that "slight deviations in communications strategies may significantly affect moods upon exposure to advertising" (page 281). She defines mood as a "feeling state" that is transient and specific in time and situation while other "invariant feeling states include personality dispositions" (page 282). Emotions are defined as more intense with the power to direct attention to the source of the emotion and potentially redirecting behavior. Mood acts more subtly to "color" and "influence" attentional processes without interrupting behavior. How much more subtle and influential might be the more stable "feeling states" associated with personality and temperament?

Research Directions

MacKenzie, Lutz, and Belch (1986) outline two areas for future research: structural issues and process issues. Under structural issues they call for research to identify antecedents of Aad and moderators of the various

relationships. Suggested moderators are "ad processing involvement, ad distinctiveness, and nature of exposure" as well as "product class interest, prior brand preference, repetition of the ad, type of appeal and type of medium" (page 142). The strength of the relationships are posited to be dependent on the combination of moderators in a given situation. The investigators suggest that there are two competing hypotheses relative to process issues: automatic, classically conditioned processing and "conscious awareness." Conscious awareness harkens back to traditional information processing models and holds that consumers consciously make associations between the ads and the brand.

The setting for testing ads--lab or testing facility versus naturalistic setting--creates a confound in research on the two competing hypotheses in that the effect of the setting may be mistaken for the effect of the ad. Thus, an advertising practitioner may be "faced with the unattractive prospect of attempting to create advertising that 'tests cognitively' but 'works affectively'" (MacKenzie, Lutz, and Belch, 1986, page 142).

Clearly attitude-toward-the-ad (Aad) has practical implications for advertising practitioners. Understanding the formation and transfer mechanism of Aad would lead to better decisions on message strategy including choice of message and creative execution.

Affect and Advertising Message Strategies

Today's advertising environment (Alsop, 1988; The Public Pulse, 1987) consists of parity products--products that can not be distinguished by product attributes or price from other similar products. Thus advertisers are faced with the task of differentiating their products from competitors' offerings by highlighting features and benefits other than attributes and performance--by enhancing the "psychological benefits" of products and brands through image creation (Reynolds and Gutman, 1984, page 27). Advertising strategies of this type include:

- "emotion-as-benefit" (Mierski and White, 1986).
- "emotion plus" (Cilo, 1985)
- "self-esteem ads"--leveraging self-esteem to effect buyer behavior (Durgee, 1986).

Meyers (1986) sees a trend toward inner-directed advertising--that is advertising portraying individualism and differentiation as themes rather than social belonging.

As Holman (1986) points out, products play key roles in the emotional lives of people as:

- background in a normal environment (furniture and appliances),
- mediators of interactions and communications (greeting cards, pets, games, and the telephone),

- enhancers of social interaction by facilitating role performance (cosmetics),
- expressions of self image (clothing, home decoration),
- objects of emotion that substitute for human relationships or provide sensory and aesthetic pleasure (art objects, computers, cars, and electronic equipment).

Advertising builds on these emotional roles. For example, many ads are rooted in the consumer's desire for products that reflect and express self. Such ads use appeals to status, style, and taste for persuasive effect. Ads that effectively use images and appeals rooted in consumer emotion are most often the result of creative intuition rather than understanding of how emotional response works.

For products in highly competitive categories like soft drinks, fashion and cosmetics and for intangible products like fragrance, ads have become "product videos" (McCollum-Speilman, 1985) relying on mood, image, and emotional appeals with no direct product pitch. These ads are designed to provoke experiential, emotional participation--a vicarious experience that establishes a relationship between the product and the viewer. These "visual odes" seek to connect with the audience through entertainment values and the enjoyment of visual images. Entertainment values and pop culture images based on

cultural signs in movies and music can be translated into powerful advertising appeals and used for product positioning. Semiotician Whalen (1984) identifies societies current dominant systems as pleasure, anxiety, image and results. While emotional appeals are powerful, Holbrook (1986) cautions that such appeals can unleash conflicting emotions that may work at cross-purposes--one facilitating recall the other canceling that out.

The emotional approach to advertising is not without its critics within advertising ranks. Article after article in advertising trade periodicals decry the excesses of emotional appeals and image manipulation. Rosen (1984) sees reliance on such an approach as "advertising's slow suicide" (page 160). He suggests that achieving the desired effect will be harder and harder as the audience's attention becomes more difficult to engage due to boredom and familiarity with the ploys.

The gap between advertising message creation and dissemination and audience receipt and acceptance is widening. As Bogart (1984) points out, an advertising message must be finetuned to the motivations and interest of a susceptible target audience in order to engage attention at a persuadable moment. In a review of outstanding commercials, Vadehra (1983) suggests that often all that the audience retains from contact with an ad is an

impressionistic image rather than a detailed memory of content. In order for ads to succeed, it is essential for advertisers to understand consumers' emotional response to products, brands and ads.

In a review of the construct involvement and its relationship to advertising strategy Arora (1985) sees the two levels of involvement--high and low--as differentiated by the level of processing and the number of repetitions required to produce a response. Given a low involvement situation, the criteria for evaluating advertising is awareness--awareness built up from the repetition of entertaining ads. In an experiment contrasting low involvement and high involvement processing of advertising messages, Gardner, Mitchell, and Russo (1985) found that low involvement yielded inferior recall of information but a more positive overall attitude toward the brand than high involvement. Based on that finding they suggests an advertising strategy that reduces the cognitive responses to the ad while facilitating the impact of the affective responses.

Advertising effectiveness means: 1) attracting attention, 2) communicating a persuasive message clearly, 3) affecting the consumer's response to the product (Stout and Leckenby, 1984). Before emotional responses can be linked to advertising effectiveness researchers must

understand how consumers respond emotionally to ads. Defining emotion for study in advertising presents problems of semantics.

Basically emotion in advertising can be studied from two perspectives: a focus on emotion as a quality of the ad (content-based) or a focus on the perceptual reactions of the audience (consumer-centered). Content-based emotion can be characterized as "emotional appeal," consumer-centered emotion can be characterized as "emotional response" (Stout and Leckenby, 1985, page R38).

Emotional response is important because it is psychologically important, involves both "arousal" and "appraisal," and is a "valenced" response to "self-relevant events" (Stout and Leckenby, 1984, page 41). Emotional response goes beyond appraisal to feelings that motivate or organize behavior.

Preliminary research indicates that consumers respond emotionally on three progressive levels (Stout and Leckenby, 1985):

- 1) descriptive--the ability to recognize emotions felt by others in the role of spectator,
- 2) empathetic---the ability to feel the same emotions some one else feels, the capacity for sharing another's feelings and ideas,
- 3) experiential--the ability to experience and exhibit valenced feelings in reaction to self-relevant events.

The experiential level relates positively to attitude-toward-the-ad and recall of both the brand and the ad (Stout and Leckenby, 1986).

Findings support the contention that emotional response to advertising is complex and multidimensional (Stout and Leckenby, 1984, 1985, 1986). And, ads themselves are complex--emotional content exists in all ads given the context, models, non-verbal, visual and verbal content. The dichotomy of "thinking" versus "feeling" ads or "emotional" versus "rational" appeals is too simplistic given today's ads and even our rudimentary understanding of consumers' emotional response. Other concept pairs often used in advertising research are equally deficient (Preston, 1987).

In copytesting the content-based and consumer-centered approaches to emotion in advertising come together. The purpose of copytesting is to determine if there is congruence between an ad and the goals of the advertiser. Determining that congruence involves analyzing and interpreting information about the audience's mind after exposure to the stimulus (Friedmann and Jugenheimer, 1985). The psychological meaning of an ad is defined as "a person's subjective perception and affective reactions to stimuli" (page R43). Copytesting based on psychological meaning sidesteps the controversy of whether copytesting works equally well on emotional and factual appeals.

Advertising audiences are initiators of transactions, not just passive receivers of messages. They may consume advertising for product information or for entertainment. Information processing theory provides a good framework for examining these transactions based on product information but is less useful for examining transactions based on entertainment (Crosier, 1983). Spivey, Munson, and Locander (1983) suggest that a functional approach can improve communication strategy by emphasizing the importance of matching the message with a consumer profile that emphasizes motive structures. In such a system cognitive inconsistencies become signals, not drive states, and attitude change occurs when message and motive match.

As Gardner (1974) points out, research on affect in advertising "would be more meaningful if dealt with from the perspective of the receiver trying to give meaning to the message. Rather than speculating on the effect of mood on behavior, maybe we should think of the receiver's having an interpretative cognitive schema that is used implicitly to give meaning to the communication" (page 189).

Personality Characteristics and the Processing of Advertising Messages

Personality characteristics are often suggested as variables related to consumer choice. But as Horton (1979) points out, personality characteristics refer to general

patterns of behavior that are unlikely to be significantly related to specific consumer choices. Instead, it is more likely that significant and possible strong relationships with personality will be found in the procedures consumers adopt for "approaching, modifying, simplifying, and reacting to their marketing environments" (page 234). In a study of patterns of information search for symbolic products Midgley (1983) calls for segmentation approaches which identify individuals as discrete types based on an appropriate set of variables.

Personality Type Theory

Peele (1984) suggests that the central controversy in the psychology of personality between those who see personality as tied to situational factors and those who see personality as dispositional is an argument "between straw men" (page 56). He cites studies and observations to support the contention that basic personality traits remain stable through the years. Current trends in psychology indicate a renewed interest in the links between dispositional factors and behavior and a parallel revival of interest in Jungian psychology.

Jung proposes two conditions for the psyche: "The one is environmental influence and the other is the given fact or the psyche as it is born. The psyche is by no means tabula rasa, but a definite mixture and combination of

genes, which are there from the very first moment of a life; and they give a definite character, even to the little child" (Jung quoted in Evans, 1964).

Jungian personality type theory suggests that people differ in fundamental ways that can be classified. Classification is based on a "preference" for a certain way of functioning, not on an inability to function in any other way. Jung's types are based on a person's perception of internal and external stimuli (intuition versus sensation, thinking versus feeling) and attitude toward interactions (extroversion versus introversion). According to Jung's original conceptualization, type is based on preference, preferences that may change over time (Evans, 1964; Buss and Plomin, 1984; and Keirsey and Bates, 1984).

During the time Jung was developing his type theory in Europe, Briggs in America was developing a typology of personality similarities and differences based on a study of biographies. Upon reading Jung's Psychological Types (published in English in 1923) she adopted his scheme because of its similarity to her observations (Myers, 1980a).

But how could this conceptual framework be translated into a useful quantitative measure? Myers, Briggs' daughter, undertook the task as a young woman without formal training in either psychology or statistics. Over

the course of decades, she developed and tested a item pool that lead to the publication of a "type indicator" measure (known as the Myers-Briggs Type Indicator or MBTI) in the early 60s (Myers, 1980a).

In addition to translating Jung's typology into questionnaire form, Myer's innovations included the addition of another "preference"--perceiving versus judging--to Jung's conceptual framework. Together the four bipolar pairs--extroversion/introversion, sensing/intuition, thinking/feeling, perception/judginng--indicate preferences for ways of functioning or a "pattern of action" for each type. In the Myers-Briggs Type Indicator (MBTI) scheme, classification by preferences results in 16 unique personality types.

In 1975 responsibility for the administration of the MBTI was placed with Consulting Psychologist Press and The Center for Applications of Psychological Type was formed to facilitate research with the MBTI. An association of MBTI users and researchers and a journal to publish related research was begun. The MBTI has become "the most widely-used personality measure for non-psychiatric populations" (Myers, 1980a, page xii).

With widespread acceptance came a boom in related research including psychometric studies. The construct validity of the measure has been supported by studies as varied as a qualitative examination of type differences in

personal documents (Carlson, 1980), comparison of MBTI scores with the judgments of friends and relations (Cohen, Cohen and Cross, 1981), type differences in memory, social perception and social action (Carlson and Levy, 1973; Carlson, 1980); and factor analysis (Thompson and Borrello, 1986). Item validity has been investigated with interitem correlations, reliability coefficients and factor analysis by Tzeng (1984) in a study that showed support for the MBTI. Conversely, a later factor analysis on a large group showed only limited support (Sipps, Alexander, and Friedt, 1985). Carskadon (1977) obtained generally satisfactory (.73 to .87) test-retest reliability with the MBTI. Hicks (1984) in a study of the verifiability of topological systems found overall support for the conceptual and psychometric properties of the MBTI while in a more limited study Comrey (1983) came to the opposite conclusion. Carlyn (1977) in a review of intercorrelation, reliability, and validity studies concluded that the measurement is reliable for adults and that E-I, S-I, and T-F scales are relatively independent and close to the concepts of Jung.

Personality Type According to the MBTI

Basic preferences as they array in individuals "produce different kinds of people who are interested in different things" (Hammer, 1987, page 4). The scales used to classify differences are:

- Extroversion/Introversion--a scale that indicates where a person likes to focus his/her attention, either on the outer or on the inner world. A preference for extroversion means that a person needs "to experience the world in order to understand it," introversion means that a person needs to "understand the world before experiencing it" (page 5).
- Sensing/Intuition--also known as the perception function--a scale that indicates the way a person likes to take in information. A sensing type depends on the senses to establish the realities of the situation and is concerned with the realistic and practical aspects. The intuitive person looks for patterns in the "meanings, relationships, and possibilities beyond the information" supplied by the senses (page 5).
- Thinking/Feeling--also known as the judging function--a scale that indicates the way people like to "reach conclusions, make decisions, or form opinions" (page 6). A person who prefers the thinking approach makes decisions by objectively weighing the evidence, a person who prefers the feeling approach decides based on "person-centered values." Note, the word feelings in this usage refers to judgments based on values not to feelings associated with emotion (page 6).
- Judging/Perceiving--a scale that indicates the kind of lifestyle people are likely to adopt. People who prefer

judging "live in a planned, orderly way, wanting to regulate life and control it" (page 6). People who prefer the perceptive process like to live in a "flexible, spontaneous way" (page 6) and seek to understand but not control life. Note, in this context, judging does not mean being judgmental, it means favoring a structured approach.

People who take the MBTI are classified by a four letter code indicating their preferences on the four scales--for example, INTJ means a personality type that is introverted and likes to process information with intuition, who prefers to use thinking to make decisions and who prefers an orderly controlled lifestyle. These four letters constitute a profile of an individual's preferred way of dealing with the world and other people.

The middle two letters of the MBTI personality profile are called "functions" and they define the core personality. The outer two letters are called "attitudes" and they define how the preferences interact.

In Jung's theory and Myer's development of it, either the information gathering function (Sensing/Intuition) or the decision-making function (Thinking/Feeling) becomes dominant--that is, one function becomes the favorite and most trusted function in the personality structure. The other function becomes a supporting or auxiliary function. Which function becomes dominant and where that dominant function is focused is determined by the "attitudes."

The judging/perceiving (J/P) scale--defined as the process used in dealing with the outside world--determines the dominant process. Since an extrovert prefers the outer world, the J/P preference indicates the dominant process. Since an introvert prefers the inner world, the J/P preference indicates the auxiliary process. The dominant and auxiliary function for all sixteen personality types can be determined by applying the following rules (Myers, 1980b):

- If an extrovert's four-letter personality profile ends in a J, the dominant process is a judging one, either thinking or feeling. Therefore, the auxiliary process is the perceptive one, either sensing or intuition.
- If an extrovert's four-letter personality profile ends in a P, the dominant process is a perceptive one, either sensing or intuition. Therefore, the auxiliary process is a judging one, either thinking or feeling.
- If an introvert's four letter personality profile ends in a J, the auxiliary process is the judging one, either thinking or feeling. Therefore, the dominant process in the perceptive one, sensing or intuition.
- If an introvert's four-letter personality profile ends in a P, the auxiliary process in the perceptive one, either sensing or intuition. Therefore, the dominant process is the judging one, either thinking or feeling.

As the rules illustrate, extroverts see the external world positively and focus their dominant function in that direction--what you see is what you get. Introverts are more complex in that they direct the dominant function inward using the auxiliary function with the world--what you see is their second-best process (Kroeger and Thuesen, 1988).

The full development of the theory shows the interaction of the "functions" and "attitudes" as expressed in the four-letter personality profile. The theory can be extended to define a tertiary process and a "shadow"--that aspect of the personality that is least developed and exists at a primitive stage (Myers, 1980a).

When reading a description of a type, the MBTI seems close to mirroring astrological horoscopes. Proponents are well aware of the potential for that criticism. Brownsword (1987) includes a chapter in his book titled "Beyond the Horoscope" in which he argues that the expansion of the theory into dominant, auxiliary, tertiary, and shadow makes it possible to "go beyond the preferences and written descriptions" to "understand behavior" (page 86). As Myers (1980a) explains, the descriptions exemplify types at their best--"normal, well-balanced, well-adjusted" (page 84). Understanding the dominant and auxiliary functions and the "shadow" enables psychologists to understand types at all stages of development.

Temperament Type Theory

Classifying people into four types of behavior began as early as 450 B.C. with Hippocrates' description of temperaments--choleric, a type quickly aroused by emotion; phlegmatic, the cool, impassive type; melancholic, the serious type; and the impulsive, excitable sanguine type. In the Middle Ages it was thought that there were four natures influenced by four spirit types. Among the American Indians the four Spirit Keepers paralleled the concept of four temperament types. Such holistic approaches to observing the patterns in human behavior were dismissed by psychology until resurrected by Kretschmer (1925) and Spranger (1926).

More recently Keirsey (1987) and Keirsey and Bates, (1984), a clinical psychologist, noted the tendency of behavior to sort into four basic patterns he called temperaments. This insight tied directly to the patterns observable in the MBTI typology. While derived from a different tradition, Keirsey's temperament approach utilizes the MBTI scoring system to identify the types (Giovannoni, Berens, and Cooper, 1987).

Defined as a consistent personal set of actions observable throughout the lifecycle, temperament types as introduced by Keirsey and Bates (1984) reinterpret Jung's theory of psychological type and the MBTI formulation to

highlight temperament. The Keirsey conceptual framework differs from the Jung-Myers approach in several ways.

The Jung-Myers approach relies on the differences between extroverts and introverts in determining the dominant and auxiliary functions. Such an approach leads to identifying four kinds of people--Intuitive Thinking (NT) types, Intuitive Feeling (NF) types, Sensing Feeling (SF), and Sensing Thinking (ST) types. Keirsey (1987 and Keirsey and Bates, 1984) disagrees with this classification since it depends in part on the power of the extroversion/introversion scale--a scale he sees as being less predictive of behavior across situations. Instead, Keirsey follows the concepts of Kretschmer and lumps extroverts and introverts together finding the key similarities and differences in the other scales (Giovannoni, Berens, and Cooper, 1987). Thus, Keirsey's temperament types are: Intuitive Thinkers (NT), Intuitive Feelers (NF), Sensing Perceivers (SP), and Sensing Judgers (SJ).

Keirsey and Bates (1984) also disagree with the Jung-Myers concept of how personality structure emerges. The Jung-Myers view is that the attitudes and functions interact or integrate to create types. Keirsey prefers the "principle of differentiation" (page 29)--that is, the

personality structure begins with temperament and then grows through individuation into one of the sixteen types.

According to Keirsey and Bates (1984), temperament "places a signature or thumbprint on each of one's actions, making it recognizable as one's own" (page 27).

Temperament type is characterized as "unique and very distinct, not overlapping" (page 10) with each type representing "intellectual, motivational, emotional and social traits" (page 16).

Keirsey connects temperament to behavior by reasoning that "behavior is the instrument for getting us what we must have" (Keirsey and Bates, 1984, page 30). Thus behavior relates to satisfying needs which leads to activity patterns "organized around core themes or values specific to each temperament" (Giovannoni, Berens, and Cooper, 1987). Kroeger and Thuesen (1988) suggest that temperament types as defined by Keirsey are "useful because they afford the widest base of accurate behavioral predictions" (page 50).

In addition to developing the temperament type approach to personality structure, Keirsey and Bates (1984) introduced a shorter measure which results in identification of the same 16 types as the MBTI and the four temperament types. However, The Keirsey Temperament Sorter can be administered and scored by anyone whereas the MBTI can be administered and scored only by a psychologist

trained in the procedures. Perhaps because of its relatively recent introduction or perhaps because it was developed by a clinician, no psychometric studies have been conducted on the measure.

Temperament Type According to Keirsey

In the 1984 version, the temperament types were given mythological names as an aid in recognizing and interpreting the descriptions. Zeus commissioned four Greek gods to make men more like gods--Prometheus to give man science, Apollo to give man a sense of spirit, Dionysus to give joy, and Epimetheus to convey duty. These mythological names correspond to the four temperaments (Promethians to NT, Apollonians to NF, Dionysians to SP, Epimetheians to SJ).

More recently, Keirsey (1987) drops the mythological names and characterizes the temperament types as:

Rationals/Intuitive Thinkers (NT)/Abstract Pragmatists

- logical types motivated by the search for knowledge.
- approximately 12 percent of the population.
- defined as "analytic-curious-efficient-inventive-logical" (Keirsey, 1987, page 10).
- identified as analysis-oriented, competence-seeking personality.
- subsumes four personality types (see Figure 3).

INTP

Quiet, reserved, brilliant in exams, especially in theoretical or scientific subjects. Logical to the point of hair-splitting. Interested mainly in ideas, with little liking for parties or small talk. Tend to have very sharply defined interests. Need to choose careers where some strong interest of theirs can be used and useful.

Live their outer life more with intuition, inner more with thinking.

INTJ

Have original minds and great drive which they use only for their own purposes. In fields that appeal to them they have a fine power to organize a job and carry it through with or without help. Skeptical, critical, independent, determined, often stubborn. Must learn to yield less important points in order to win the most important.

Live their outer life more with thinking, inner more with intuition.

ENTP

Quick, ingenious, good at many things. Stimulating company, alert and outspoken, argue for fun on either side of a question. Resourceful in solving new and challenging problems, but may neglect routine assignments. Turn to one new interest after another. Can always find logical reasons for whatever they want.

Live their outer life more with intuition, inner more with thinking.

ENTJ

Hearty, frank, able in studies, leaders in activities. Usually good in anything that requires reasoning and intelligent talk, such as public speaking. Are well-informed and keep adding to their fund of knowledge. May sometimes be more positive and confident than their experience in an area warrants.

Live their outer life more with thinking, inner more with intuition.

Figure 3: Temperament Type/Rationals

Adapted from: Myers, Isabel Briggs (1980). Introduction to Type. Palo Alto, CA: Consulting Psychologist Press.

Idealists/Intuitive Feelers (NF)/Abstract Cooperators

- romantics motivated by idealism and spiritual pursuits.
- approximately 12 percent of the population.
- defined as "imaginative-sympathetic-linguistic-enthusiastic-subjective" (Keirsey, 1987, page 11).
- identified as "Identity-Seeking Personality" (Keirsey, 1987, page 90).
- subsumes four personality types (see Figure 4).

Artisans/Sensing Perceivers (SP)/Concrete Pragmatists

- hedonic types motivated by freedom and action.
- approximately 38 percent of the population.
- defined as "artistic-athletic-cheerful-mechanical-realistic" (Keirsey, 1987, page 10).
- identified as the "Sensation-Seeking Personality" (Keirsey, 1987, page 20).
- subsumes four personality types (see Figure 5).

Guardians/Sensing Judgers (SJ)/Concrete Cooperators

- belongs motivated by duty and responsibility.
- approximately 38 percent of the population.
- defined as "dependable-factual-painstaking-routinized-thorough" (Keirsey, 1987, page 10).
- identified as the "Security-Seeking Personality" (Keirsey, 1987, page 45).
- subsumes four personality types (see Figure 6).

The temperament theory reinterprets Maslow's theory of motivation by positing the replacement for the top levels

INFP

Full of enthusiasms and loyalties, but seldom talk of these until they know you well. Care about learning, ideas, language, and independent projects of their own. Apt to be on yearbook staff, perhaps as editor. Tend to undertake too much, then somehow get it done. Friendly but often too absorbed in what they are doing to be sociable or notice much.

Live their outer life more with intuition, inner more with feeling.

INFJ

Succeed by perseverance, originality and desire to do whatever is needed or wanted. Put their best efforts into their work. Quietly forceful, conscientious, concerned for others. Respected for their firm principles. Likely to be honored and followed for their clear convictions as to how best to serve the common good.

Live their outer life more with feeling, inner more with intuition.

ENFP

Warmly enthusiastic, high-spirited, ingenious, imaginative. Able to do almost anything that interests them. Quick with a solution for any difficulty and ready to help anyone with a problem. Often rely on their ability to improvise instead of preparing in advance. Can always find compelling reasons for whatever they want.

Live their outer life more with intuition, inner more with feeling.

ENFJ

Responsive and responsible. Feel real concern for what others think and want, and try to handle things with due regard for other people's feelings. Can present a proposal or lead a group discussion with ease and tact. Sociable, popular, active in school affairs, but put time enough on their studies to do good work.

Live their outer life more with feeling, inner more with intuition.

Figure 4: Temperament Type/Idealists

Adapted from: Myers, Isabel Briggs (1980). Introduction to Type. Palo Alto, CA: Consulting Psychologist Press.

ISFP

Retiring, quietly friendly, sensitive, modest about their abilities. Shun disagreements, do not force their opinions or values on others. Usually do not care to lead but are often loyal followers. May be rather relaxed about assignments or getting things done, because they enjoy the present moment and do not want to spoil it by undue haste or exertion.

Live their outer life more with sensing, inner more with feeling.

ISTP

Cool onlookers, quiet, reserved, observing and analyzing life with detached curiosity and unexpected flashes of original humor. Usually interested in impersonal principles, cause and effect, or how and why mechanical things work. Exert themselves no more than they think necessary, because any waste of energy would be inefficient.

Live their outer life more with sensing, inner more with thinking.

ESFP

Outgoing, easygoing, accepting, friendly, fond of a good time. Like sports and making things. Know what's going on and join in eagerly. Find remembering facts easier than mastering theories. Are best in situations that need sound common sense and practical ability with people as well as with things.

Live their outer life more with sensing, inner more with feeling.

ESTP

Matter-of-fact, do not worry or hurry, enjoy whatever comes along. Tend to like mechanical things and sports, with friends on the side. May be a bit blunt or insensitive. Can do math or science when they see the need. Dislike long explanations. Are best with real things that can be worked, handled, taken apart or put back together.

Live their outer life more with sensing, inner more with thinking.

Figure 5: Temperament Type/Artisans

Adapted from: Myers, Isabel Briggs (1980). Introduction to Type. Palo Alto, CA: Consulting Psychologist Press.

ISFJ

Quiet, friendly, responsible and conscientious. Work devotedly to meet their obligations and serve their friends and school. Thorough, painstaking, accurate. May need time to master technical subjects, as their interests are not often technical. Patient with detail and routine. Loyal, considerate, concerned with how other people feel.

Live their outer life more with feeling, inner more with sensing.

ISTJ

Serious, quiet, earn success by concentration and thoroughness. Practical, orderly, matter-of-fact, logical, realistic and dependable. See to it that everything is well organized. Take responsibility. Make up their own minds as to what should be accomplished and work toward it steadily, regardless of protests or distractions.

Live their outer life more with thinking, inner more with sensing.

ESTJ

Practical realists, matter-of-fact, with a natural head for business or mechanics. Not interested in subjects they see no use for, but can apply themselves when necessary. Like to organize and run activities. Tend to run things well, especially if they remember to consider other people's feelings and points of view when making their decisions.

Live their outer life more with thinking, inner more with sensing.

ESFJ

Warm-hearted, talkative, popular, conscientious, born cooperators, active committee members. Always doing something nice for someone. Work best with plenty of encouragement and praise. Little interest in abstract thinking or technical subjects. Main interest is in things that directly and visibly affect people's lives.

Live their outer life more with feeling, inner more with sensing.

Figure 6: Temperament Type/Guardians

Adapted from: Myers, Isabel Briggs (1980). Introduction to Type. Palo Alto, CA: Consulting Psychologist Press.

of Maslow's hierarchy of needs (self esteem and self-actualization) with one for each temperament type. After needs related to physical aspects, security, and love are satisfied the drive for self-esteem and self-actualization takes the following forms according to temperament type (Giovannoni, Berens, and Cooper, 1987):

- Intuitive Thinkers--knowledge and competence
- Intuitive Feelers--self-realization and integrity
- Sensing Perceivers--variation and impact
- Sensing Judgers--responsibility and stability

Comparison of Approaches: Jung-Myers and Keirsey

As Giovannoni, Berens, and Cooper (1987) explain in comparing the conceptual frameworks:

- the Jung-Myers approach hypothesizes mental processes to explain actions. Keirsey's temperaments are constructs of activity patterns.
- the Jung-Myers concepts are a "dynamic parts model" where each function or attitude has an identity that combines and interacts to create type. Keirsey's concept of temperament types is a "systemic model which focuses on the configuration of the whole" (page 13).
- The Jung-Myers approach provides the tools for dealing with developmental aspects of personality type development. Keirsey focuses not on the "intrapsychic" but on the "interpsychic"--that is on the "communication aspects of

behavior between rather than within psyches" (page 14).

Because of Keirsey's focus on activity patterns and communication aspects associated with temperament types, the parsimony of the conceptual framework, and ease of administration and scoring of the Keirsey Temperament Sorter (Appendix A), this measure lends itself to consumer behavior research into how types differ in their response to and structuring of the marketing environment.

Linking Temperament Type Theory with Processing Advertising Messages

If, as Zajonc (1980) contends, affective reactions such as preferences mirror the self and, as Batra and Ray (1983) suggest, consumers in low involvement situations make choices based on overall affect, then: Do ads have the "thumbprint" characteristic of temperament types? Is it possible for the various temperament types to recognize an ad as slanted to their own interests and needs? Does an ad appeal "belong" to a temperament type?

Based on very preliminary qualitative-style research McBride, Cline, and Miller (1987) propose a "theory of psychological type congruence." The theory suggests that one way an individual categorizes objects is by personality type--that is "whether from some intrinsic characteristic or from the way the object has been positioned in the subject's mind" (page 12) the object belongs to a type.

The researchers hypothesize that "the receiver will prefer a presentation where the type of the object is congruent with his own perception of that object's type" (page 13).

Carlson in a series of seven studies (Carlson, 1980 and Carlson and Levy, 1973) found significant differences between opposite types in digit span, memory for faces, interpreting facial expressions of emotions, affective memories, interpersonal closeness versus distance of thematic content, emphasis on cognitive clarity versus vividness of feeling, the nature of personal constructs and style of self-description given an imaginary role. Her studies support the contention that personality types differ in their perception of the outer world and the construction of their inner world.

It follows that differences may exist between types in the way they process the complex, ambiguous, and voluminous advertising stimuli. If types with different personality structures interpret stimuli differently, then differences in affective response may mirror an interaction between personality structure and ad appeals/executions. Such an interaction should be especially apparent in low involvement, peripheral processing situations.

However, McBride, Cline, and Miller (1987) assert that while type theory has found acceptance in education, business, health professions, and clinical psychology it

business, health professions, and clinical psychology, it has been neglected by advertising.

Measurement Problems. Golden and Johnson (1983) looked at one aspect of cognitive style--sensory preference--and its impact on response to advertising given thinking versus feeling appeals. Sensory preference is defined as a stated preference for receiving verbal information visually, aurally, or both. They concluded that thinking and feeling ads interact with sensory preference and product stimuli to produce communication effects.

Ross (1983) in response to their paper raises some interesting and important questions regarding this research direction. He notes a "confounding between the stimuli and the measurement procedures" in that right-brained/aural and left-brained/visual components are measured by verbal protocols that are inherently left-brained. Ross also points out the demand characteristics created by the dichotomy "thinking ads" versus "feeling ads." He asks, "Are not thinking ads more socially desirable" and thus more likely to be reported as likable, informative, useful, and evoking higher purchase intentions"? On the conceptual level he asks, "can an advertisement be high in both 'thinking' and 'feeling'?" He summarizes his numerous criticisms of the research with the following question: "...is the 'thinking'/'feeling' distinction so inextricably confounded with the message itself, the product, and so on,

that it doesn't make sense to separate these components for experimental inquiry?" Finally Ross leaves the door open for further research with the observation that the problem lies with unresolved measurement issues.

Moore (1985) examined cognitive style and advertising type in relation to responses to advertising. He operationalized cognitive style using the Myers-Briggs Type Indicator, advertising type as concrete versus abstract for radio ads, and used affective response, Aad and attitude-toward-the-brand as dependent measures. He hypothesized an interaction between cognitive style and ad type however he found that Aad and attitude-toward-the-brand were unaffected by differences in cognitive style.

It is important when interpreting this research to question the researcher's classification of ads into "concrete" and "abstract." Such a priori classifications reflect the researcher's schema which may or may not parallel the schema of subjects. Preston (1987) points out that such pairs are inherently flawed in that they fail to reflect the complexity of advertising claims.

Linking Temperament Type with Attitude-toward-the-Ad

Zajonc (1980) identifies two "forms of unconscious processes": 1) processes "entirely under the influence of affective factors without the participation of cognitive

processes" (page 172), and 2) a process of overlearned automated information processing where "cognitive acts" are collapsed "into larger molar chunks that may conceal their original component chunks" (page 172). In addition Zajonc sees the possibility that other forms of unconscious processes exist "in which the separation between affect and cognition prevents the individual from apprehending the potential connection between them" (page 172).

Identification of such unconscious processes begins with identification of patterns of affective response that can be paired with specific cues in stimuli. While personality characteristics are unsuitable as variables related to specific consumer choices, identifying individuals as discrete types provides insight into the way consumers approach, modify, simplify, and react to the environment. This study uses the advertising situation to investigate consumers as types--that is as individuals differentially oriented toward stimuli.

This research investigates one element of the emotional criteria used by consumers to discriminate between the persuasive messages they will attend and the depth of the processing. In so doing it attempts to define part of the experiential and subjective state of consumption associated with symbolic meanings and hedonic response. Symbolic meanings appear in the verbal, visual,

emotional, and non-verbal aspects of messages. What determines the hedonic response?

For the initial advertising contact, the answer may lie in the preferences formed prior to any cognitive processing--a possibility suggested by Zajonc (1980) and defined by Batra and Ray (1983) as "precognitive, mere-exposure-based affect." In initial processing situations cues in the ad act as triggers for "invok[ing] guiding schemata or inferences" (according to Petty's and Cacioppo's [in press] description of peripheral processing).

This research hypothesizes that predispositions in the form of temperament type provide the guiding schemata for decisions on which ad to attend and which processing strategy to employ. The schemata associated with temperament type interacts with the verbal, visual, and nonverbal content of the ad to produce an approach-avoidance reaction--a concept similar to that described for products by Batra and Ray (1985) in their hedonic component of the "percentage contribution model." That approach-avoidance reaction can be captured by the variable attitude-toward-the-ad (ad liking). Affective response to the ad--attitude-toward-the-ad--has three components: 1) overall attitude-toward-the-ad, 2) response to executional elements of the ad and 3) response to the emotional content.

Specifically, this research seeks to determine if individual differences as an antecedent of Aad can be expanded beyond the present definition of simple positive or negative outlook on life. The substitute offered is the complex bundle of traits operationalized as temperament type.

Implications of Linking Temperament and Aad

According to Allport (1961):

"temperament refers to the characteristic phenomena of an individual's emotional nature, including his susceptibility to emotional stimulation, his customary strength and speed of response, the quality of his prevailing mood, and all the peculiarities of fluctuation and intensity of mood, these phenomena being regarded as dependent upon constitutional make-up and therefore largely hereditary in origin" (page 34).

Thus, temperament reflects the characteristic way an individual approaches, modifies, simplifies and reacts to the environment. In this light, predispositions in the form of temperament can be seen as an essential part of the emotional criteria used by consumers to determine which ads to attend and which to ignore.

Relating that view to the the model of antecedents in the formation of attitude-toward-the-ad, temperament types represent a complex bundle of traits likely to impact the model at two points:

1) in the central processing section, the ad perception subsystem.

2) in the peripheral processing section, the mood subsystem.

This research investigates the link between temperament type and the formation of Aad. If such a link exists, then each type will exhibit a characteristic profile of affective response to ads of contrasting types.

Based on brain lateralization theory and research and using "psycho-physiological recording procedures", Cacioppo and Petty (1982) examined individual differences in responding to persuasive messages. He found a relationship between hemispheric activation and cognitive response "regardless of topic, replication, position" or timing. Cacioppo sees this as in accord with Hansen's (1981) hypothesis that "some individuals are more likely than others to rely on right-brain processes" (page 33).

This research attempts to identify habitual response pattern in terms not of brain lateralization but of temperament type. Such an identification of consumers by types with typical response patterns has practical and theoretical implications.

From the Marketing Research Viewpoint

Much of advertising research is focused on the interests of the practitioner. Most often results are couched in terms of insights into audience behavior or as

new and improved testing criteria for ads or as tools for advertising planning.

The "thumbprint" of temperament type may provide refinements in advertising planning and testing. Personal values produce a "particular choice criteria for a product class" that is reflected in the positioning of a brand in the belief system of the consumer. Only three or four attributes rather than all the product's attributes determine this positioning. Thus, personal values determine the choice criteria used in evaluation of specific products within a product class. While values have only an indirect affect on purchase intention, values can still be a useful market segmentation scheme in designing products and writing advertising (Howard and Woodside, 1984, page 7).

Insights based on temperament type can assist practitioners in creative and strategic planning keyed to affective consumer response. Certainly such a formulation would add to the model of how advertising works, specifically the impact of temperament type as a mediator in the formation of Aad through the ad perception and mood subsystems.

From the Consumer Research Viewpoint

As Holbrook (1986) points out, the practitioners viewpoint is not the only way to assess advertising

research results. He suggests that consumer research is more interested in the perspective of consumers and the entire experience of buying and consuming. He sees the importance of such a focus given that "the consumption experience constitutes as important component of social welfare and the quality of life" (page 22). Emotion, he contends, is central to the consumption experience. In setting an agenda for research Holbrook calls for a research at the macrolevel of analysis--that is examining consumption over a range of ads, products or objects rather than a microlevel examinations for a specific ad, brand or item. The goal of macro analysis is to find "general patterns of consumption behavior" (page 43).

CHAPTER III

METHODS AND PROCEDURES

Theoretical Rationale

This study is designed to investigate the relationship between temperament type and the evaluation of advertising. Temperament type is viewed as a classification relating to personal values as they evolve out of dispositional factors. It is hypothesized that such characteristic patterns also indicate differences between groups in their orientation toward stimuli. The stimuli in this case is advertising. The ads in the study have been classified into three categories: 1) ads that refer to the product's attributes, 2) ads that refer to the status or social context of the product user, and 3) ads that refer to the emotional or sensual pleasure of owning or using the product.

The theoretical framework of the research is a model of the antecedents of attitude-toward-the-ad (or ad liking). The model specifies antecedents in both central and peripheral processing modes. Individual differences are hypothesized to impact on the ad perception subsystem in the central processing mode and the mood subsystem in the peripheral processing mode. However, specific individual

differences and their impact on the formation of ad liking have not thus far been identified.

The purpose of this research is to investigate temperament type as an individual difference likely to influence the formation of attitude-toward-the-ad. The research question is:

Do individuals classified into the four temperament types exhibit characteristic response patterns to advertising messages representing three message and execution strategies?

Hypotheses

The overall hypothesis of this study is that people classified into four mutually exclusive temperament types will exhibit a characteristic profile of affective response to ads. Recent research tentatively supports that contention.

In a study of 450 restaurant diners Boote (1981) found support for the conclusion that brand preference could not be differentiated based on demographic characteristics but could based on value orientations. In that study, the personal values were food orientation (a quality factor), rational orientation (related to neatness, tidiness, orderly ways), leisure orientation, sociability-novelty, conservative-insular, deliberateness, and individualism. Several of these general values parallel temperament types.

Mizerski and Settle (1979) in an experimental investigation of inner- and other-directed types found that other-directed individuals tend to be more persuasible by advertising, have a preference for social information about products, but do not exhibit a preference for certain advertising appeals. Specifically, other-directed subjects did not prefer objective or social appeals more than inner-directed subjects.

The inner-directed individuals parallel descriptions of the Realists and Idealists of type theory in that they base behavior on inner standards. The other-directed individuals parallel the Artisans and Guardians of temperament type theory and base behavior on group values. While conflicting findings were difficult to interpret, Mizerski and Settle (1979) suggest that the two types might act similarly but for different reasons. They conclude that "an individual's social character has little to do with response to advertising, but does exert a significant effect on information preferences"--that is on preferences for additional objective information.

Major (1987) used a "four-types-of-people" approach to study the psychological processing of advertising for a symbolic product. Although her groups are not theoretically derived as are Keirsey's temperament types, there are parallels. She operationalized the four groups as:

"Functionalists"; "Imitators" (other directed, status conscious conformists); "Quality Seekers"; and "Differentiators" (inner directed, independent, self-confident innovators). Functionalists like the Artisans are concerned with function as it relates to goal satisfaction; Imitators like the Guardians are concerned with social belonging; Quality Seekers share with Rationals a concern for product quality; and Differentiators share a drive for innovation with Idealists.

In looking for communications effects based on type, Major hypothesized that:

- Functionalists interpret the validity of the product as a solution to their actual needs and find other-directed appeals uninvolving.
- Imitators prefer structured messages providing straight forward solutions to problems and attend to messages with motivational appeals providing social behavior guidance.
- Quality-Seekers prefer highly structured messages without emotional appeals.
- Differentiators prefer unstructured messages allowing for interpretation and respond to emotional appeals.

Her findings support the hypotheses for Imitators and Functionalists but not for Differentiators and Quality-Seekers. She suggests that the "restricted nature of the respondents" rather than "theoretical misspecification" (page R36) produced these results. That contention

parallels the Keirsey findings that Rationals and Idealists are rarer than the other two types in the population.

Interpolating from Major's findings and Keirsey's definition of temperament types, the following hypotheses specify an expected characteristic profile of affective response for each temperament type:

Hypothesis 1: There will be a statistically significant difference between Artisans, Guardians, Realists, and Idealists in ad liking.

Hypothesis 2: There will be a pattern of response to ad types characteristic of each temperament type. Specific hypothesized patterns based on an interpretation of temperament type theory are as follows:

- Artisans can be expected to exhibit a focus on utility as it relates to goal satisfaction. For this type, the message represents attribute information, either in terms of utilitarian claims or sensory (hedonic) cues. The affective pattern will show a preference for utilitarian and hedonic ad appeals and executions based on the Aad index.
- Guardians can be expected to exhibit a focus on social symbolism and a desire for social acceptance. For this type, the message represents social information including status cues and behavior with the potential for imitation. The affective pattern will show a preference for symbolic

ad appeals and executions based on the Aad index.

- Rationals can be expected to exhibit a focus on functional design and quality. For this type, the message represents attribute information sufficient to make his/her own decision. The affective pattern will show a preference for utilitarian appeals and executions based on the Aad index.

- Idealists will exhibit a focus on imaginative and innovative images. For this type, the message represents an opportunity to structure his/her own images within the context of the ad. The affective pattern will show a preference for hedonic and symbolic appeals and executions based on the Aad index.

Table 1 graphically shows the expected pattern for each temperament type.

Support for Hypothesis 1 requires a significant main effect for temperament type on Aad. Support for Hypotheses 2a through 2d requires a significant interaction between temperament type and ad type and an examination of the simple effects--each temperament type in relation to each ad type.

Definition of Variables

Dependent Variables

The dependent variable, attitude-toward-the-ad (Aad) is generally defined as ad liking. In this study, three

Table 1: Hypothesized Response Pattern for Ad Liking

TEMPERAMENT TYPE	AD TYPE		
	Utilitarian	Symbolic	Hedonic
Artisans	X		X
Guardians		X	
Idealists		X	X
Rationals	X		

dimensions have been defined and associated with scalar items: overall liking for the ad, liking of the ad execution, and liking of the emotional content of the ad.

Measurement Problems. Since Aad is by definition pure affect (liking), measuring the response presents difficulties. How can a right-brained, non-verbal response be collected in verbal terms suitable for analysis and interpretation? Still, subjects are likely to be able to indicate liking (the approach-avoidance reaction) even if they cannot verbalize the reasons behind it.

Early studies of Aad used some measure of global Aad. More recent studies have pointed to the "multidimensional" nature of Aad and suggested that traditional measures are inadequate to assess the impact of emotional appeals and executions. Based on previous studies, researchers recommend "that researchers using bipolar scales to measure [Aad] select scales that capture the emotional responses as well as the 'utilitarian' response" (Hill and Mazis, 1986, page 165). This study uses a measure composed of a set of six scales, two relate to overall ad liking, two to ad execution (the cognitive dimension) and two to the emotional content (the affective dimension) of Aad.

Measurement Strategy. For this study attitude-toward-the-ad (Aad) is operationally defined by the following six bipolar seven-point adjective scales:

- 1) like-dislike
- 2) interesting-not interesting
- 3) lively-dull
- 4) amusing-unamusing
- 5) sensual-not sensual
- 6) heartwarming-cold

Selection of the adjectives for use in the measure reflects the current view that Aad is multidimensional in nature.

The first two bipolar adjective scales are based on research by Gardener (1983) and Mitchell and Olson (1977) and represent the traditional approach to measuring Aad--overall liking for the ad. The second two are based on research by Leavitt (1970); Wells, Leavitt and McConville (1971); Batra and Ray (1985); and Hill and Mazis (1986) and represent the ad execution component. The final two scales are based on research by Batra and Ray (1985) and Hill and Mazis (1986) and represents the emotional content component.

An index of each Aad component is formed by the sum of responses on each of the two scales referring to that component. Early studies of Aad using bipolar adjective scales used the mean as the response variable (for example, Mitchell and Olson, 1981). More recent studies have used the sum as the response variable (for example, Hill and Mazis, 1986). Thus, each index will vary from a minimum score of 2 to a maximum score of 14.

Independent Variables

Temperament Type. Frequently in research subjects are classified according to a simple bipolar scale of personality characteristics like thinking versus feeling. All personality traits and predispositions represent complex constructs that present measurement difficulties. Even well constructed measures oversimplify reality. However, the Myers-Briggs Type Indicator (MBTI) approach of crossing four bipolar traits--Extroversion (E)/Introversion (I), Sensation (S)/Intuition (N), Thinking (T)/Feeling (F), Judgment (J)/Perception (P)--to produce 16 personality types is superior to many personality measures in its attempt to model the complex personality structure.

Keirsey's (1987) reinterpretation of the MBTI approach to focus on temperament type employs a shorter measure convenient for advertising research because it can be administered in a few minutes and can be scored by any researcher. Keirsey gave permission for the use of his copyrighted measure in this study.

While scoring the Keirsey Temperament Sorter (Appendix A) classifies subjects into both the 16 personality types and the four temperament types, the measure is used in this study to form ex post facto groups based on temperament type. Thus the groups studied are self-selected and non-

equivalent. In the analysis these four temperament types are used as levels of the independent variable.

The temperament groups are defined as follows:

1) Artisans

Classified as Sensing Perceivers (SP), Artisans are outer-directed in that they rely on the messages of the senses to construct a fact-based reality. Artisans prefer to react to the world in a spontaneous, open way. They are identified as hedonic types and sensation seekers.

2) Guardians

Classified as Sensing Judgers (SJ), Guardians are like Artisans in that they are outer-directed but unlike Artisans in that they prefer a more structured and ordered lifestyle. Guardians are identified as belongers and security seekers.

3) Rationals.

Classified as Intuitive Thinkers (NT), Rationals are inner-directed--that is they rely on intuitive functions and inner resources to construct reality. Rationals use logic to mediate between the inner reality and the outer world. They are identified as analytical types and competence seekers.

4) Idealists.

Classified as Intuitive Feelers (NF), Idealists are like Rationals in that they are inner-directed but unlike Rationals they use people-oriented values to mediate

between the inner reality and the outer world. Idealists are characterized as identity seekers and innovators.

Scoring of Keirsey's Temperament Sorter. The 70 questions on Keirsey's Temperament Sorter are forced choice question that must be answered using one of two answers provided (either "a" or "b"). Ten of the questions relate to the Extroversion-Introversion scale, 20 question each relate to the remaining three scales: Intuition-Sensing, Thinking-Feeling, and Judging-Perceiving. The scoring form provided (Figure 7) shows the correspondence between question number, answer choice, and preference scale. Using the scoring form, choices between the "a" and "b" answers are recorded and summed to indicate the temperament classification. In this study, ties are deemed as unclassifiable but a simple majority of answers results in classification. Thus, the classification does not distinguish between those who indicate a strong preference on a scale (all or nearly all answers corresponding to one of the characteristics) and those who indicate a weak preference (answers more balanced between choices).

Ad Type. The second factor in this study is ad type--a frequent variable in advertising research. Edell and Staelin (1983) found that the type of claim made (in their research, objective, subjective or characterization) had a significant effect on the processing of information in ads

Enter a check for each answer in the column for a or b

Directions for Scoring

- Figure 7: Keirsey Temperament Sorter Scoring Scheme**

Keirsey, David (1987). Portraits of temperament. Del Mar, CA: Prometheus Nemesis Books.

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and that these differences affected brand attitudes and purchase intentions.

For this study ads from magazines targeted by age and sex to the subject group were used. Zielske (1982) suggests that magazine reading as opposed to watching television is more left-brained and that this effect may carry over to the ads regardless of their classification as thinking or feeling.

Hirschman (1986) found that all-verbal advertising was associated with utilitarian/rational perceptions and all-visual advertising was associated with familiarity perceptions. To avoid introducing the effect into this research, the ads selected were balanced between visual versus verbal execution within product types.

It is common practice to classify ads according to bipolar concepts such as thinking versus feeling, rational versus emotional, or abstract versus concrete. Such a priori classifications substitute the researcher's schema for the subject's response. These two-way categories oversimplify today's advertising environment and are unrealistic given the complexity and sophistication of ads. Emotional content exists in all ads given the context, models, non-verbal, visual and verbal content. Preston (1987) in a review of concept pairs often used in advertising research concluded that all such pairs are equally deficient.

To avoid such deficiencies, this research classifies ads according to overall appeal transmitted to the receiver through visual, verbal, and non-verbal content. The ad types are defined as follows:

1) Utilitarian Ads

Ads that refer to physical, tangible features and performance of the product through appeals and execution (considering the headline, visual, and copy).

2) Symbolic Ads

Ads that refer to the nature or characteristics of the consumer or the social context of the consumer/product user through appeals and execution (considering the headline, visual, and copy).

3) Hedonic Ads

Ads that refer to the emotional satisfaction or sensual pleasures resulting from owning or using the product through appeals and execution (considering the headline, visual, and copy).

Qualifying Ads. To avoid researcher's bias in the selection of ads for use in this study, ads were selected by a panel demographically similar to study subjects. Because no ad is likely to be a pure type and, as Preston (1987) argues, no dichotomy captures the range of possibilities in ads, the procedure for qualifying stimuli

provides a set of test ads grounded in advertising reality as interpreted by the population tapped in this research.

As a first step, the researcher located over 100 ads that could clearly be identified by the definitions of utilitarian, symbolic or hedonic ads. At this point no restriction was placed on product category. All ads came from current magazines targeting the general age and demographics of the subjects.

From this collection of ads, the researcher selected twenty-four ads representing five product categories-- credit cards, food products, cosmetics, fashion, and home products. Ads were photocopied and randomly sorted for presentation to the panel.

The presentation was made during a class period of an apparel production lab to 11 female college students. Students were informed that participation was voluntary but an incentive was offered for participation--a one-dollar merchandise certificate redeemable at a local store.

In the briefing, packets containing an invitation to participate that outlined the project, instructions, the ads and scoring sheets were distributed (see Appendix B). The briefing consisted of:

- an overview of the project,
- a discussion of the definitions of utilitarian, symbolic, and hedonic ads including questions to ask regarding each ad during the classification task and key

words that could be applied to ads of each type.

- a step-by-step classification procedure.
- discussion of three practice ads--one of each type.

Specifically panel members were told to sort the ads in the packet into the three categories and record the results on the scoring sheets. They were instructed to consider the whole ad--headline, visual, and copy--in order to determine the overall appeal to the consumer. Further, they were instructed to disregard their personal reaction to the ad, product and brand and concentrate only on classifying the appeals in the ad. They were warned that classification must be mutually exclusive--that is, no ad was to be recorded under two classifications.

While the briefing was presented in class, the actual classification of the ads was done outside of class. Packets were returned at the next class period two days later.

Since the actual classification task was done individually, definitions for each ad type were reinforced at the top of each scoring sheet. All scoring sheets had 30 blanks so that there was no indication of how many ads were likely in any category.

The panel was not informed that there were an equal number of ads of each type in the packet (according to classification by the researcher). No subject duplicated

the exact classification of the researcher, an indication of how different cultural definitions can be between observers. It also indicates that panel members did not use test-taking strategies in classifying the ads.

Seven of the eleven panel member returned usable packets and scoring sheets. Those sheets were analyzed to determine the ads most frequently classified in each ad type category and infrequently classified in other categories. Agreement on certain ads across the panel indicated that these ads could be defined by category among demographically similar groups.

In the final selection of study ads product categories were considered. As Zaichkowsky (1986) points out, certain types of ads (informational versus non-informational) seem confounded by product type. She suggests testing the same product under different appeals. For the purposes of this research it would be most helpful to have three ads--one of each type--across product types. Such a condition eliminates the interference of product type in the response to the ad. However, some appeals are rarely used in certain product classes. For example, utilitarian appeals are never used to sell intangible products like fragrance. Finding perfectly matched ads is very difficult. A compromise selection of ads was made for this study. Product type categories were narrowed to lotion, fragrance, and fashion shoes using the panel selections.

All seven panel members agreed that the Shalimar fragrance ad was hedonic in type. Six panel members agreed on the utilitarian classification for the Vaseline ad and Joan & David fashion shoes ad and the hedonic classification for the Lubridern lotion ad. Five panel members classified the Gucci fashion shoe ad as symbolic in type and four agreed that the Gucci fragrance ad was symbolic.

While other individual ads attained full agreement as to type across the panel, the rationale for the final selection included consideration of the matching of ads across product type as to visual versus verbal ad execution, selection of contrasting ad types across product types, and representation of ads in each of three product classifications--utilitarian (lotion, skin moisturizer), symbolic (fashion shoes), and hedonic (fragrance).

Since the panel classification did not lead to a selection of ads such that all three ad types were represented in each product type, the researcher added three ads to the set. These ads for athletic shoes--one classified by the researcher as utilitarian (Rockport), one symbolic (Nike) and one hedonic (Reebok)--were intended to represent a product type with both utilitarian and symbolic aspects. Table 2 shows the final ad selection. Note that there are three ads in each ad type category and at least two ads in each product type category. See Appendix C for

Table 2: Ad Selection by Ad Type and Product Type

PRODUCT TYPE	Class	AD TYPE		
		Utilitarian	Symbolic	Hedonic
U	lotion	Vaseline	-	Lubriderm
H	fragrance		Gucci	Shalimar
S	shoe	Joan & David	Gucci	-
U&S	running shoe	Rockport	Nike Air	Reebok

Note: U=Utilitarian, S= Symbolic, H=Hedonic

copies of the nine study ads as they were presented in this study.

For both the ad qualifying and the data-gathering stages of this study, ads were photocopied and thus presented as black and white representations regardless of the actual ad execution in the magazine context. While this does alter the naturalism of the presentation, it does remove certain ad execution factors (color, for example) from consideration. Photocopying the ads was necessary for both practical and research reasons. The costs involved in making 150 test packets with actual ads would have been prohibitive. Simplifying and leveling the stimulus across all ads in the study set can be seen as a way to limit noise in the experiment while focusing reactions on the element of interest--the appeal as capsulized in ad type.

In this study, ad type is a within-subjects factor--the same experimental units (subjects) measured on different occasions. Presentation of each stimulus ad can be seen as a different response occasion.

Design of the Investigation

The focus of this study is on affect at initial contact with the ads. Specifically, do groups differing in temperament type correspondingly differ in their liking for ads of contrasting types. To study this question a block design is employed. That is, each treatment is included in

each block--thus, each block is a replication of the experiment (Neter, Wasserman, and Kutner, 1985).

In this study, each individual subject is considered an experimental unit and as a blocking variable. Employing local control reduces experimental error variability. The objective is to make each block homogeneous in relation to the dependent variable while making different blocks as heterogeneous as possible with respect to the dependent variable. In this case the homogeneity of an individual's response is contrasted with the heterogeneity of responses from different individuals.

In a block design, sources of variability between subjects is excluded from experimental errors--subjects are used as their own controls. However, there is a potential serious disadvantage if there is interference from position in treatment order (higher ratings for ads at beginning or end of sequence) or carry over effect from preceding treatments. To minimize these disadvantages, treatment order should be randomized for each subject independently--a condition not met in this study. However, carry over and treatment order effects do not seem to be present in this data.

The analysis investigates a predicted characteristic pattern of ad preferences for each temperament type. Keirse's temperament types form ex post facto groups in an

analysis of variance study. Multivariate analysis of variance (MANOVA) is used to study group differences across a range of advertising messages in which temperament type is a between-groups factor based on observed differences among units of analysis (people) and ad type a within subjects factor.

The study is a fixed effect model in that conclusions pertain to factor levels specified and not to a population of factor levels of which these levels are a sample. The fixed effects model assumes that probability distributions differ only in respect to means and that means reflect essential differences in factor level effects.

Statistical Analysis Model

Multivariate analysis (Huck, Cormier and Bounds, 1974) is appropriate when there is simultaneous interest in two or more dependent variables. This study can be characterized as having 1) distinctive dependent and independent variables; 2) more than one dependent variable and more than one independent variable; 3) expected interaction among the independent variables (the relationship is multiplicative rather than additive); and the dependent variables are treated as interval data. In such cases A Guide for Selecting Statistical Techniques for Analyzing Social Science Data (Anderson, Klem, Davidson, O'Malley, and Rodgers, 1981) recommends treating

independent variables as nominal and testing for "pre-specified relationships" (page 24) using multivariant analysis of variance (MANOVA). Assumptions for the dependent variables are: observations are independent ["the value of a variable for one case in no way affects the value of the variable for any other case" (page 2)], observations are normally distributed, and there is "homogeneity of variance" (page 2). Sometimes the statistical independence of independent variables is also assumed.

For this study, there is simultaneous interest in the facets of attitude-toward-the-ad--overall ad liking, liking of ad execution, and liking of emotional content. MANOVA improves the "chance of discovering changes produced by different treatments and interactions" (Tabachnick and Fidell, 1983, page 222) because such procedures may reveal patterns of differences not shown by a series of separate ANOVAs. Additionally, MANOVA protects against Type I error--that is it reduces the risk of rejecting the null hypothesis by mistake.

The overall multivariate null hypothesis--specifically, that groups do not differ--assumes that the population mean vector (a vector formed with means for each dependent variable) for each temperament type is equal. The multivariant approach means that initial analysis

results will pertain to the set of dependent variables and will be "adjusted for correlations among the dependent variables" (page 178). If, as the researcher hopes, the hypothesis of equal means can be rejected, then an examination of means in each cell may reveal the hypothesized characteristic response pattern for each temperament type. Specifically, the examination of means will be used to determine how the groups differ from one another on the dependent variables. Current computer statistical packages allow the researcher to perform all the necessary analyses.

Main Effect: Temperament. The research question asked in the main effects test for group differences related to temperament is:

Holding all else constant, does belonging to a different temperament type change attitude-toward the ad?

The statistical null hypothesis states:

Ho: Temperament type has no systematic effect on the optimal linear combination of dependent variables.

If the hypothesis can be rejected, the researcher can conclude that temperament type effects the attitude-toward-the-ad component.

Main Effect: Ad Type. The research question in the main effects test for group differences related to ad type is: Holding all else constant, does a difference in ad type change attitude-toward-the-ad?

The statistical null hypothesis is stated:

Ho: Ad type has no systematic effect on the optimal linear combinations of dependent variables.

If the hypothesis can be rejected, the researcher can conclude that ad type effects attitude-toward-the-ad component.

Interaction. The research question asked in the interaction effect test for group differences is:

Does the effect on attitude-toward-ad due to differences in temperament type vary with ad type?

The statistical null hypothesis is stated:

Ho: Temperament type and ad type taken together have no systematic effect on the optimal linear combination of dependent variables.

If the hypothesis can be rejected, the researcher can conclude that temperament type and ad type vary together to effect attitude-toward-the-ad. If an interaction is present, tests can be performed to explore the exact nature of this interaction by the construction of contrast statements based on the matrix algebra form of the hypothesis test and computer statistical package program statements.

Subeffects. Subeffects refers to specific comparisons that reveal specific group differences. Given significant main effects or interaction for independent variables with more

than two levels, subeffects assess the differences between levels of the factors. When comparisons are expected or planned comparisons and are stated as a priori hypotheses, appropriate contrast coefficients can be used to make the tests. The planned tests for this study are suggested by the expected pattern of response for each temperament type over contrasting ad types. Therefore, if significant interaction effects are present, then an investigation of individual groups X individual ad types interactions will be undertaken. This set of subeffects provides a profile of each group on each ad type. For each temperament type over each ad type, the research question asked in this test for group differences is:

Does the effect on attitude-toward-the-ad due to the difference in belonging to Artisans or Guardians or Rationals or Idealists temperament type vary with utilitarian or symbolic or hedonic ad type?

The statistical null hypothesis is stated:

Ho: Temperament type--Artisans or Guardians or Rationals or Idealists--taken with ad type--utilitarian or symbolic or hedonic--has no systematic effect on the optimal linear combination of dependent variables.

For each test where the hypothesis can be rejected, the researcher can conclude that for that temperament type attitude-toward-the-ad varies with that specific ad type.

Findings in this set of subeffects can be used to construct a profile of how each temperament type interacts with ad type in the formation of attitude-toward-the-ad.

Sampling Procedure

According to Sternthal (1986), males and females differ in what will persuade, in information seeking behavior, and in how they make decisions. Boote (1981) found that the value structure of males and females frequently vary. In a study of 4380 respondents, Schlinger (1982) found that sex, age, age and brand use have significant affects on post-test affective response to advertising. Seegmiller and Epperson (1987) investigated gender differences related to thinking-feeling preferences and found that males and females differ significantly in terms of their MBTI scores. Based on these research findings and because females make many of the consumption decisions for individuals and families, only female subjects are used for this study. Such a single-sex study eliminates sex differences variables as an influence on the dependent variable.

This study was conducted with a convenience sample of female college students. The students were recruited from introductory classes of textiles, clothing, and design classes at two southeastern universities through the

assistance of the class instructors. No incentive was offered for participation and subjects were fully informed that participation was voluntary. Human subjects forms were submitted and approved at both schools assuring proper procedures with subjects.

Both men and women students participated but only the women's responses are used in the analysis. In all 36 men and 158 women completed the measures. Of the women, 152 returned complete answer sheets where directions were followed and answers were legible.

The sample size was substantially reduced due to the scoring scheme employed in Keirsey's Temperament Sorter. Because an equal number of items are used for each of the four dimensions and because ties are considered in this analysis as unclassified, any subject unclassified on any one of the three dimensions used in this study was not used in subsequent analysis. For the initial analysis, 128 subjects were available. For the analysis with the revised temperament sorter, 103 subjects were available.

Considering the Keirsey and Bates (1984) estimates of the distribution of temperament types in the population--38 percent Artisans, 38 percent Guardians, 12 percent Rationals and 12 percent Idealists--a sample size of 100 would produce a distribution of types suitable for this study. The actual distribution of types within this particular sample was 12 Artisans, 23 Guardians, 61

Idealists, and 7 Rationals. The unexpected distribution may be explained by sex differences. Keirsey's distribution estimate refers to a male-female population. An all male sample could be expected to have more Artisans and Rationals, an all female sample could be expected to have more Guardians and Idealists (Keirsey, 1987).

The distribution can also be expected to be influenced by the classes sampled for this study--introductory classes in textiles, clothing, and design. Much of the research using the MBTI illustrates the connection between career choice and temperament type. In a study profiling textiles, clothing and design students using the MBTI, Kean, Mehlhoff, and Sorenson (1988) found that Intuitive Feeling types (Idealists) predominated. Thus, the distribution of temperament types in this study parallels expectations and can be explained as a natural gravitation of certain types to certain curricula.

Data Gathering Procedure

After the researcher was introduced to the class and the voluntary nature of participation was explained, answer sheets and test packets were distributed. Test packets consisted of the following sections:

- 1) the Keirsey Temperament Sorter.
- 2) a practice ad and sample measures.

3) nine randomized test ads each followed by the Aad measure.

A scan sheet was used to record responses on the Keirsey Temperament Sorter but an answer sheet was used for the scales of the dependent measure.

First subjects were asked transfer the code number of the answer sheet to the scan form for identification purposes. No names, social security number or other identifying codes were used.

Next subjects were instructed in how to take the Keirsey Temperament Sorter and record answers on the scan form. They were asked to stop after completing this phase for further instructions.

For the next phase, scoring the ads, subjects were told that investigators were interested in the "initial reaction to each ad regardless of product type, use patterns, need for the product, purchase plans or previous experience with the product or brand." They were asked to report their "immediate and uncensored feelings toward the ads, not the products or brands." They were specifically instructed to disregard any thoughts regarding ad effectiveness and report only their own personal reactions to the ads. In instructions to the subjects the following points were stressed: 1) be natural, 2) do not memorize ad content, and 3) report first impressions only. No

disguises of any type were used but subjects were not specifically briefed on the the purpose of the study.

To reinforce these instructions, subjects were asked to rate a practice ad. Subjects were asked to look at the ad for as long as they wished and then to indicate their response to the ad by scoring it on the six scales provided. The researcher then answered questions and defined terms if questioned by subjects.

In completing the dependent measures, no time limit was imposed but subjects were asked not to return to any ad already scored. The experimental session lasted approximately 50-60 minutes including instructions and debriefing.

Debriefing consisted of an approximately 10 minute presentation of the model for attitude-toward-the-ad and an overview of the research in progress.

Data Computerization Process

After the data had been collected, the researcher examined each answer sheet discarding those where answers were unclear or missing--a total of 6 were removed from analysis. Answer sheets from men--36 in all--were separated and retained for future analysis.

The Auburn University Computing Service prepared the data sets for analysis by scanning the answers to the Keirsey Temperament Sorter and key punching and verifying

the scores on the dependent measures for each subject. The mainframe computer at Auburn University and the computer statistical package SAS were used for all analysis.

CHAPTER IV

ANALYSIS OF RESULTS

Hypothesized Findings

Initial Analysis

The three components of attitude-toward-the-ad (Aad)--Overall Ad Liking, Liking for the Ad Execution, and Liking for the Emotional Content of the ad--served as the dependent variables in a multivariate analysis of variance (MANOVA). Temperament type with four groups--Artisans, Guardians, Rationals and Idealists--and ad type with three classifications--utilitarian ads, symbolic ads, and hedonic ads--were the two independent variables. Due to missing values generated in the scoring of the Keirsey Temperament Sorter, 128 subjects were used in the analysis.

The findings were as follows:

- the univariate hypothesis that all means were equal for the Aad component Overall Liking could not be rejected-- $F(11, 3490) = 1.19$; probability, 0.29; R-squared, 0.0037.
- the univariate hypothesis that all means were equal for the Aad component Liking of Ad Execution was rejected-- $F(11, 3490) = 94.24$; probability, 0.0001; R-squared, 0.229. There was a main effect for ad type, no main effect for temperament type, and no interaction effect.

- the univariate hypothesis that all means were equal for the Aad component Liking of Emotional Content could not be rejected-- $F(11,3490) = 0.28$, probability, 0.989, R-squared, 0.0009. Table 3 presents the ANOVA tables for the three dependent variables and Table 4 shows the means for each cell of the analysis.

Discussion of Findings

The initial analysis using the three components of Aad--Overall Ad Liking, Liking for the Ad Execution, and Liking for the Emotional Content of the ad--as dependent variables and temperament type and ad type as independent variables does not support the hypothesis of difference between the types on ad liking. The hypothesis that all means were equal for the dependent variables Overall Liking and Liking of Emotional Content could not be rejected. The hypothesis that all means were equal for the Liking of Ad Execution was rejected at the .0001 level. However, there was no main effect for temperament type and no interaction between ad type and temperament type. There was a main effect for ad type.

An examination of the overall pattern of the means shows that in general subjects in this study liked the symbolic and hedonic ads more than the utilitarian ads. Only when means are examined in light of relative preferences among temperament type groups within ad type

Table 3: ANOVA Tables for the
Three Components of Attitude-Toward-the-Ad

Source of Variation	df	MS	F	Probability
OVERALL AD LIKING				
TTYPE	3	66.68	4.33	0.0047
ADTYPE	2	0.0002	0.00	1.0000
TTYPE*ADTYPE	6	0.0014	0.00	1.0000
Error	3490	5.1280		
Total	3501			
LIKING FOR AD EXECUTION				
TTYPE	3	21.1859	0.92	0.4308
ADTYPE	2	4174.8989	271.63	0.0001
TTYPE*ADTYPE	6	38.1342	0.83	0.5488
Error	3490	7.6850		
Total	3501			
LIKING FOR EMOTIONAL CONTENT				
TTYPE	3	27.61	1.01	0.3857
ADTYPE	2	0.0008	0.00	1.0000
TTYPE*ADTYPE	6	0.0064	0.00	1.0000
Error	3490	5.1280		
Total	3501			

NOTE: TTYPE=temperament type, ADTYPE=ad type

Table 4: Means from Initial Analysis

TEMPERAMENT TYPE	AD TYPE	OVERALL	EXECUTION	EMOTION
Artisan	Hedonic	7.88	5.93	6.67
Guardian		7.35	6.16	6.95
Idealist		7.49	6.16	6.79
Rational		7.31	6.14	6.87
Artisan	Symbolic	7.88	6.30	6.66
Guardian		7.35	6.29	6.95
Idealist		7.49	6.40	6.79
Rational		7.31	6.34	6.85
Artisan	Utilitarian	7.89	9.72	6.67
Guardian		7.35	9.23	6.95
Idealist		7.49	9.57	6.79
Rational		7.30	9.02	6.85

Note: Because the scales were constructed with 1 allied with positive adjectives and 6 with negative adjectives, the smallest values indicate liking.

categories does a pattern emerge. For example, which temperament type indicates greater liking within the utilitarian ad category? Within the symbolic ad category? Within the hedonic ad category? By looking at the means tables and indentifying the two temperament types showing relative preferences for the ad type versus the two temperament types scoring the ad type less likable, patterns of preference can be observed.

An examination of the means for the Liking of Ad Execution dependent variable, the only dependent variable where the hypothesis of equal means could be rejected, shows a pattern of liking similar to that hypothesized even though there was no main effect for temperament type. The relative pattern of preference for the Liking of Ad Execution variable shows that Rationals liked utilitarian ads more than did other groups, Artisans liked hedonic ads, and Guardians liked symbolic ads.

In summary, the initial analysis provides only limited support for the hypothesis that temperament types differ in ad liking given distinctly different ad message and execution strategies. Only one dependent variable--Liking for Ad Execution--supports the hypothesis. However, the relative pattern of preference that emerges from an examination of the means on that variable does resemble the hypothesized pattern.

Since neither the Keirsey Temperament Sorter or the attitude-toward-the-ad scales for the dependent variable have established psychometric properties, the obvious next step was to examine these measures.

Factor Analysis of the Keirsey Temperament Sorter

Factor analysis was used to examine the relationship of the 70 items in the Keirsey Temperament Sorter to the constructs underlying the measure. The constructs are represented by the four scales: Extroversion-Introversion, Sensing-Intuition, Thinking-Feeling, Perceiving-Judging. The analysis was performed in four stages:

- 1) factor analysis unrotated to examine the relative loadings of items and factor patterns, and to determine the number of factors to retain for further analysis.
- 2) factor analysis using Varimax rotation method to examine relative loadings of items and factor patterns.
- 3) factor analysis of each item set corresponding to one of the scales to determine which items most clearly discriminate between types given this particular sample.
- 4) factor analysis of the revised measure resulting from excluding items that fail to discriminate between types for this sample.

The revised measure was then used to form the groups for all subsequent multivariate analysis of variance.

Stage one of the factor analysis yielded 26 factors. Factor 1 revealed low loadings on the majority of items with a faint pattern of higher loadings on items associated with the Judging/Perception construct. Table 5 shows the factor pattern for the first four factors.

Stage two of the factor analysis was limited to 3 factors. The ten items associated with Extroversion/Introversion scale were dropped since Keirsey does not use them in forming temperament type groups. The rotated factors showed overall higher loadings for items but some items were not loading on any factor above the level of 0.287. When the pattern of the first rotated factor was examined, it revealed 10 items loading on the Sensing/Intuition dimension, 1 item on the Thinking/Feeling dimension, and 11 items on the Judging/Perceiving dimension. The second rotated factor revealed 1 item loading on the Sensing/Intuition dimension, 11 items loading on the Thinking Feeling dimension, and 2 items loading on the Judging/Perceiving dimension. Only three items loaded on factor three and all were related to the Judging/Perceiving dimension. See Table 6 for factor loadings.

Stage three of the factor analysis--an examination each item set corresponding to one of the three retained scales--revealed the items which were loading above the

Table 5: Factor Analysis (Principal Components)
on Keirsey Temperament Sorter

	ITEM NUMBER	FACTOR 1	2	3	4
E-I SCALE	1	-0.22	0.31	0.58	0.198
	8	-0.32	0.22	0.22	0.04
	15	0.58	0.12	0.28	-0.18
	22	-0.15	0.00	0.04	0.297
	29	-0.13	0.29	0.67	0.07
	36	-0.00	0.18	0.21	0.26
	43	0.21	-0.08	0.33	0.03
	50	-0.15	0.26	0.67	0.10
	57	0.03	0.12	0.13	-0.29
	64	-0.17	0.37	0.61	0.06
S-N SCALE	2	0.29	0.11	0.49	0.19
	3	0.12	-0.22	-0.99	0.01
	9	0.47	0.18	0.15	0.29
	10	0.35	0.16	0.14	0.33
	16	0.25	0.19	0.32	-0.02
	17	0.26	0.19	0.07	-0.01
	23	0.02	0.14	0.07	-0.25
	24	0.21	-0.15	0.05	-0.11
	30	0.11	0.18	0.18	0.05
	31	0.19	0.10	-0.13	0.14
	37	0.56	0.098	-0.23	0.23
	38	0.17	-0.37	0.02	0.098
	44	0.28	0.02	0.11	-0.08
	45	0.26	0.099	-0.06	0.22
	51	0.44	0.20	0.07	0.25
	52	0.51	0.20	-0.14	0.19
	58	0.64	0.21	0.17	0.11
	59	0.38	0.13	0.24	0.14
	65	0.42	0.27	0.11	-0.11
	66	0.33	-0.25	0.23	-0.26

Table 5 continued.

	ITEM NUMBER	FACTOR 1	2	3	4
T-F SCALE	4	0.31	0.21	0.21	0.16
	5	0.29	0.07	0.23	0.29
	11	0.26	0.07	0.11	-0.04
	12	0.28	0.11	-0.25	0.24
	18	0.22	0.15	0.10	0.17
	19	0.41	0.03	-0.08	0.09
	25	0.399	0.49	0.22	0.12
	26	0.16	0.01	0.12	0.08
	32	0.56	0.198	0.27	-0.02
	33	0.34	0.51	0.25	-0.15
	39	0.09	0.01	0.08	0.13
	40	0.54	0.41	0.21	0.09
	46	0.35	0.29	0.28	0.09
	47	0.09	0.18	0.20	-0.38
	53	0.41	0.17	0.21	0.09
	54	0.41	0.28	0.21	0.27
	60	0.34	0.02	0.02	-0.06
	61	0.26	0.58	0.17	-0.02
	67	0.10	0.24	0.03	0.03
	68	0.13	-0.12	0.03	0.299
J-P SCALE	6	0.24	0.12	0.25	-0.47
	7	0.26	0.03	0.07	0.09
	13	0.41	0.01	-0.09	0.34
	14	0.15	0.26	0.08	0.14
	20	0.25	0.31	-0.01	0.20
	21	0.46	-0.23	-0.01	0.26
	27	0.40	0.14	0.197	0.07
	28	-0.05	0.06	0.11	-0.38
	34	0.09	-0.04	0.06	0.08
	35	0.41	0.08	0.09	0.04
	41	0.26	-0.11	0.23	-0.29
	42	0.57	0.25	0.18	0.03
	48	0.31	0.12	0.01	-0.13
	49	0.21	0.37	-0.099	0.23
	55	0.495	0.12	0.13	-0.26
	56	0.21	0.19	0.10	-0.06
	62	0.53	0.35	-0.13	-0.26
	63	0.64	0.20	-0.02	-0.13
	69	0.61	0.15	-0.00	-0.26
	70	0.53	0.095	-0.07	-0.18

Note: S-N=Sensing-Intuition T-F=Thinking-Feeling
J-P=Judging-Perceiving

Table 6: Factor Analysis of Keirsey Temperament Sorter
(Varimax)

SCALE	ITEM NUMBER	FACTOR		
		1	2	3
S-N	58	67	19	3
	37	60	18	-14
	52	55	15	1
	9	55	11	-9
	65	51	3	8
	59	48	7	-11
	51	48	13	4
	10	45	3	-12
	16	40	-9	-6
	17	33	1	8
	45	31	6	-8
	38	-4	32	-27
T-F	19	33	23	-8
	40	13	70	-8
	25	-2	66	-20
	33	-12	65	-10
	32	22	60	8
	61	-15	58	-25
	46	1	54	1
	54	10	53	-7
	53	13	48	6
	4	5	42	-3
J-P	62	61	9	24
	63	59	28	15
	69	52	31	22
	70	50	24	1
	42	46	33	33
	49	38	-11	12
	55	36	33	24
	13	34	22	2
	20	32	-1	27
	48	29	13	7
	21	22	44	-8
	41	4	34	15
	35	29	29	19
	6	-31	4	77
	14	17	1	35

Note: S-N=Sensing-Intuition T-F=Thinking-Feeling
J-P=Judging-Perceiving

0.37 level for each dimension. These were retained as the revised item set for forming the temperament type groups for this sample. See Table 7 for the factor loadings.

The retained item set from the Keirsey Temperament Sorter used in all subsequent analyses consisted of 12 Sensing/Intuition items, 10 Thinking/Feeling items, and 12 Judging/Perceiving items. Thus, the final item set consisted of 34 questions from the original set of 70.

Items dropped were:

- the 10 items associated with Extroversion/Introversion because Keirsey does not use them in the classification of temperament types.
- eight questions each from the Sensing/Intuition and Judging/Perception item sets and 10 questions from the Thinking/Feeling dimension because of low item loadings in the factor analysis.

A confirmatory factor analysis using only the retained items showed that 12 of the retained items loaded above 0.45, 11 items loaded between 0.45 and 0.35, and the range of loadings went from the lowest, 0.225, to the highest 0.651. The rotated factors (Varimax method) showed the following pattern:

- Factor 1--11 items loaded on the Sensing/Intuition dimension above the 0.366 level, one item loaded on the Thinking/Feeling dimension, and one item loaded on the

Table 7: Factor Analysis by S-N, T-F and J-P Scales
(Principal Components)

SCALE	ITEM NUMBER	FACTOR LOADING	RETAIN	DROP
S-N	2	0.38	X	
	3	0.12		X
	9	0.65	X	
	10	0.47	X	
	16	0.46	X	
	17	0.37	X	
	23	0.06		X
	24	0.14		X
	30	0.096		X
	31	0.31		X
	37	0.67	X	
	38	0.04		X
	44	0.26		X
	45	0.37	X	
	51	0.52	X	
	52	0.63	X	
	58	0.48	X	
	65	0.54	X	
	66	0.32		X
T-F	4	0.41	X	
	5	0.41	X	
	11	0.25		X
	12	0.22		X
	18	0.28		X
	19	0.31		X
	25	0.69	X	
	26	0.23		X
	32	0.63	X	
	33	0.64	X	
	39	0.13		X
	40	0.75	X	
	46	0.57	X	
	47	0.19		X
	53	0.51	X	
	54	0.54	X	
	60	0.28		X
	61	0.56	X	
	67	-0.07		X
	68	0.19		X

Table 7 continued.

SCALE	ITEM NUMBER	FACTOR LOADING	RETAIN	DROP
J-P	6	0.39	X	
	7	0.29		X
	13	0.46	X	
	14	0.27		X
	20	0.39	X	
	21	0.43	X	
	27	0.46	X	
	28	0.03		X
	34	0.09		X
	35	0.41	X	
	41	0.29		X
	42	0.62	X	
	48	0.37	X	
	49	0.22		X
	55	0.62	X	
	56	0.34		X
	62	0.65	X	
	63	0.70	X	
	69	0.69	X	
	70	0.60	X	

Note: S-N=Sensing-Intuition T-F=Thinking-Feeling
J-P=Judging-Perceiving

Judging/Perceiving dimension. Factor 1 explained 4.936 percent of the variance.

- Factor 2--no items loaded on the Sensing/Intuition dimension but 10 items loaded on the Thinking/Feeling dimension and one item loaded on the Judging/Perceiving dimension at above the 0.336 level. Factor 2 explained 4.808 percent of the variance.

- Factor 3--no items loaded on the Sensing/Intuition dimension, no items loaded on the Thinking/Feeling dimension, 11 items loaded on the Judging/Perceiving dimension. Factor 3 explained 4.716 percent of the variance.

Thus, Factor 1 represents the Sensing/Intuition dimension, Factor 2 the Thinking/Feeling dimension, and Factor 3 the Judging/Perceiving dimension. See Table 8 for factor loadings.

Factor Analysis of Attitude-Toward-the-Ad Measures

Factor analysis was used to examine the relationship of the ads to the dependent variable. A principle components approach (unrotated factor analysis) allowed examination of correlations, factor patterns, and relative loadings of ads on factors.

In the first factor analysis, the correlations across the six scales for each of the nine ads were high (generally above 0.60) indicating that subjects' overall

Table 8: Confirmatory Factor Analysis of Revised
Keirsey Temperament Sorter (Varimax)

SCALE	ITEM NUMBER	FACTOR		
		1	2	3
S-N	9	67	4	7
	58	64	13	30
	37	60	11	22
	52	58	11	19
	10	55	3	1
	59	50	2	9
	16	48	-12	1
	51	45	8	20
	65	42	-11	33
	2	38	17	-6
	45	36	9	0
	17	28	-4	22
T-F	40	22	70	10
	25	4	69	4
	33	-15	68	11
	61	-12	63	-2
	46	6	56	5
	54	16	56	8
	32	23	54	28
	53	4	49	27
	4	17	44	-3
	5	35	38	-17
J-P	69	20	12	70
	62	27	-7	67
	63	31	15	64
	55	9	18	61
	70	22	11	55
	13	10	8	49
	6	-9	1	46
	42	38	25	42
	20	7	-6	40
	27	18	19	37
	21	5	36	35
	35	29	21	21

Note: S-N=Sensing-Intuition T-F=Thinking-Feeling
J-P=Judging-Perceiving

reaction to the ad colored reaction to the ad components as represented by the six scales. Inspection of these correlations did not reveal sets of scales compatible with the expected multidimensionality of Aad. The factor pattern could be interpreted as follows:

- Factor 1 showed high positive loadings for all 6 Aad scales on all nine ads. Therefore, the factor represented ad liking and explained 14.14 percent of the variance.
- Factor 2 showed a pattern of high positive loadings for utilitarian ad types with high negative loadings for one of the symbolic ads. Factor 2 explained 6.25 percent of the variance.
- Factor 3 showed high positive loadings for two of the running shoe ads with an active lifestyle focus--in one a female is dressed for tennis and carries a racket, in the other a couple is jogging. Thus, this factor indicated a liking for an active lifestyle. Factor 3 explained 4.06 percent of the variance.
- Factor 4 showed high negative loadings for the two ads for skin moisturizers and high positive loadings for one running shoe and one fashion shoe ad. Factor 4 explained 3.44 percent of the variance.

See Table 9 for factor patterns.

Based on this analysis, it was decided to drop the ads for running shoes. The rationale was:

Table 9: Factor Analysis on Aad Measures (Principal Components)

AD NUMBER	AD TYPE	PRODUCT TYPE	AAD SCALE	FACTOR 1	2	3
1	S	U	1	0.37	0.33	0.49
			2	0.46	0.38	0.33
			3	0.39	0.41	0.27
			4	0.38	0.43	0.18
			5	0.33	0.33	0.24
			6	0.39	0.38	0.19
2	H	U	1	0.596	-0.11	-0.04
			2	0.60	0.02	-0.18
			3	0.51	0.00	-0.26
			4	0.54	0.06	-0.48
			5	0.54	-0.08	-0.11
			6	0.55	-0.09	-0.21
3	U	U	1	0.42	0.43	-0.05
			2	0.53	0.44	-0.19
			3	0.53	0.46	-0.26
			4	0.50	0.48	-0.25
			5	0.47	0.42	-0.35
			6	0.49	0.498	-0.27
4	S	H	1	0.55	-0.52	0.06
			2	0.62	-0.47	0.01
			3	0.59	-0.397	-0.15
			4	0.57	-0.42	0.01
			5	0.47	-0.57	0.08
			6	0.60	-0.51	-0.03
5	U	S	1	0.56	-0.14	-0.19
			2	0.61	-0.03	-0.17
			3	0.58	0.07	-0.39
			4	0.53	0.01	-0.34
			5	0.595	0.21	-0.28
			6	0.51	0.24	-0.396
6	S	S	1	0.66	-0.35	0.09
			2	0.69	-0.31	0.06
			3	0.66	-0.32	-0.08
			4	0.64	-0.28	0.01
			5	0.57	-0.37	0.04
			6	0.63	-0.28	-0.14

Table 9 continued.

AD NUMBER	AD TYPE	PRODUCT TYPE	AAD SCALE	FACTOR		
				1	2	3
7	U	U	1	0.49	0.30	0.20
			2	0.49	0.395	0.13
			3	0.43	0.51	0.02
			4	0.41	0.50	0.04
			5	0.43	0.50	-0.14
			6	0.42	0.47	-0.07
8	H	H	1	0.44	-0.40	0.13
			2	0.57	-0.34	0.04
			3	0.49	-0.21	-0.05
			4	0.53	-0.22	0.07
			5	0.32	-0.22	0.095
			6	0.55	-0.21	-0.03
9	U	H	1	0.36	-0.00	0.68
			2	0.46	0.10	0.64
			3	0.38	-0.03	0.67
			4	0.33	0.21	0.67
			5	0.395	0.23	0.42
			6	0.39	0.12	0.50

Note: U=Utilitarian S=Symbolic H=Hedonic

- 1) these ads were added by the researcher after the ad qualifying round and had not been vetted by the panel.
- 2) the active lifestyle portrayed in the ads was such a desirable symbol to these subjects that it could submerged the manipulation of ad type.

A second factor analysis after dropping the running shoe ads produced the following factor pattern:

- Factor 1 still represented ad liking.
- Factor 2 showed the strongest positive loadings for a utilitarian ad and strong negative loadings for symbolic ads.
- Factor 3 showed the strongest positive loading for a utilitarian ad and strong negative loadings for hedonic ads. Thus, Factor 1 represents overall ad liking, Factor 2 represents the discrimination between utilitarian and symbolic ads, and Factor 3 represents the discrimination between utilitarian and hedonic ads. See Table 10 for factor patterns.

As a result of the factor analysis, only the six ads selected in the ad qualifying round were used in the final analysis. Note that this change means that there were two ads in each ad type category and two ads in each product type category. Examination of the factor patterns also revealed a possible interaction between ad type and product type--a matter for further investigation in MANOVA

Table 10: Factor Analysis on Aad Measures
with Running Shoe Ads Deleted
(Principal Components)

AD NUMBER	AD TYPE	PRODUCT TYPE	AAD SCALE	FACTOR 1	2	3
2	H	U	1	0.59	0.10	0.46
			2	0.595	0.29	0.47
			3	0.53	0.43	-0.46
			4	0.53	0.30	0.41
			5	0.57	0.17	0.26
			6	0.58	0.17	0.298
4	S	H	1	0.64	-0.41	0.12
			2	0.70	0.05	0.24
			3	0.67	-0.28	-0.08
			4	0.63	-0.34	-0.05
			5	0.59	-0.46	0.05
			6	0.69	0.04	0.01
5	U	S	1	0.58	0.02	-0.57
			2	0.60	0.11	-0.57
			3	0.54	0.19	-0.62
			4	0.52	0.16	-0.63
			5	0.54	0.33	-0.46
			6	0.47	0.33	-0.56
6	S	S	1	0.71	-0.24	0.08
			2	0.74	-0.19	0.04
			3	0.72	-0.19	0.05
			4	0.69	-0.20	0.05
			5	0.64	-0.30	0.11
			6	0.68	-0.16	0.01
7	U	U	1	0.42	0.49	0.13
			2	0.397	0.597	0.11
			3	0.32	0.72	0.13
			4	0.30	0.71	0.097
			5	0.32	0.69	-0.02
			6	0.34	0.66	0.03
8	H	H	1	0.53	-0.20	0.04
			2	0.65	-0.11	-0.095
			3	0.54	-0.08	-0.09
			4	0.57	-0.07	-0.02
			5	0.38	-0.11	0.07
			6	0.59	-0.01	0.00

Note: U=Utilitarian S=Symbolic H=Hedonic

Analysis with Revised Measures

Factor analysis for the Keirsey Temperament Sorter and the attitude-toward-the-ad scales resulted in the revision of both measures. Specifically, 34 out of the original 70 items were retained in the Keirsey Temperament Sorter and six out of the original nine ads were retained, two of each type.

A multivariate analysis of variance (MANOVA) was performed using the revised measures. Due to missing values generated by the scoring of the Keirsey Temperament Sorter, 102 subjects were used in the analysis.

The findings were as follows:

- the univariate hypothesis that all means were equal for the Aad component Overall Liking was rejected-- $F(11, 914) = 17.62$; probability, 0.0001; R-squared, 0.175. There was a main effect for ad type, a main effect for temperament type, and no interaction effect.
- the univariate hypothesis that all means were equal for the Aad component Liking of Ad Execution was rejected-- $F(11, 914) = 23.35$; probability, 0.0001; R-squared, 0.219. There was a main effect for ad type, no main effect for temperament type, and no interaction effect.
- the univariate hypothesis that all means were equal for the Aad component Liking of Emotional Content was rejected-- $F(11, 914) = 67.95$, probability, 0.0001, R-squared, 0.4499.

There was a main effect for ad type, no main effect for temperament type, and no interaction effect. Table 11 presents the ANOVA tables for the three dependent variables and Table 12 shows the means for each cell.

Discussion of Findings

After revising the Keirsey Temperament Sorter through factor analysis, the hypothesis that all means were equal for each component of Aad was rejected .0001 level. In each case there was a main effect for ad type and no interaction effects. On Overall Liking, there was a main effect for temperament type but not on the other dependent variables.

Again, subjects generally preferred symbolic and hedonic ads over utilitarian ads. However, when relative preferences within ad types are examined, the following patterns emerge:

- in the Overall Liking variable, Idealists like both hedonic ads and symbolic ads (with Guardians next), but Idealists also like utilitarian ads (with Rationals second). Artisans score all ads as less likable when compared with the other temperament types. The pattern departs from the hypothesized one in the following ways:
 - 1) Artisans, hypothesized to like hedonic ads, exhibit no relative preference for such ads.

Table 11: ANOVA Tables for the
Three Components of Attitude-Toward-the-Ad
after Revision of Measures

Source of Variation	df	MS	F	Probability
OVERALL AD LIKING				
TTYPE	3	39.81	2.28	0.0784
ADTYPE	2	488.71	41.90	0.0001
TTYPE*ADTYPE	6	18.43	0.53	0.7883
Error	914	5.83		
Total	925			
LIKING FOR AD EXECUTION				
TTYPE	3	25.56	1.28	0.2810
ADTYPE	2	710.93	53.27	0.0001
TTYPE*ADTYPE	6	51.95	1.30	0.2556
Error	914	6.6733		
Total	925			
LIKING FOR EMOTIONAL CONTENT				
TTYPE	3	11.87	0.58	0.6309
ADTYPE	2	2423.09	176.39	0.0001
TTYPE*ADTYPE	6	54.95	1.33	0.2394
Error	914	6.8686		
Total	925			

NOTE: TTYPE=temperament type, ADTYPE=ad type

Table 12: Means from Analysis with Revised Measures

TEMPERAMENT TYPE	ADTYPE	OVERALL	EXECUTION	EMOTION
Artisan	Hedonic	6.97	7.52	6.47
Guardian		6.29	7.01	5.53
Idealist		6.18	7.19	6.06
Rational		6.55	7.25	6.10
Artisan	Symbolic	5.79	6.79	6.21
Guardian		5.16	6.01	5.33
Idealist		4.79	5.53	5.37
Rational		5.25	5.45	5.55
Artisan	Utilitarian	7.66	8.79	10.11
Guardian		7.83	9.24	10.77
Idealist		7.59	9.07	10.79
Rational		7.60	8.35	10.30

Note: Because the scales were constructed with 1 allied with positive adjectives and 6 with negative adjectives, the smallest values indicate liking.

2) Guardians, hypothesized to prefer symbolic ads, show greater preference for hedonic ads.

- in the Liking for Ad Execution variable, Guardians and Idealists rank one and two in preference for hedonic ads and symbolic ads, Rationals and Artisans rank one and two for utilitarian ads, and Idealists rank first on symbolic ads (with Rationals next). The actual pattern differs from the hypothesized one in the following ways:

- 1) Artisans do not prefer hedonic ads as much as Guardians do.

- 2) Rationals, not hypothesized to be attracted to symbolic ads, show a preference for such ads.

- in the Liking for Emotional Content variable, Guardians and Idealists show preferences for hedonic and symbolic ads, Artisans and Rationals for utilitarian ads. This pattern is closest to the hypothesized pattern except for Artisans who do not exhibit a relative preference for hedonic ads as hypothesized. Guardians, a group not hypothesized to be attracted to hedonic ads, show a preference for such ads.

In summary, analysis with revised measures provides limited support for the hypothesis that temperament types differ in ad liking in that there was a main effect for temperament type on the Overall Liking dependent variable. However, there was no main effect for temperament type on

the other two dependent variables and no interaction effects on any of the dependent variables. The relative preference patterns within ad categories that emerges from an examination of means does resemble the hypothesized pattern.

Overall, Idealists show a relative preference for hedonic and symbolic ads on all three dependent variables as hypothesized, Rationals rank one or two on all three dependent variables on utilitarian ads with Artisans ranking first or second on two dependent variables, and Guardians show a relative preference for symbolic ads for two of the three dependent variables.

With a main effect for temperament type in only one dependent variable and no interactions, these patterns must be examined with caution. However, examination of the relative preference patterns does indicated a pattern of responses that substantially coincides with expectations from theory. Exceptions--the lack of preference for hedonic ads by Artisans, the preference for hedonic ads by Guardians--may be explainable within the theory of temperament types.

Since Artisans are characterized as spontaneous, sensation seekers, it seems logical to hypothesize a preference for hedonic ads--that is, ads that mirror the life of the senses. However, Artisans also have fact-based

cognitive structures. Perhaps this reality-based, goal-oriented aspect of this temperament type overwhelms any other preference in the realm of advertising.

The hypothesis of a preference for symbolic ads among Guardians was based on the assumption that this temperament type would seek social information in ads as part of the drive to belong and fit in. In our society, perhaps the hedonic ads carry social information, too. For Guardians, social information may be available in both symbolic and hedonic ads but be more compelling in hedonic ads.

The general pattern of liking for symbolic and hedonic ads over utilitarian ads among subjects may represent the entertainment element in advertising. An ad that lays out the attributes of a product may provide more factual information but provide less entertainment value. In a low involvement situation such as is represented in this study, where there is no pressure to make a purchase decision and no perceived risk in selection, entertainment may be more valued than information.

The general pattern of liking for symbolic and hedonic ads in this study does indicate that subjects were not scoring based on demand characteristics. That is, subjects did not perceive a thinking-feeling dichotomy in the ads. If they had they might have scored thinking ads (utilitarian ads) higher because of a belief that

preference for a thinking ads shows higher intelligence or greater social conscience.

The consistency of the relative preference pattern within ad types does suggest that temperament type influences ad liking. However, the ways that the pattern differs from the pattern hypothesized indicates that assumptions about the action patterns associated with each type must be questioned and fine tuned before meaningful predictions can be made based on the theory.

Unhypothesized Findings

Analysis with Three Independent Variables

The factor analysis of the dependent measures as described above indicated the potential for product type effect, possibility of an interaction effect of product type and ad type. In this study, the final selection of ads was related to product type. Three product types were identified:

- Utilitarian--useful products that solve problems or meet everyday needs.
- Symbolic--products used to identify the self or attributes of the self.
- Hedonic--products associated with pleasure or that provide stimulus to the senses.

In this study lotion or skin moisturizer (Vaseline and Lubriderm) was termed utilitarian in product type, fashion shoes (Joan & David and Gucci) were termed symbolic, and fragrance (Gucci and Shalimar) was termed hedonic.

To explore the possibility of an ad type X product type interaction an analysis was performed with the three components of Aad as dependent variables and with three independent variables--temperament type, ad type, and product type. The revised version of the Keirsey Temperament Sorter and the attitude-toward-the-ad measures were used. The findings were as follows:

- the univariate hypothesis that all means were equal for the Aad component Overall Liking was rejected-- $F(23, 928) = 12.04$; probability, 0.0001; R-squared, 0.23. There was a main effect for ad type, a main effect for product type, no main effect for temperament type but it approached significance, and no interaction effects.
- the univariate hypothesis that all means were equal for the Aad component Liking of Ad Execution was rejected-- $F(23, 927) = 15.33$; probability, 0.0001; R-squared, 0.28. There was a main effect for ad type, a main effect for product type, no main effect for temperament type, and no interactions.
- the univariate hypothesis that all means were equal for the Aad component Liking of Emotional Content was rejected--

-F(23,928) = 42.42; probability, 0.0001, R-squared, 0.52. There was main effect for ad type, a main effect for product type, no main effect for temperament type and no interaction effects. Table 13 presents the ANOVA tables for the three dependent variables and Table 14 shows the means for each cell of the analysis.

Discussion of Findings

The factor analysis of the dependent measures indicated a potential product type effect. An analysis with three dependent and three independent variables confirmed the effect. The hypothesis of equal means was rejected for all three dependent variables at the .0001 level. In each case there was a main effect for ad type, a main effect for product type, no main effect for temperament type and no interaction effects. However, in the Aad component Overall Liking, temperament type did approach significance (probability, 0.0844).

Examination of the means for relative preference shows the following patterns:

- In the hedonic ad type-hedonic product type cell, Idealists and Guardians consistently indicate greater ad liking.
- In the hedonic ad type-utilitarian product type cell, Guardians show up most often as first or second in liking, Idealists appear with Guardians in the Overall Liking

Table 13: ANOVA Tables for Three Dependent and Three Independent Variables

Source of Variation	df	MS	F	Probability
OVERALL AD LIKING				
TTYPE	3	36.54	2.22	0.0844
ADTYPE	2	159.92	14.57	0.0001
PRODTYPE	2	172.79	15.75	0.0001
TTYPE*ADTYPE	6	13.5	0.41	0.8706
ADTYPE*PRODTYPE	1	0.71	0.13	0.7179
TTYPE*PRODTYPE	6	20.57	0.62	0.7105
ADTYPE*TTYPE*PRODTYPE	3	14.33	0.26	0.8521
Error	905	5.4869		
Total	928			
LIKING FOR AD EXECUTION				
TTYPE	3	23.767	1.27	0.2826
ADTYPE	2	332.25	26.68	0.0001
PRODTYPE	2	139.56	11.21	0.0001
TTYPE*ADTYPE	6	25.44	0.68	0.6652
PRODTYPE*ADTYPE	1	4.99	0.68	0.4084
TTYPE*PRODTYPE	6	45.996	1.23	0.2877
ADTYPE*TTYPE*PRODTYPE	3	13.68	0.73	0.5327
Error	904	6.23		
Total	927			

Table 13 continued.

Source of Variation	df	MS	F	Probability
LIKING FOR EMOTIONAL CONTENT				
TTYPE	3	9.94	0.55	0.6512
ADTYPE	2	1090.33	89.76	0.0001
PRODTYPE	2	377.16	31.05	0.0001
TTYPE*ADTYPE	6	34.77	0.95	0.4553
ADTYPE*PRODTYPE	1	13.47	2.22	0.1368
TTYPE*PRODTYPE	6	21.36	0.59	0.7416
ADTYPE*TTYPE*PRODTYPE	3	2.30	0.13	0.9445
Error	905	6.0734		
Total	928			

NOTE: TYPE=temperament type, ADTYPE=ad type PRODTYPE=product type

Table 14: Means from Analysis with Three Independent Variables

TEMPERAMENT TYPE	ADTYPE	PRODUCT TYPE	OVERALL	EXECUTION	EMOTION
Artisan	Hedonic	Hedonic	6.05	6.89	5.72
Guardian			5.54	6.40	4.46
Idealist			5.25	6.37	4.91
Rational			5.60	6.90	5.00
Artisan		Utilitarian	7.63	8.00	7.19
Guardian			7.03	7.63	6.60
Idealist			7.11	7.99	7.21
Rational			7.50	7.60	7.20
Artisan	Symbolic	Symbolic	6.16	7.00	7.32
Guardian			5.34	6.20	6.40
Idealist			5.15	5.87	6.52
Rational			5.30	5.30	6.60
Artisan		Hedonic	5.42	6.58	5.11
Guardian			5.11	5.82	4.40
Idealist			4.42	5.19	4.23
Rational			5.20	5.60	4.50
Artisan	Utilitarian	Utilitarian	7.63	8.63	10.00
Guardian			8.49	10.37	11.17
Idealist			8.32	10.09	11.21
Rational			8.30	9.20	11.30
Artisan		Symbolic	7.68	8.95	10.21
Guardian			7.17	8.11	10.37
Idealist			6.87	8.04	10.37
Rational			6.90	7.50	9.30

Note: Because the scales were constructed with 1 allied with positive adjectives and 6 with negative adjectives, the smallest values indicate liking.

dependent variable, Rationals in the Ad Execution dependent variables, and Artisans in the Emotional Content dependent variable.

- In the symbolic ad type-symbolic product type cell, Idealists show up most often as first or second in liking for each of the dependent variables. In the Overall Liking and Ad Execution dependent variables Rationals appear with Idealists, Guardians appear with Idealists in the Emotional Content dependent variable.

- In the symbolic ad type-hedonic product type cell, Idealists indicate ad liking on all three dependent variables. Guardians appear with Idealists on the Overall Liking and Emotional Content dependent variables, Rationals on the Ad Execution dependent variable.

- In the utilitarian ad type-utilitarian product type cell, Artisans indicate liking on all three dependent variables paired. Rationals appear with Artisans on Overall Liking and Ad Execution dependent variables, Guardians on Emotional Content dependent variable.

- In the utilitarian ad type-symbolic product cell, Rationals appear as first or second in liking on all three dependent variables. Idealists appear with Rationals on the Overall Liking and Ad Execution dependent variables, Artisans with Rationals on the Emotional Content dependent variable.

Looking at the the ads sharing ad type but not product type, the following patterns appear:

- In the hedonic ads taken together, Idealists and Guardians indicate greatest liking. This repeats the pattern observed in the means with only two independent variables.
- In the symbolic ads taken together, Idealists appear first or second in liking for each of the dependent variables with an even split between Rationals and Guardians in the other spot. This repeats the pattern observed in the means with only two independent variables.
- In the utilitarian ads taken together, Artisans and Rationals indicate the greatest liking. This repeats the pattern observed in the means with only two independent variables

The product type effect presents problems for interpreting findings. It is likely that a confound exists between product type and ad type to the extent that temperament type effects can not be determined. It seems unlikely that temperament type can be linked to product type preferences in the way that temperament and ad type are linked in this study. However, product type and ad type interactions do seem apparent in an examination of the means.

In the hedonic ad type-hedonic product type cell, the pattern of liking shows Idealists and Guardians predominating. But when a utilitarian product type appears in a hedonic-type ad Artisans and Rationals indicate greatest liking. Such a pattern can be explained within the theory of temperament type. Artisans are assumed to be goal-oriented and ads and products may represent ways to reach goals. Thus, it could be hypothesized that Artisans would be attracted to useful products that satisfy needs associated with goals. Rationals with their focus on product quality and function may also be attracted to useful, simple products.

The same kind of interaction pattern appears in the utilitarian ad section of the chart. The utilitarian ad type-utilitarian product type cell show a strong Artisans and Rationals pattern. When a symbolic product appears in a utilitarian-type ad, Idealists rank one or two on the Overall Liking and Ad Execution dependent variables. Within the theory of temperament types, Idealists are characterized as identity-seekers. It could be hypothesized that Idealists demonstrate that search for identity by being attracted to the symbolic information in ads and to products that communicate something about the self (symbolic products).

The interaction pattern is not as clear cut on the symbolic ad section of the chart. In the symbolic ad type-symbolic product type cell, Idealists indicate consistent liking and the appearance of Guardians is expected. But the appearance of Rationals is unexpected. Perhaps while symbolic ads offer social information to Guardians and represent people-values to Idealists, they offer cues about product quality to Rationals.

Analysis with Six Dependent Variables and Two Independent Variables

Since the correlations in the factor analysis of the attitude-toward-the-ad measures did not indicate the three dimensions of Aad (Overall Liking, Liking of Ad Execution, and Liking of Emotional Content), each of the six scales could be just as useful as dependent variables. The rational for using each scale as a dependent variable is that each scale provided the subject with an opportunity to indicate ad liking and that each scale represents a dimension of ad liking. Thus, an analysis was performed using each scale as a dependent variable and two independent variables--ad type and temperament type. The findings were as follows:

- the univariate hypothesis that all means were equal for the like-dislike scale was rejected-- $F(11, 914) = 14.18$; probability, 0.0001; R-squared, 0.146. There was a main

effect for ad type, a main effect for temperament type, and no interaction effect.

- the univariate hypothesis that all means were equal for the **interesting-uninteresting scale** was rejected-- $F(11,914) = 18.07$; probability, 0.0001; R-squared, 0.179. There was a main effect for ad type, no main effect for temperament type, and no interaction effect.

- the univariate hypothesis that all means were equal for the **lively-dull scale** was rejected-- $F(11,914) = 18.54$; probability, 0.0001, R-squared, 0.182. There was a main effect for ad type, a main effect for temperament type, and no interaction effect.

- The univariate hypothesis that all means were equal for the **imaginative-unimaginative scale** was rejected-- $F(11, 914) = 23.28$; probability, 0.0001; R-squared, 0.219. There was a main effect for ad type, no main effect for temperament type, and no interaction effect.

- The univariate hypothesis that all means were equal for the **sensual-not sensual scale** was rejected-- $F(11, 914) = 75.83$; probability, 0.0001; R-squared, 0.477. There was a main effect for ad type, no main effect for temperament type, and no interaction effect.

- the univariate hypothesis that all means were equal for the **heartwarming-cold scale** was rejected-- $F(11, 914) = 39.48$; probability, 0.0001; R-squared, 0.322. There was a

main effect for ad type, no main effect for temperament type, and no interaction effect. Table 15 presents the ANOVA tables for the six dependent variables and Table 16 shows the means for each cell.

Discussion of Findings

Since each scale in the Aad measure offers an opportunity for subjects to express a preference, an analysis using each scale as a dependent measure offers another view of the relationships between ad type and temperament type. The hypothesis of equal means was rejected for all six dependent variables at the 0.0001 level. In each case there was a main effect for ad type. Only in the cases of the **like-dislike scale** (one of two scales in the Overall Liking dependent measure) and **lively-dull scale** (one of two scales in the Ad Execution dependent measure) scales was there a main effect for temperament type.

An examination of relative preference pattern within ad type across all six dependent variables shows the following patterns:

- in the hedonic ad type classification, Idealists and Guardians indicate consistent liking.
- in the symbolic ad type classification, Idealists indicate consistent ad liking with means either first or

Table 15: ANOVA Tables for the
Six Aad Scales as Dependent Variables

Source of Variation	df	MS	F	Probability
LIKE-DISLIKE				
TTYPE	3	14.36	3.15	0.0243
ADTYPE	2	102.51	33.73	0.0243
TTYPE*ADTYPE	6	2.25	0.25	0.9604
Error	914	1.52		
Total	925			
INTERESTING-UNINTERESTING				
TTYPE	3	6.46	1.25	0.2894
ADTYPE	2	146.98	42.77	0.0001
TTYPE*ADTYPE	6	9.15	0.89	0.5032
Error	914	1.72		
Total	925			
LIVELY-DULL				
TTYPE	3	16.29	2.94	0.0322
ADTYPE	2	151.15	40.95	0.0001
TTYPE*ADTYPE	6	11.54	1.04	0.3961
Error	914	1.84		
Total	925			
IMAGINATIVE-UNIMAGINATIVE				
TTYPE	3	1.27	0.22	0.8829
ADTYPE	2	206.64	53.51	0.0001
TTYPE*ADTYPE	6	17.30	1.49	0.1771
Error	914	1.93		
Total	925			

Table 15 continued.

Source of Variation	df	MS	F	Probability
SENSUAL-NOT SENSUAL				
TTYPE	3	4.58	0.72	0.5405
ADTYPE	2	862.29	203.18	0.0001
TTYPE*ADTYPE	6	12.88	1.01	0.4164
Error	914	2.12		
Total	925			
HEARTWARMING-COLD				
TTYPE	3	5.47	0.90	0.4417
ADTYPE	2	395.68	97.35	0.0001
TTYPE*ADTYPE	6	15.38	1.26	0.2726
Error	914	2.03		
Total	925			
NOTE: TTYPE=temperament type, ADTYPE=ad type				

Table 16: Means from Analysis Six Dependent Variables

ADTYPE		LIKE	INTEREST	LIVELY	IMAGINE	SENSUAL	HEART
TEMPERAMENT TYPE							
Artisan	H	3.36	3.61	4.07	3.47	2.83	3.64
Guardian		2.97	3.31	3.31	3.39	2.46	3.07
Idealist		2.87	3.30	3.30	3.39	2.46	3.07
Rational		3.05	3.50	3.50	3.75	2.50	3.60
Artisan	S	2.82	2.82	2.82	3.26	2.82	3.395
Guardian		2.57	2.57	2.59	2.88	2.41	2.93
Idealist		2.37	2.37	2.41	2.69	2.38	2.995
Rational		2.70	2.70	2.55	2.60	2.25	3.30
Artisan	U	3.82	3.82	3.84	4.34	5.16	4.95
Guardian		3.73	3.73	4.10	4.10	4.57	5.49
Idealist		3.63	3.63	3.97	4.61	5.52	5.27
Rational		3.70	3.70	3.90	4.20	5.15	5.15

NOTE: H=Hedonic, S=Symbolic, U=Utilitarian

Because the scales were constructed with 1 allied with positive adjectives and 6 with negative adjectives, the smallest values indicate liking.

second in ranking on all six scales. Guardians appear as first or second in rankings on three scales (like-dislike scale, interesting-uninteresting scale, and heartwarming-cold scale). Rationals appear first or second on three scales (lively-dull scale, imaginative-unimaginative scale, and sensual-not sensual scale).

- in the utilitarian ad type classification, Idealists indicate ad liking on the like-dislike and interesting-uninteresting scales, Artisans on the lively-dull and heartwarming-cold scales and Guardians on the imaginative-unimaginative and sensual-not sensual scales.

Interestingly, Rationals are second across all six scales.

It is clear from this analysis that the three dimensions of Aad did not appear in this study given the measures and the subjects' response on the measures.

Analysis with Six Dependent Variables and Three Independent Variables

Because the factor analysis of the dependent measures indicated a probable product type effect, an analysis was performed with each of the six Aad scales as dependent variables and three independent variables--ad type, temperament type, and product type. The findings were as follows:

- the univariate hypothesis that all means were equal for the like-dislike scale was rejected-- $F(23, 902) = 10.01$;

probability, 0.0001; R-squared, 0.20. There was a main effect for ad type, a main effect for temperament type, a main effect for product type and no interaction effect.

- the univariate hypothesis that all means were equal for the **interesting-uninteresting scale** was rejected-- $F(23, 902) = 12.25$; probability, 0.0001; R-squared, 0.238. There was a main effect for ad type, no main effect for temperament type, a main effect for product type, and no interactions.

- the univariate hypothesis that all means were equal for the **lively-dull scale** was rejected-- $F(23, 902) = 12.97$; probability, 0.0001; R-squared, 0.249. There was a main effect for ad type, a main effect for temperament type, a main effect for product type and no interaction effect.

- The univariate hypothesis that all means were equal for the **imaginative-unimaginative scale** was rejected-- $F(11, 914) = 23.28$; probability, 0.0001; R-squared, 0.219. There was a main effect for ad type and product type, no main effect for temperament type, and no interactions.

- The univariate hypothesis that all means were equal for the **sensual-not sensual scale** was rejected-- $F(23, 902) = 14.34$; probability, 0.0001; R-squared, 0.268. There was a main effect for ad type, no main effect for temperament type, a main effect for product type and no interactions.

- the univariate hypothesis that all means were equal for the heartwarming-cold scale was rejected-- $F(23, 902) = 51.56$; probability, 0.0001; R-squared, 0.568. There was a main effect for ad type, a main effect for product type, no main effect for temperament type, and no interactions. Table 17 presents the ANOVA tables for the six dependent variables and Table 18 shows the means for each cell.

Discussion of Findings

Because of the possibility of a product type effect, the analysis was repeated with the addition of the third dependent variable--product type. The hypothesis of equal means was rejected for all six dependent variables at the 0.0001 level. In each case there was main effect for ad type and product type. In the cases of the like-dislike and the lively-dull scales, as in the previous analysis, there was a main effect for temperament type. There were no significant interaction effects. However, the ad type X product type interaction approached significance on the heartwarming-cold scale.

An examination of the relative preference patterns within ad type X product type X temperament type cells across all six dependent variables shows the following patterns:

- in the hedonic ad type-hedonic product type cell, Idealists indicate greatest ad liking on the like-dislike,

Table 17: ANOVA Tables for Six Dependent and Three Independent Variables

Source of Variation	df	MS	F	Probability
LIKE-DISLIKE				
TTYPE	3	13.87	3.22	0.0222
ADTYPE	2	31.78	11.06	0.0001
PRODTYPE	2	42.46	14.78	0.0001
TTYPE*ADTYPE	6	4.06	0.47	0.8296
ADTYPE*PRODTYPE	1	0.27	0.19	0.6658
TTYPE*PRODTYPE	6	8.19	0.95	0.4575
ADTYPE*TTYPE*PRODTYPE	3	1.396	0.32	0.8079
Error	902	1.44		
Total	925			
INTERESTING-UNINTERESTING				
TTYPE	3	6.11	1.26	0.2864
ADTYPE	2	53.50	16.56	0.0001
PRODTYPE	2	41.22	12.76	0.0001
TTYPE*ADTYPE	6	5.02	0.52	0.7953
PRODTYPE*ADTYPE	1	1.12	0.69	0.4050
TTYPE*PRODTYPE	6	4.94	0.51	0.8016
ADTYPE*TTYPE*PRODTYPE	3	2.85	0.59	0.6234
Error	902	1.62		
Total	925			

Table 17 continued.

Source of Variation	df	MS	F	Probability
LIVELY-DULL				
TTYE	3	15.79	3.06	0.0274
ADTYPE	2	58.84	17.12	0.0001
PRODTYPE	2	46.52	13.53	0.0001
TTYE*ADTYPE	6	6.77	0.66	0.6847
ADTYPE*PRODTYPE	1	2.28	1.33	0.2500
TTYE*PRODTYPE	6	8.57	0.83	0.5460
ADTYPE*TTYE*PRODTYPE	3	2.72	0.53	0.6629
Error	902	1.72		
Total	925			
IMAGINATIVE-UNIMAGINATIVE				
TTYE	3	1.21	0.22	0.8821
ADTYPE	2	11.5997	30.43	0.0001
PRODTYPE	2	24.13	6.58	0.0015
TTYE*ADTYPE	6	8.29	0.75	0.6069
ADTYPE*PRODTYPE	1	0.39	0.21	0.6450
TTYE*PRODTYPE	6	17.495	1.59	0.1468
ADTYPE*TTYE*PRODTYPE	3	4.15	0.75	0.5201
Error	902	1.83		
Total	925			

Table 17 continued.

Source of Variation	df	MS	F	Probability
SENSUAL-NOT SENSUAL				
TTYPE	3	4.43	0.83	0.4767
ADTYPE	2	367.82	103.52	0.4767
PRODTYPE	2	174.78	49.19	0.0001
TTYPE*ADTYPE	6	7.55	0.71	0.6427
PRODTYPE*ADTYPE	1	1.92	1.08	0.2992
TTYPE*PRODTYPE	6	3.46	0.32	0.9243
ADTYPE*TTYPE*PRODTYPE	3	1.46	0.27	0.8444
Error	902	1.78		
Total	925			
HEARTWARMING-WARM				
TTYPE	3	5.57	0.96	0.4095
ADTYPE	2	195.66	50.75	0.0001
PRODTYPE	2	43.13	11.19	0.0001
TTYPE*ADTYPE	6	9.59	0.83	0.5475
ADTYPE*PRODTYPE	1	5.78	3.00	0.0838
TTYPE*PRODTYPE	6	8.43	0.73	0.6262
ADTYPE*TTYPE*PRODTYPE	3	0.38	0.06	0.9784
Error	902	1.93		
Total	925			

NOTE: TYPE=temperament type, ADTYPE=ad type PRODTYPE=product type

Table 18: Means from Analysis Six Dependent Variables
and Three Dependent Variables

AD PRODUCT LIKE INTEREST LIVELY IMAGINE SENSUAL HEART TYPE TYPE								
TEMPERAMENT TYPE								
A	H	H	3.00	3.24	3.71	2.29	2.12	3.59
G			2.66	2.89	3.29	3.11	1.69	2.77
I			2.43	2.82	3.21	3.16	1.90	3.01
R			2.60	3.00	3.70	3.60	1.70	3.30
A		U	3.68	3.95	4.37	3.63	3.47	3.68
G			3.29	3.74	3.97	3.66	3.23	3.37
I			3.22	3.79	4.13	3.89	3.49	3.73
R			3.50	4.00	3.30	3.90	3.00	3.90
A	S	S	3.05	3.11	3.68	3.32	3.37	3.95
G			2.62	2.71	3.34	2.85	2.97	2.77
I			2.62	2.54	3.02	2.85	3.00	3.52
R			2.90	2.40	2.80	2.50	3.00	3.60
A		H	2.58	2.84	3.37	3.21	2.26	2.84
G			2.50	2.47	2.91	2.01	1.82	2.41
I			2.13	2.29	2.65	2.54	1.76	2.47
R			2.50	2.70	2.90	2.70	1.50	3.80

Table 18 continued.

AD PRODUCT LIKE INTEREST LIVELY IMAGINE SENSUAL HEART		
TYPE	TYPE	
TEMPERAMENT		
TYPE		
A	U	U

NOTE: A=Artisan, G=Guardian, I=Idealist, R=Rational, H=Hedonic, S=Symbolic, U=Utilitarian

Because the scales were constructed with 1 allied with positive adjectives and 6 with negative adjectives, the smallest values indicate liking.

interesting-uninteresting, and lively-dull scales and rank second on the heartwarming-cold scale. Guardians indicate greatest ad liking on the sensual-not sensual and heartwarming-cold scales and rank second on the interesting-uninteresting, lively-dull, and imaginative-unimaginative scales.

- In the hedonic ad type-utilitarian product type cell, Guardians indicate greatest ad liking on the interesting-uninteresting and heartwarming-cold scales and rank second in ad liking on the other scales.
- In the symbolic ad-symbolic product type cell, Guardians indicate greatest ad liking on the like-dislike, interesting-uninteresting, sensual-not sensual, and heartwarming-cold scales and rank second on the lively-dull and imaginative-unimaginative scales.
- In the symbolic ad type-hedonic product type cell, Idealists indicate greatest ad liking on the like-dislike, interesting-uninteresting, and lively-dull scales and rank second on the other three scales. Guardians indicate greatest liking on the imaginative-unimaginative and heartwarming-cold scales and rank second on the like-dislike, interesting-uninteresting and lively-dull scales.
- In the utilitarian ad type-utilitarian product type cell, Artisans indicate greatest ad liking on all but the imaginative-unimaginative scale where they rank second.

Rationals rank second on the interesting-uninteresting, lively-dull, and sensual-not sensual scales.

- In the utilitarian ad type-symbolic product type cell, Rationals indicate greatest ad liking on all but the interesting-uninteresting scale. Idealists indicate greatest ad liking on the interesting-uninteresting scale and rank second on the like-dislike and lively-dull scales.

Looking at the the ads sharing ad type but not product type, the following patterns appear:

- In the hedonic ads taken together, Idealists and Guardians appear most frequently in the top rankings of ad liking. This repeats the the pattern observed in the examination of means for 4 X 2 MANOVA with three dependent variables and again with six dependent variables.
- In the symbolic ads taken together, Idealists predominate in the relative preference patterns with Guardians next, then Rationals. This is similar to patterns seen in other examination of means.
- In the utilitarian ads taken together, Artisans predominate in the utilitarian ad type-utilitarian product type case but Rationals predominate in the utilitarian ad type-symbolic product type case.

CHAPTER V

CONCLUSIONS, LIMITATIONS, IMPLICATIONS

Consumers come in contact with hundreds of ads in the course of a day and because of the rushed situation and cluttered context, low involvement processing is the likely norm. What is it then that stops someone and entices them to give attention to an ad? Perhaps the ad represents information about a needed purchase. Perhaps the novelty of the images or the cleverness of the message provides entertainment value. Perhaps the ad or some component of it has psychological meaning for that individual. Understanding the cognitive and affective responses on contact with advertising provides the key to understanding how individuals react to and simplify their marketing environment.

The emerging model of information processing takes peripheral processing to be the usual. Some research has even indicated that central processing is only an adjunct to the dominant peripheral mode. Such conjecture leads to the idea that consumers make purchase decisions based on affect, especially cumulative affect disassociated from the original cognitive base. If that is true, the execution factors and emotional content of an ad may be more influential than product attributes.

The variable attitude-toward-the-ad (Aad) is used in this research to explore the affective responses of different types of consumers to advertising appeals. Theory suggests that predispositions such as temperament give rise to personal values and action patterns. Temperament can be defined as a consistent personal set of action patterns observable throughout the lifecycle. Characteristic patterns of affective response growing out of temperament may be part of the emotional criteria used to screen ads.

Values such as those associated with temperament type may indicate underlying consumer motivations better than attitudes because values are closely linked to the overall cognitive structure (Pitts and Woodside, 1984). Research that looks at values goes beyond demographics and psychographics in enriching the descriptions of audience segments.

As Peterson and Hoyer (1986) point out, the theoretical focus in consumer behavior should be on determining what decisions are primarily affective, what the strength of affect is in decision making, and what happens when affect and cognition are in conflict. The approach-avoidance reaction to an ad as capsulized by Aad is primarily affective. Therefore, initial response to ads is a perfect laboratory for the study of affect in decision making. Only recently has there been an interest in specifying the

role of subjective response in the communication process (Edell and Burke, 1984).

This research looks at the decision to attend an ad or ignore it in low involvement situations as an affective response, one that may be related to temperament type. Research on the variable Aad has spawned theory and model building. The model of the formation of Aad by central and peripheral processing provides the structure for the study. In that model, two subsystems are likely to be impacted by individual differences like personality and temperament type--the ad perception subsystem in central processing and the mood subsystem in peripheral processing. So far the only individual difference suggested as influencing the formation of Aad is an overall positive or negative outlook on life. This research looks at temperament type (as operationalized through the Keirsey Temperament Sorter) as a profile of personal values that may influence ad liking. The underlying hypothesis is that temperament type provides a characteristic schema of attractive images and messages--a schema specific to type. That schema becomes part of the emotional criteria consumers use to screen information. The presence of images or messages attractive to a particular temperament type then influences ad liking.

This research explores the possible link between temperament type and ad liking by presenting subjects

classified as to temperament type with a selection of ads of three different types--utilitarian, symbolic, and hedonic--across a range of product types--utilitarian, symbolic, and hedonic. Subjects respond to each ad on a series of ad liking measures.

Findings of a characteristic response pattern that can be explained in the theory of temperament type does not confirm the effect. If temperament type acts in the marketing environment, the effect will be subtle and can be submerged by situational factors. However, a characteristic pattern of response linked to temperament type does indicate that the effect is worth further research efforts.

Conclusions

In general the subjects in this study indicated a preference for symbolic and hedonic ads over utilitarian ads (see Table 19 for means by ad type across the three dependent variables). Since manipulations for purchase intention was absent in this research, any perceived risk in decision making was absent. Thus, subjects recorded their affective responses in a low involvement situation.

The general pattern of liking for symbolic and hedonic ads over utilitarian ads among subjects may represent the entertainment element in advertising. An ad that depends on the factual presentation of product attributes is more

Table 19: Means by Ad Type

AD TYPE	DEPENDENT VARIABLES		
	Overall Liking	Liking for Ad Execution	Liking for Emotional Content
Symbolic	5.246	5.945	5.617
Hedonic	6.496	7.246	6.040
Utilitarian	7.669	8.86	10.492

Note: Because the scales were constructed with 1 allied with positive adjectives and 6 with negative adjectives, the smallest values indicate liking.

likely to appeal to those looking for a solution to a problem or making a specific purchase decision. If those pressures are lacking, then the entertainment value of an ad may supersede the information gathering function.

The general pattern of liking for symbolic and hedonic ads over utilitarian ads does indicate that demand characteristics were not present. If subjects had perceived a thinking-feeling dichotomy in the ads and if they believed that scoring thinking ads higher demonstrates higher intelligence, better consumer discrimination, or greater social conscience, then scores for utilitarian ads would have been higher. Thus, responses of subjects to ad liking measures can be assumed to be pure affect and not colored by demand characteristics.

Hypothesis Testing

The first hypothesis tested in this research is that there is a statistically significant difference between Artisans, Guardians, Realists, and Idealists in ad liking. This study provides limited support for the hypothesis.

While a main effect for temperament type is not present in each dependent variable, it is present in each analysis done with revised measures and, importantly, in the Overall Liking dependent variable. In no analysis is there an interaction effect for ad type X temperament type.

However, with a fixed-effects model, means are assumed to reflect essential differences in factor level effects.

The second hypothesis in this study concerns a pattern of response to ad types characteristic of each temperament type. Specifically, based on an interpretation of the theory and an examination of research studies, the following patterns of response were hypothesized:

- Artisans will prefer utilitarian and hedonic ad appeals and executions because of their focus on utility as it relates to goal satisfaction.
- Guardians will prefer symbolic ads because of the social information involved.
- Rationals will prefer utilitarian ads because of their focus on attribute information in decision making.
- Idealists will prefer hedonic and symbolic ads because of the imaginative and innovative images.

While overall the sample preferred symbolic and hedonic ads over utilitarian ads, examination of relative rankings of response within ad types shows a consistent pattern, much of it coinciding with the pattern hypothesized.

Exceptions to the hypothesized pattern are as follows:

- Artisans do not exhibit a preference for hedonic ads.
- Rationals do exhibit an attraction to symbolic ads.
- Guardians exhibit a strong attraction to hedonic appeals, even over symbolic ones.

These exceptions to the hypothesized pattern may result from the exploratory aspect of this research. This is the first study to look at the possible link between temperament type and ad liking. The theoretical specifications of temperament type as related to information processing are imprecise. However, it is logical to assume a link between personal values growing out of temperamental dispositions and information processing, including affective response to ad appeals and executions. The exceptions to the hypothesized patterns are not contrary to theory or previous related research.

As regards Artisans, the finding of lack of attraction to hedonic ads parallels Major's (1987) findings that Functionalists (a group similar to Artisans by definition) do not find other-directed appeals involving. Hedonic ads with their focus on pleasure could be interpreted as other-directed.

As regards Rationals' attraction to symbolic ads, the use of affluent lifestyles as a theme may signal an underlying message of product quality. Major's suggests that quality considerations may be important for a certain type (close in definition to Rationals) but she did not find that this type is attracted to emotional appeals. A precise definition of emotional appeals is difficult. For example, Batra (1986) suggests that status appeals can be considered utilitarian since the ad makes a claim about a

product attribute. If Batra's argument is accepted, then the attraction of Rationals to symbolic ads dovetails with the hypothesis of attraction to utilitarian-type ads.

As regards Guardians unhypothesized attraction for hedonic ads, perhaps the "social behavior guidance" (as Major's terms it) preferred by this type is stronger, more attractive, or more emotionally charged in hedonic ads.

One outcome of this research is a recasting and refinement of hypotheses that link temperament and ad liking. When relative ad preference is examined within ad type categories, consistent patterns of preferences appear. Relative ad preference is defined as the position of each temperament type when mean scores are arrayed from most to least liking within ad type or ad type/product type cells. The presence of a pattern does not confirm the effect but it does encourage continued interest in temperament type as a moderator of ad liking.

An examination of means over the several analyses in this study leads to the pattern of ad liking for the four temperament types illustrated in Table 20. The double 'X' indicates strong preferences as represented by a predominating presence in the first or second rank of a given ad type. This revised pattern and the hypotheses that could be derived from it provide the basis for:

Table 20: Revised Response Pattern for Ad Liking

TEMPERAMENT TYPE	AD TYPE		
	Utilitarian	Symbolic	Hedonic
Artisans	XX		
Guardians		X	XX
Idealists		XX	X
Rationals	XX	X	

- summarizing related research on types of people and their response to advertising appeals and executions.
- replicating this study with revised hypotheses and more precise theoretical specification.
- developing hypotheses for testing in future research related to personal values and processing of advertising messages.

Temperament Type or Thinking versus Feeling in Disguise?

It is interesting to note pairing of types in this study. Artisans and Rationals show a preference for utilitarian ad types, Guardians and Idealists for symbolic and hedonic. It could be argued that a thinking-feeling dichotomy tells as much.

One of the underlying assumptions of this research was that because Rationals and Idealists were both inner-directed (intuitive types), they would share an affinity regarding ad type as would Artisans and Guardians because they are both outer-directed (sensing types). Despite slight differences in the wordings, the general type groupings in this study parallel Mizerski and Settle's (1979) findings that inner- and other-directed types do not exhibit a opposite preferences for objective versus social appeals. Evidently, the fact-based reality of the Artisan and the logic-based world of the Rational are similar in shaping preferences. And, the social-belonging drive of

the Guardian relates to the people-oriented values of the Idealist.

Is then the temperament type typology superior to the the thinking-feeling dichotomy? The temperament type approach offers a finer tuned version of thinking-feeling, one that distinguishes between types in emphasis. For example, three types show preferences for symbolic ads-- Idealists, Guardians, and Rationals--but only Idealists show a strong, persistent preference regardless of product type. For Rationals, the attraction to symbolic-type ads appears secondary to attraction to utilitarian-type ads. As suggested previously, Rationals may find in symbolic-type ads an attribute-based appeal that implies product quality. For Guardians, symbolic imagery is attractive but they are most consistently attracted to hedonic imagery. Perhaps in our society, hedonic ads carry more arresting social information for this type than symbolic ads.

Ad Type or Product Type or Both?

In selection of ads for use in this study, two properties were considered: ad type and product type. The property of interest was ad type. It was hoped that a careful selection of ads would provide a manipulation sufficient to produce separation between temperament type groups on affective response to ad messages and executions. In part, the manipulation seems to have worked. However,

the presence of product type as a possible variable presented problems in interpreting findings. Additional analyses showed clearly that product type as well as ad type were acting. There were, however, no interaction effects between these two variables. It is likely that a confound exists between product type and ad type to the extent that temperament type effects can not be determined.

Although there is a body of literature on product symbolism, it seems unlikely on the face of it that temperament type can be linked to product type preferences in the way that temperament and ad type are linked in this study.

However, a link between temperament type, ad type, and product type seem apparent in an examination of the means in this study. In the hedonic ad type-hedonic product type cell, the pattern of liking shows Idealists and Guardians predominating. But when a utilitarian product type appears in a hedonic-type ad, Artisans and Rationals indicate greatest liking. Perhaps this attraction signals a connection between the goal-orientation of Artisans and useful products that satisfy needs. Rationals with their focus on product quality and function may also be attracted to useful, simple products. In the utilitarian ad type-utilitarian product type cell, a strong Artisans-Rationals pattern emerges. But when a symbolic product is presented in a utilitarian-type ad, Idealists indicate ad liking.

Idealists, characterized as identity-seekers, may seek identity clues both in the symbolic information in ads and in symbolic products that communicate something about the self. The appearance of Rationals in rankings of ad liking for symbolic ads for both symbolic and hedonic products may reflect an attraction to product quality information regardless of product type.

Exploration of the temperament type-ad type-product type link can be pursued in three ways:

- 1) Studies with ads representing all combinations of ad type-product type categories.
- 2) Studies where all ads are confined to a single product category across several ad types.
- 3) Studies where a single ad type is investigated across several product categories.

Such studies can provide clear evidence of links between ad type, product type, and temperament type.

Through such studies it may be possible to map the preferences of consumer types for the presentation of products in advertising. Preference maps would be of help to those seeking to understand consumer behavior and to practitioners seeking to narrow the gap between advertising messages sent and received.

Temperament Type and the Attitude-toward-the-Ad Model

The proposed model for the antecedents of Aad has provided the structure for this study. The ad perception subsystem (central processing) and the mood subsystem (peripheral processing) are most likely to be sensitive to individual differences. The ad perception subsystem refers to the consumer's perception of the advertising stimulus including ad execution but excluding attitudes and beliefs about the brand. In general, ad perceptions are thought to result from the values consumers attach to ad execution when involvement is high enough to trigger central processing. Mood as an antecedent of Aad is proposed as a 'state' variable resulting from 'trait' variables.

Two investigation strategies have developed for studying the ad perception subsystem--"reaction profiles" and "ad execution cognitive responses". Reaction profiles, developed by factor analysis from databases of consumer responses to hundreds of ads, are a set of stable factors that measure the emotional appeal as part of ad recall. Ad execution cognitive response involves collecting free responses to ads and content analyzing them into mutually exclusive and exhaustive categories. Inconsistency from study to study means that in neither approach is there a universal set of perceptual dimensions said to represent the ad perceptions subsystem.

No consistent measure or organizing principle has been offered for personal values. Temperament type may prove to be such an organizing principle for consumer response based on a personal value system. If individual differences, specifically temperament type, can be specified as an antecedent in the formation of Aad, then that has implications for explaining individuals' allocation of attention and processing strategy given low involvement/peripheral information processing.

If Gardner (1985b) is correct in her contention that "slight deviations in communications strategies may significantly affect moods upon exposure to advertising" (page 281), then it is essential to understand the traits underlying mood. Dispositional factors capsulized as temperament type may provide insights into affective response to ads. Just as mood acts to color and influence attentional processes without interrupting behavior, temperament may similarly act in subtle but influential and pervasive ways. Temperament type theory can refine and enrich market segmentation and provide insights into decisions on message strategies.

The model of the formation of Aad should be amended to show a link between the ad perception subsystem and the mood subsystem as moderated by individual differences (Figure 8). Certainly the presence of a main effect for temperament type on some of the dependent variables

indicates that it is possible to specify individual differences as moderators of Aad beyond the speculation that a generally positive or negative approach to life may influence mood in the formation of Aad.

Is Temperament Type a Useful Concept?

Given the cluttered marketing environment, Bogart (1984) points out that advertising messages must be fine-tuned to the motivations and interests of a target audience. After research with high and low involvement conditions, Gardner, Mitchell, and Russo (1985) recommended an advertising strategy that facilitates the impact of affective response. Temperament type theory offers a typology for organizing and interpreting consumers' affective responses. Copytesting based on psychological meaning analyzed within the organizing principle of temperament offers a more satisfactory base for exploring consumers' perception of and affective reaction to ads.

The thumbprint of temperament, as Keirsey terms it, expands not only the practitioner's toolkit but provides insight into the buying experience. Holbrook (1986) maintains that emotion and values are central to understanding general patterns of consumption behavior. Stout and Leckenby (1984) point out that emotional response goes beyond appraisal to feelings that motivate or organize behavior. In this context too, temperament type provides a

typology useful in organizing hypotheses and explaining results.

This research adds weight to the speculation that ad imagery, messages, and execution "belong" to different temperament types and that schema associated with temperament type is part of the emotional criteria used to screen information. It is also clear from this research that temperament type schema can be easily overwhelmed by situational factors and strong cultural symbols such as the active lifestyle depicted in the deleted running shoe ads.

However, the psychological meaning of an ad--the subjective perception of and affective response to an ad--does seem related to personal values rooted in temperament type. If that connection can be supported by further research, then it may be possible to build a communication strategy that matches the message with a consumer profile that emphasizes motivations--a goal suggested by Spivey, Munson, and Locander (1983). As Gardner (1974) points out, it may be more meaningful to look at messages from the perspective of the receiver and to explore how that receiver gives meaning to the message. Such an approach requires "macroanalysis" (Holbrook, 1986)--the examination of consumption over a range of ads and products rather than analysis of specific ads and brands.

If a typical response pattern based on temperament type can be mapped, findings could lead to:

- the refinement of advertising planning and testing.
- positioning of brands based on the belief system of the consumer (Howard and Woodside, 1984).

Limitations

This research is exploratory and descriptive. It seeks to specify the individual difference temperament type as a moderator of attitude-toward-the-ad (Aad) or ad liking. The connection between attitude-toward-the-ad and temperament type could only be hypothesized through logical deductions from two separate strands of literature, that on the structure and processes of ad liking and Jung-Myers personality type theory as reinterpreted and operationalized by Keirsey. The paucity of research linking the two traditions meant that decisions about measures and data-gathering procedures had to be made without the recommendations of previous researchers.

As Campbell and Stanley (1963) point out, the minimum required for research to be interpreted is that the variable of interest make a difference in the particular situation. The particular situation in this case is limited to female college students confronted with ads of three types taken from magazines that target that audience segment. Within that framework, temperament types do

appear to exhibit characteristic patterns of preference. However, limitations in the study design and implementation restrict the generalizability of the finding beyond the sample.

The data was collected at two state universities in the southeast. Locality is a situational factor that can be expected to influence personal values and preferences. It can not be demonstrated that the effects observed in this research are not artifacts of locality.

The data was collected in a particular curriculum setting--the introductory classes in textiles, clothing and design. While drawing students from other curricula, interest in courses in these areas presupposes a similarity that may be expressed in the data. It can not be demonstrated that the effects observed in this research did not occur because of this selection bias.

The generalizability is further hampered by the lack of naturalness in the data-gathering setting. Specifically:

- 1) ads were not presented in the context of magazines,
- 2) ads were photocopied reproductions of the actual ads,
- 3) the setting was not natural or disguised,
- 4) the measures were obtrusive.

Because of the limitations of the sample and the unnaturalness of the experimental situation, it is

impossible to generalize findings beyond the specific sample. The subjects in this study can not be shown to represent a population to which the findings would also apply.

Even within the sample, interpretation is hampered by the introduction of a confounding variable--product type. While the characteristic patterns still appear, product type does influence preference. Thus, in this study, ad type is confounded with product type--that is, the effect of ad type could be mistaken for product type.

The use of the Keirsey Temperament Sorter as a measure of temperament type is problematical. Developed by a clinical psychologist with over 30 years of experience and based on the well-tested MBTI, the measure appears to have face validity. However, the relatively new measure (first published in 1984) does not have established psychometric properties. In this study, the measure was item analyzed using factor analysis and revised according to the loadings and factor patterns observed. Low loadings and unclear factors in this study may have resulted from the fact that the measure was developed for the general population and was used with only females. However, lack of psychometric information such as test-retest coefficient and internal consistency coefficient indicates a need for further psychometric evaluation.

The attitude-toward-the-ad measures, the six bipolar adjective scales, failed to exhibit the hypothesized component structure--Overall Ad Liking, Liking of Ad Execution, Liking of Emotional Content. While these scales have been used by other researchers in a context defined as comparable to the components, no consistent, reliable set of scales can be said to represent attitude-toward-the-ad and its component structure. Without a consistent measure with established psychometric properties, future research on Aad will be hampered.

Recommendations for Future Research

McBride, Cline, and Miller (1987) suggest that personality type theory and, by extension, temperament type have been neglected by advertising. Perhaps the resurgence of interest among psychologists in dispositional factors (Peele, 1984) such as those theorized by Jung has not yet reached the applied fields like advertising. And yet interesting testable hypotheses spring from type theory. For example, McBride, Cline, and Miller (1987) in their theory of psychological type congruence suggest that individuals categorize objects by type and prefer congruence between their assessment of the object's type and its presentation. One explanation for the processes underlying attitude-toward-the-ad is reciprocal mediation. Reciprocal mediation hypothesizes a triad mechanism between

the consumer, the ad, and the brand within a balance system. Since there will likely always be a positive relationship between the ad and the brand, a balance occurs when the consumer either likes or dislikes both the ad and the brand. Given the link between temperament and ad liking, these hypotheses suggest a causal chain from predispositions in the form of personality or temperament type to preference and, perhaps, purchase intention.

The first step should be to confirm the link between temperament and ad liking suggested by this research. Since product type appears to be a confound, selection of stimulus ads becomes critical. As discussed above, it will be necessary to control either for ad type, product type or both in subsequent research. A series of such studies could map the links between ad type and product type and temperament type.

Confirming the effect of temperament type also requires replication with male subjects and other age ranges. Personality type and temperament type theory suggests that sex differences exist and that these differences will be reflected in the measures. Further, theory suggest a developmental factor associated with age. Personality theory suggests that people evolve with time into a more balanced state where types may be less distinguishable. Temperament type theory suggests the

opposite--that is, temperament type is the more primitive state and people evolve into more and more finely differentiated personality types.

The sex differences and developmental factor mean that temperament type effects will have to be mapped by sex and audience segment instead of viewed as consistent across populations. Thus, temperament type can be used to fine-tune descriptions of audience segments and as an aid in deciding on message strategy.

Before confirming the effect with other subject types and mapping the effect across audience segments, it will be necessary to investigate the measures. While the Keirsey Temperament Sorter is convenient and practical for advertising research because of its length and ease of administration, its psychometric properties have not been fully established. Without a reliable measure, the effect of temperament type on ad liking can not be interpreted as covariation and may be attributable to chance.

Operationalization of temperament type in this study follows Keirsey's recommendation: Sensing Perceptive, Sensing Judging, Intuitive Thinkers, and Intuitive Feelers. Myers (1980a) has a slightly different way of defining temperament type--Sensing Thinkers, Sensing Feelers, Intuitive Thinkers, and Intuitive Feelers. Note the more direct thinking-feeling dichotomy in Myers' approach.

Research should be conducted using both classifications and comparisons made between the two classification schemes.

Further research is needed to confirm the component structure of the variable attitude-toward-the-ad (Aad). Each investigation has used different sets of bipolar adjectives. Mapping the audience segments for temperament type effects on ad liking requires a standardized Aad measure with established psychometric properties.

Summary

This research provides support for the hypothesis that temperament types differ in their response to ad appeals and executions and that these differences are detectable as a characteristic pattern of affective response.

However, the restrictions on the sample--a convenience sample of college-aged females--limit the generalizability of the findings. Further, this study points out the need for improved measures for both temperament type and attitude-toward-the-ad.

Even with the limitations, the findings indicate a link between temperament type, ad type, and product type in the formation of attitude-toward-the-ad. A possible confound between ad type and product type provides the impetus for future research.

This study suggests replacing the speculation that individual differences such as a positive or negative

outlook on life may influence the formation of Aad with a revised model reflecting the influence of individual differences such as temperament type on both the ad perception and mood subsystems. Findings indicate that individual differences can be specified and empirically demonstrated as moderators of Aad.

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APPENDIXES

APPENDIX A
QUALIFYING ADS

EVELYN L. BRANNON
EXTENSION CLOTHING SPECIALIST

WORK #: 826-4913
HOME #: 887-6561

INVITATION TO PARTICIPATE IN A RESEARCH PROJECT

I am working on my doctorate at the University of Tennessee in the College of Communication. One of the requirements is that I complete an original piece of research and write up the results. I would appreciate your help in classifying the ads to be used in my project.

My research investigates the link between temperament/personality type and attention to advertising messages.

Visualize the way people encounter and evaluate advertising. Flipping through a magazine, clicking around the TV dial--in an instant a decision is made to give attention to the ad or ignore it. What is it about an ad that catches the attention of some people and not others?

This research project is designed to investigate the possibility that temperament/personality type acts as a screening mechanism for an individual. That is, individuals of a given temperament/personality type are attracted to a certain type of message presented in a specific way.

The subjects in this study will be tested to determine their temperament/personality type. Then, they will look at some ads and answer questions about each one. From this data I will be able to determine if temperament/personality type has an effect on liking for ads.

The first step is to select the ads to be used in the study. Since the subjects will be female college students, it is important that the ads be selected by a panel composed of individuals like the subjects. Why? Because the meaning of symbols in the ads may be different for different groups. Having a panel similar to the research subjects select the ads means that the symbol system in the ads is more likely to be consistent in interpretation across that group.

I am asking you to be part of that panel. You will be asked to look through a series of ads and classify them as to ad type. The assignment should take no more than 15 to 30 minutes.

To thank you for your help, each participant will receive a certificate good for a free ice cream cone at Baskin-Robbins.

The following pages give more specific directions. If you have questions about any part of this task, please call me.

PLEASE RETURN THE COMPLETED PACKET TO PAM ULRICH BY THURSDAY.

CLASSIFYING ADS BY TYPE Look at the ad as a whole--headline, visual, and copy of the ad. What overall appeal is the ad making to the consumer? How would you classify each ad given the following definitions:

Utilitarian Ads Ads that refer to physical, tangible features of the product and/or explain the performance of the product.

Is it appealing to the practical side of the consumer by explaining how the product works? Or, is it simply picturing the product and its parts? That's an appeal based on product features.

Is it extolling the reliability and ease of use? That's an appeal based on product performance.

These types of ads should be classified as utilitarian.

Symbolic Ads Ads that refer to the nature or characteristics of the consumer or the social context of the consumer of the product.

Is the ad wooing the consumer by associating the product with people of high status, taste, affluence and style? That's an appeal that links product use to attaining social position.

Is the product positioned as the key to projecting a desirable social role? That's an appeal that links product use with achieving life goals.

These types of ads should be classified as symbolic.

Hedonic Ads Ads that refer to the emotional satisfaction or sensual pleasures resulting from owning or using the product.

Is the ad promising sensual pleasures to the users of the product? That's an appeal that links product use with the enjoyment of the senses.

Does the ad link emotional well being with consuming or using the product?

These ads should be classified as hedonic.

CONSIDER ONLY THE MESSAGE OF THE AD. DISREGARD YOUR PERSONAL REACTION TO THE AD, THE PRODUCT, AND THE BRAND. YOUR ONLY TASK IS TO ANALYZE THE APPEALS USED IN THE AD.

For the purposes of this research, each ad must be classified into only one of the three types--utilitarian, symbolic, or hedonic.

STEPS IN CLASSIFYING ADS

1. Look through all the ads one time spending a few seconds examining each ad.
2. Spread out the three scoring sheets and go back through the ads sorting them into the three ad types. Set aside any ads that don't seem to fall in any category.
3. Go back through each ad in the utilitarian stack. Do you still agree with that classification? In the same way, go through the symbolic and hedonic stacks.
4. Now look at the ads you found difficult to classify. If the classification now seems clear to you, add them to the appropriate stack. If you are unable to classify some ads, keep them in a separate stack.
5. Record the I.D. numbers of the ads on the appropriate sheets. Paper clip ads you classified as utilitarian to that answer sheet. Do the same with the other two stacks. Return all ads and answer sheets to the envelope.

REMEMBER!! ADS MUST BE CLASSIFIED INTO MUTUALLY EXCLUSIVE CATEGORIES--THAT IS, EACH AD MUST BE CLASSIFIED AS ONE AND ONLY ONE TYPE.

THANK YOU FOR YOUR HELP!

SCORING SHEET/UTILITARIAN ADS

Ads that refer to physical, tangible features of
the product and/or explain the performance
of the product.

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

Ads that refer to the nature or characteristics
of the consumer or the social context of the
consumer of the product.

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. #

I.D. #

I.D. #

I.D. #

I.D. #

I.D. #

SCORING SHEET/HEDONIC ADS

Ads that refer to the emotional satisfaction or sensual pleasures resulting from owning or using the product.

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

I.D. # _____

APPENDIX B

DATA GATHERING INSTRUMENT

The Kelrsey Temperament Sorter

1. At a party do you
 - (a) interact with many, including strangers
 - (b) interact with a few, known to you
2. Are you more
 - (a) realistic than speculative
 - (b) speculative than realistic
3. Is it worse to
 - (a) have your "head in the clouds"
 - (b) be "in a rut"
4. Are you more impressed by
 - (a) principles
 - (b) emotions
5. Are you more drawn toward the
 - (a) convincing
 - (b) touching
6. Do you prefer to work
 - (a) to deadlines
 - (b) just "whenever"
7. Do you tend to choose
 - (a) rather carefully
 - (b) somewhat impulsively
8. At parties do you
 - (a) stay late, with increasing energy
 - (b) leave early, with decreased energy
9. Are you more attracted to
 - (a) sensible people
 - (b) imaginative people
10. Are you more interested in
 - (a) what is actual
 - (b) what is possible
11. In judging others are you more swayed by
 - (a) laws than circumstances
 - (b) circumstances than laws

12. In approaching others is your inclination to be somewhat
 - (a) objective
 - (b) personal
13. Are you more
 - (a) punctual
 - (b) leisurely
14. Does it bother you more having things
 - (a) incomplete
 - (b) completed
15. In your social groups do you
 - (a) keep abreast of other's happenings
 - (b) get behind on the news
16. In doing ordinary things are you more likely to
 - (a) do it the usual way
 - (b) do it your own way
17. Writers should
 - (a) "say what they mean and mean what they say"
 - (b) express things more by use of analogy
18. Which appeals to you more
 - (a) consistency of thought
 - (b) harmonious human relationships
19. Are you more comfortable in making
 - (a) logical judgments
 - (b) value judgments
20. Do you want things
 - (a) settled and decided
 - (b) unsettled and undecided
21. Would you say you are more
 - (a) serious and determined
 - (b) easy-going
22. In phoning do you
 - (a) rarely question that it will all be said
 - (b) rehearse what you'll say
23. Facts
 - (a) "speak for themselves"
 - (b) illustrate principles

24. Are visionaries
(a) somewhat annoying
(b) rather fascinating
25. Are you more often
(a) a cool-headed person (b) a warm-hearted person
26. Is it worse to be
(a) unjust (b) merciless
27. Should one usually let events occur
(a) by careful selection and choice
(b) randomly and by chance
28. Do you feel better about
(a) having purchased (b) having the option to buy
29. In company do you
(a) initiate conversation (b) wait to be approached
30. Common sense is
(a) rarely questionable (b) frequently questionable
31. Children often do not
(a) make themselves useful enough
(b) exercise their fantasy enough
32. In making decisions do you feel more comfortable with
(a) standards (b) feelings
33. Are you more
(a) firm than gentle (b) gentle than firm
34. Which is more admirable:
(a) the ability to organize and be methodical
(b) the ability to adapt and make do
35. Do you put more value on the
(a) definite (b) open-ended
36. Does new and non-routine interaction with others
(a) stimulate and energize you
(b) tax your reserves
37. Are you more frequently
(a) a practical sort of person
(b) a fanciful sort of person
38. Are you more likely to
(a) see how others are useful
(b) see how others see
39. Which is more satisfying:
(a) to discuss an issue thoroughly
(b) to arrive at agreement on an issue
40. Which rules you more:
(a) your head (b) your heart
41. Are you more comfortable with work that is
(a) contracted (b) done on a casual basis
42. Do you tend to look for
(a) the orderly (b) whatever turns up
43. Do you prefer
(a) many friends with brief contact
(b) a few friends with more lengthy contact
44. Do you go more by
(a) facts (b) principles
45. Are you more interested in
(a) production and distribution
(b) design and research
46. Which is more of a compliment:
(a) "There is a very logical person."
(b) "There is a very sentimental person."

24. Are visionaries
(a) somewhat annoying
(b) rather fascinating
25. Are you more often
(a) a cool-headed person (b) a warm-hearted person
26. Is it worse to be
(a) unjust (b) merciless
27. Should one usually let events occur
(a) by careful selection and choice
(b) randomly and by chance
28. Do you feel better about
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(a) initiate conversation (b) wait to be approached
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(b) exercise their fantasy enough
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33. Are you more
(a) firm than gentle (b) gentle than firm
34. Which is more admirable:
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(b) the ability to adapt and make do
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(b) see how others see
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(b) a few friends with more lengthy contact
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(a) facts (b) principles
45. Are you more interested in
(a) production and distribution
(b) design and research
46. Which is more of a compliment:
(a) "There is a very logical person."
(b) "There is a very sentimental person."

47. Do you value in yourself more that you are
(a) unwavering (b) devoted
48. Do you more often prefer the
(a) final and unalterable statement
(b) tentative and preliminary statement
49. Are you more comfortable
(a) after a decision (b) before a decision
50. Do you
(a) speak easily and at length with strangers
(b) find little to say to strangers
51. Are you more likely to trust your
(a) experience (b) hunch
52. Do you feel
(a) more practical than ingenious
(b) more ingenious than practical
53. Which person is more to be complimented: one of
(a) clear reason (b) strong feeling
54. Are you inclined more to be
(a) fair-minded (b) sympathetic
55. Is it preferable mostly to
(a) make sure things are arranged
(b) just let things happen
56. In relationships should most things be
(a) renegotiable
(b) random and circumstantial
57. When the phone rings do you
(a) hasten to get to it first
(b) hope someone else will answer
58. Do you prize more in yourself
(a) a strong sense of reality (b) a vivid imagination
59. Are you drawn more to
(a) fundamentals (b) overtones
60. Which seems the greater error:
(a) to be too passionate (b) to be too objective
61. Do you see yourself as basically
(a) hard-headed (b) soft-hearted
62. Which situation appeals to you more:
(a) the structured and scheduled
(b) the unstructured and unscheduled
63. Are you a person that is more
(a) routinized than whimsical
(b) whimsical than routinized
64. Are you more inclined to be
(a) easy to approach (b) somewhat reserved
65. In writings do you prefer
(a) the more literal (b) the more figurative
66. Is it harder for you to
(a) identify with others (b) utilize others
67. Which do you wish more for yourself:
(a) clarity of reason (b) strength of compassion
68. Which is the greater fault:
(a) being indiscriminate (b) being critical
69. Do you prefer the
(a) planned event (b) unplanned event
70. Do you tend to be more
(a) deliberate than spontaneous
(b) spontaneous than deliberate

I.D. NUMBER _____ SEX: MALE FEMALE AGE: _____

ANSWER SHEET Please indicate how you evaluate each ad by circling the number on each scale that corresponds to your rating. First, look at each ad. Then, close the booklet and rate that ad. Continue until all ads have been rated.

Example:

GOOD 1-----2-----3-----4-----5-----6-----7 BAD
1-----2-----3-----4-----5-----6-----7

PRACTICE AD

1 LIKE 1-----2-----3-----4-----5-----6-----7 DISLIKE

2 INTERESTING 1-----2-----3-----4-----5-----6-----7 UNINTERESTING

3 LIVELY 1-----2-----3-----4-----5-----6-----7 DULL

4 IMAGINATIVE 1-----2-----3-----4-----5-----6-----7 UNIMAGINATIVE

5 SENSUAL 1-----2-----3-----4-----5-----6-----7 NOT SENSUAL

6 HEARTWARMING 1-----2-----3-----4-----5-----6-----7 COLD

AD 1

1.1 LIKE 1-----2-----3-----4-----5-----6-----7 DISLIKE

1.2 INTERESTING 1-----2-----3-----4-----5-----6-----7 UNINTERESTING

1.3 LIVELY 1-----2-----3-----4-----5-----6-----7 DULL

1.4 IMAGINATIVE 1-----2-----3-----4-----5-----6-----7 UNIMAGINATIVE

1.5 SENSUAL 1-----2-----3-----4-----5-----6-----7 NOT SENSUAL

1.6 HEARTWARMING 1-----2-----3-----4-----5-----6-----7 COLD

Please indicate how you rate the ad on the following scales by circling the appropriate number.

Example:

GOOD
1-----2-----3-----4-----5-----6-----7
BAD

AD 2

2.1 LIKE DISLIKE
1-----2-----3-----4-----5-----6-----7

2.2 INTERESTING UNINTERESTING
1-----2-----3-----4-----5-----6-----7

2.3 LIVELY DULL
1-----2-----3-----4-----5-----6-----7

2.4 IMAGINATIVE UNIMAGINATIVE
1-----2-----3-----4-----5-----6-----7

2.5 SENSUAL NOT SENSUAL
1-----2-----3-----4-----5-----6-----7

2.6 HEARTWARMING COLD
1-----2-----3-----4-----5-----6-----7

AD 3

3.1 LIKE DISLIKE
1-----2-----3-----4-----5-----6-----7

3.2 INTERESTING UNINTERESTING
1-----2-----3-----4-----5-----6-----7

3.3 LIVELY DULL
1-----2-----3-----4-----5-----6-----7

3.4 IMAGINATIVE UNIMAGINATIVE
1-----2-----3-----4-----5-----6-----7

3.5 SENSUAL NOT SENSUAL
1-----2-----3-----4-----5-----6-----7

3.6 HEARTWARMING COLD
1-----2-----3-----4-----5-----6-----7

Please indicate how you rate the ad on the following scales by circling the appropriate number.

Example:

GOOD 1-----2-----3-----4-----5-----6-----7 BAD

AD 4

4.1 LIKE 1-----2-----3-----4-----5-----6-----7 DISLIKE

4.2 INTERESTING 1-----2-----3-----4-----5-----6-----7 UNINTERESTING

4.3 LIVELY 1-----2-----3-----4-----5-----6-----7 DULL

4.4 IMAGINATIVE 1-----2-----3-----4-----5-----6-----7 UNIMAGINATIVE

4.5 SENSUAL 1-----2-----3-----4-----5-----6-----7 NOT SENSUAL

4.6 HEARTWARMING 1-----2-----3-----4-----5-----6-----7 COLD

AD 5

5.1 LIKE 1-----2-----3-----4-----5-----6-----7 DISLIKE

5.2 INTERESTING 1-----2-----3-----4-----5-----6-----7 UNINTERESTING

5.3 LIVELY 1-----2-----3-----4-----5-----6-----7 DULL

5.4 IMAGINATIVE 1-----2-----3-----4-----5-----6-----7 UNIMAGINATIVE

5.5 SENSUAL 1-----2-----3-----4-----5-----6-----7 NOT SENSUAL

5.6 HEARTWARMING 1-----2-----3-----4-----5-----6-----7 COLD

Please indicate how you rate the ad on the following scales by circling the appropriate number.

Example:

GOOD
1-----2-----3-----4-----5-----6-----7
BAD

AD 6

6.1 LIKE DISLIKE
1-----2-----3-----4-----5-----6-----7

6.2 INTERESTING UNINTERESTING
1-----2-----3-----4-----5-----6-----7

6.3 LIVELY DULL
1-----2-----3-----4-----5-----6-----7

6.4 IMAGINATIVE UNIMAGINATIVE
1-----2-----3-----4-----5-----6-----7

6.5 SENSUAL NOT SENSUAL
1-----2-----3-----4-----5-----6-----7

6.6 HEARTWARMING COLD
1-----2-----3-----4-----5-----6-----7

AD 7

7.1 LIKE DISLIKE
1-----2-----3-----4-----5-----6-----7

7.2 INTERESTING UNINTERESTING
1-----2-----3-----4-----5-----6-----7

7.3 LIVELY DULL
1-----2-----3-----4-----5-----6-----7

7.4 IMAGINATIVE UNIMAGINATIVE
1-----2-----3-----4-----5-----6-----7

7.5 SENSUAL NOT SENSUAL
1-----2-----3-----4-----5-----6-----7

7.6 HEARTWARMING COLD
1-----2-----3-----4-----5-----6-----7

Please indicate how you rate the ad on the following scales by circling the appropriate number.

Example:

GOOD BAD
1-----2-----3-----4-----5-----6-----7

AD 8

8.1 LIKE DISLIKE
1-----2-----3-----4-----5-----6-----7

8.2 INTERESTING UNINTERESTING
1-----2-----3-----4-----5-----6-----7

8.3 LIVELY DULL
1-----2-----3-----4-----5-----6-----7

8.4 IMAGINATIVE UNIMAGINATIVE
1-----2-----3-----4-----5-----6-----7

8.5 SENSUAL NOT SENSUAL
1-----2-----3-----4-----5-----6-----7

8.6 HEARTWARMING COLD
1-----2-----3-----4-----5-----6-----7

AD 9

9.1 LIKE DISLIKE
1-----2-----3-----4-----5-----6-----7

9.2 INTERESTING UNINTERESTING
1-----2-----3-----4-----5-----6-----7

9.3 LIVELY DULL
1-----2-----3-----4-----5-----6-----7

9.4 IMAGINATIVE UNIMAGINATIVE
1-----2-----3-----4-----5-----6-----7

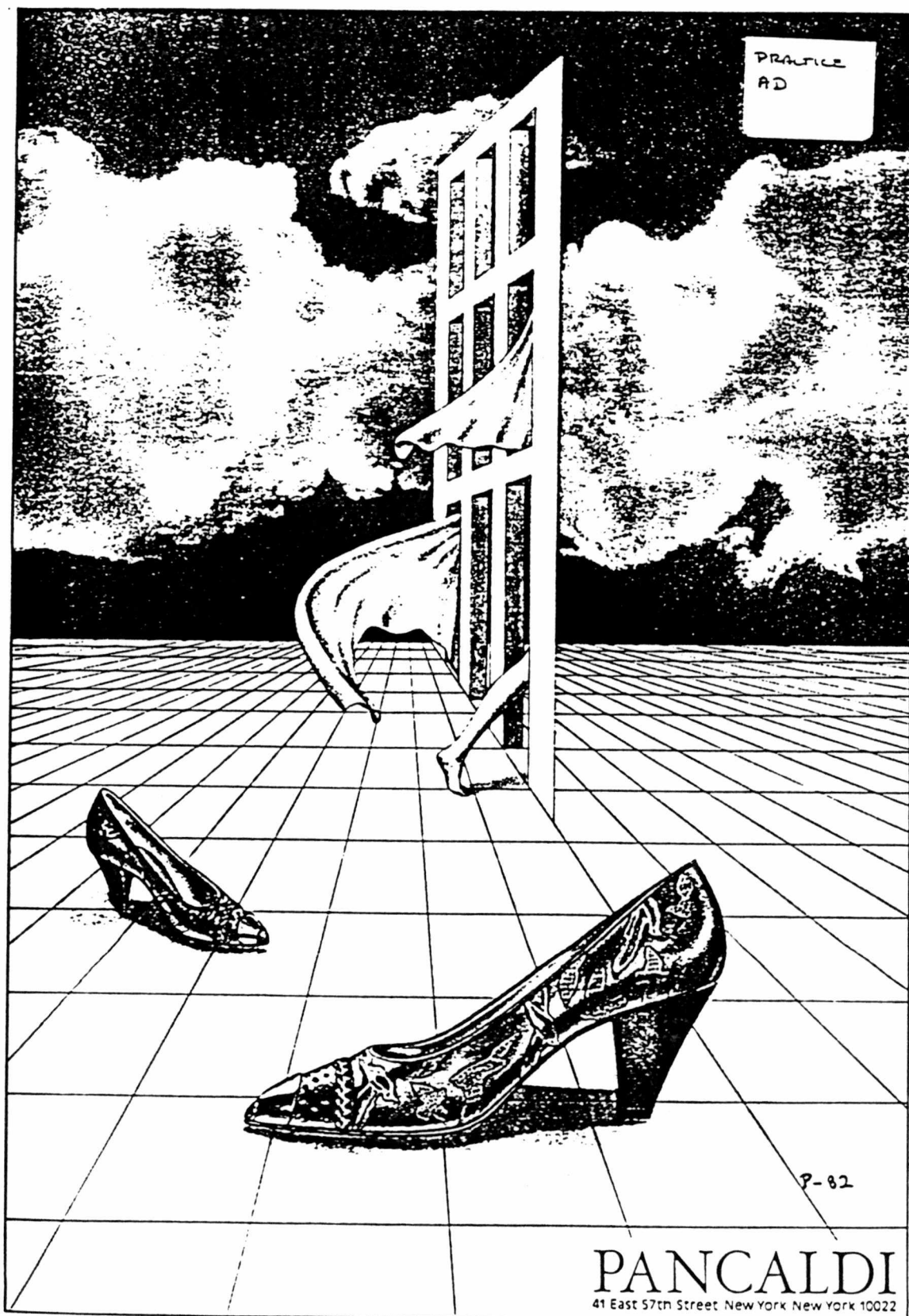
9.5 SENSUAL NOT SENSUAL
1-----2-----3-----4-----5-----6-----7

9.6 HEARTWARMING COLD
1-----2-----3-----4-----5-----6-----7

THANKS! I APPRECIATE YOUR HELP IN THIS RESEARCH PROJECT.

APPENDIX C

TEST ADS

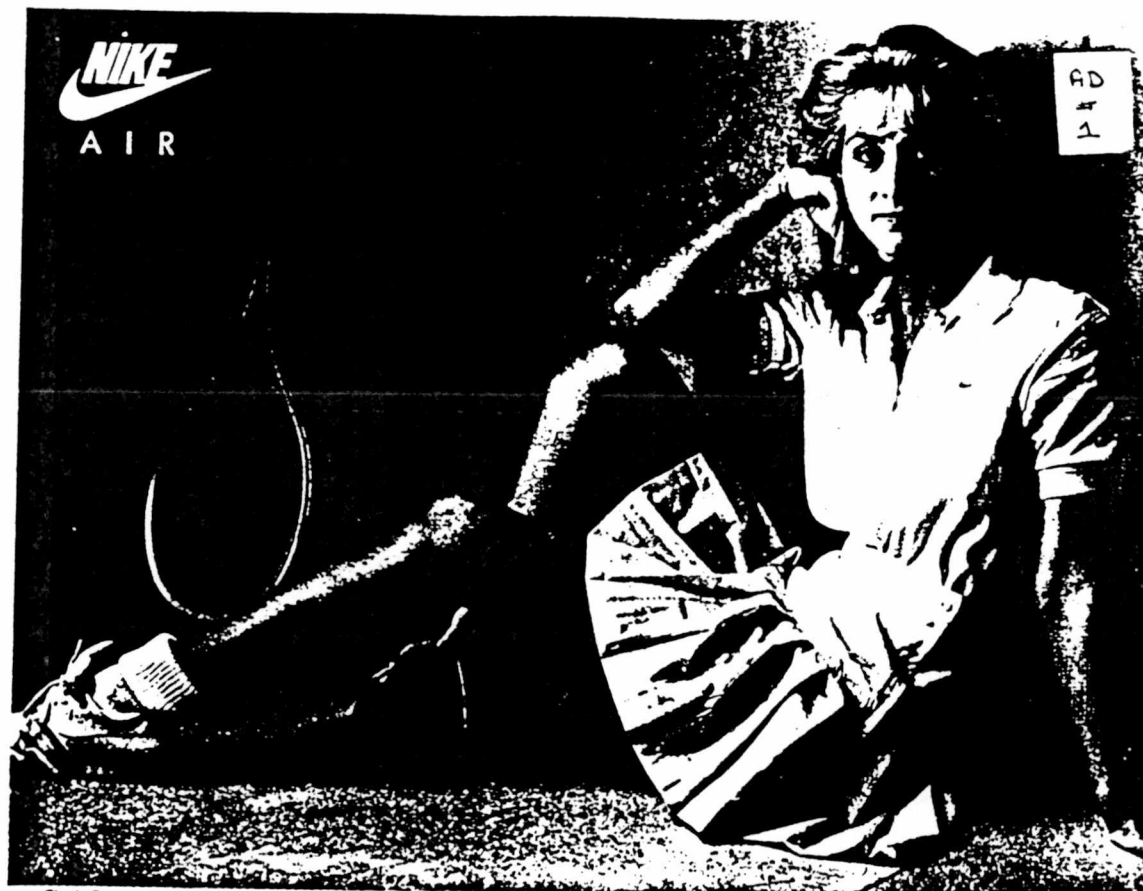


PRACTICE
AD

P-82

PANCALDI
41 East 57th Street New York New York 10022

681106



Cherie Dussair, Paper Sales Representative, in Jersey Polo and Yoke Pleat Skirt.

You don't have to be center court to be serious about this game. But you do have to dress for the occasion.

The Nike Air Play comes with Nike-Air™ cushioning. So you play longer, in greater comfort, match after match, with no breakdown. The Footframe cradles the foot for a stable, snug fit. While the Dura-thane forefoot cup provides an outsole capable of lasting up to three times longer than those of conventional rubber.

The Nike Air Play. If it sounds like an aggressive shoe, it is. But then, this is no timid game.

Air Play



AD

2

Lubriderm means softness All over your body

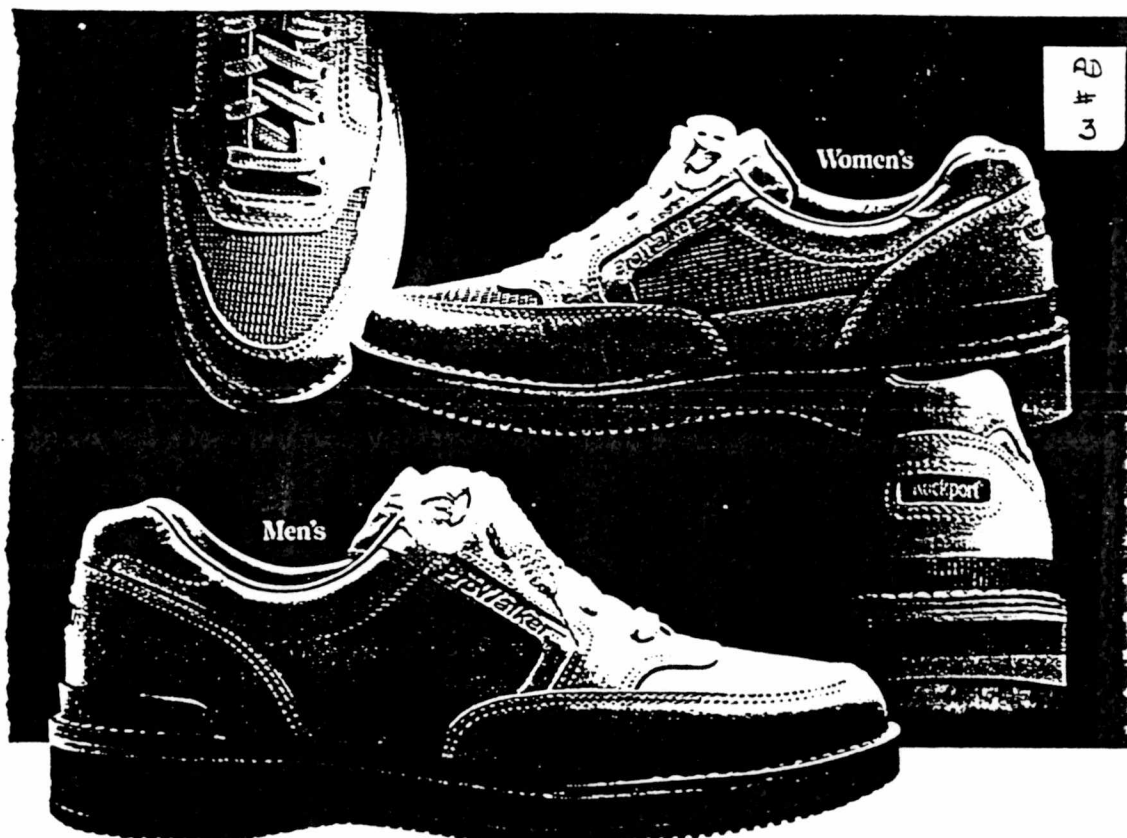


Lubriderm[®]
Lotion
FOR DRY SKIN CARE

Created for Dermatologists.
Soothes, smooths, moisturizes
and protects.
Absorbs quickly.

AD

3



The Walking Shoes.

Yes, you really do need special shoes for walking. Shoes designed for running, tennis, or other sports aren't ideally equipped for the specific forces and motions of walking.

That's why you need ProWalkers® by Rockport. ProWalkers are the result of Rockport's years of research into walking, and years of experience in making comfortable walking shoes.



ACCEPTED BY THE AMERICAN PODIATRIC MEDICAL ASSOCIATION

They're biomechanically engineered to provide the stability and shock absorption you need for comfortable fitness walking. With performance features like a high-density Vibram® sole to absorb shocks.

A built-in rocker profile that aids your natural walking motion and reduces muscle fatigue.

Foam padding to cushion your foot.

And multiple heel counters for greater lateral stability and support.

ProWalkers are available in all-leather and breathable fabric-and-leather styles for men and women.

Try on a pair.

And get ready for some serious walking.



TAKE THE ROCKPORT
FITNESS WALKING TEST
ENT. 1-2-27 10:00AM-10:00PM

Rockport

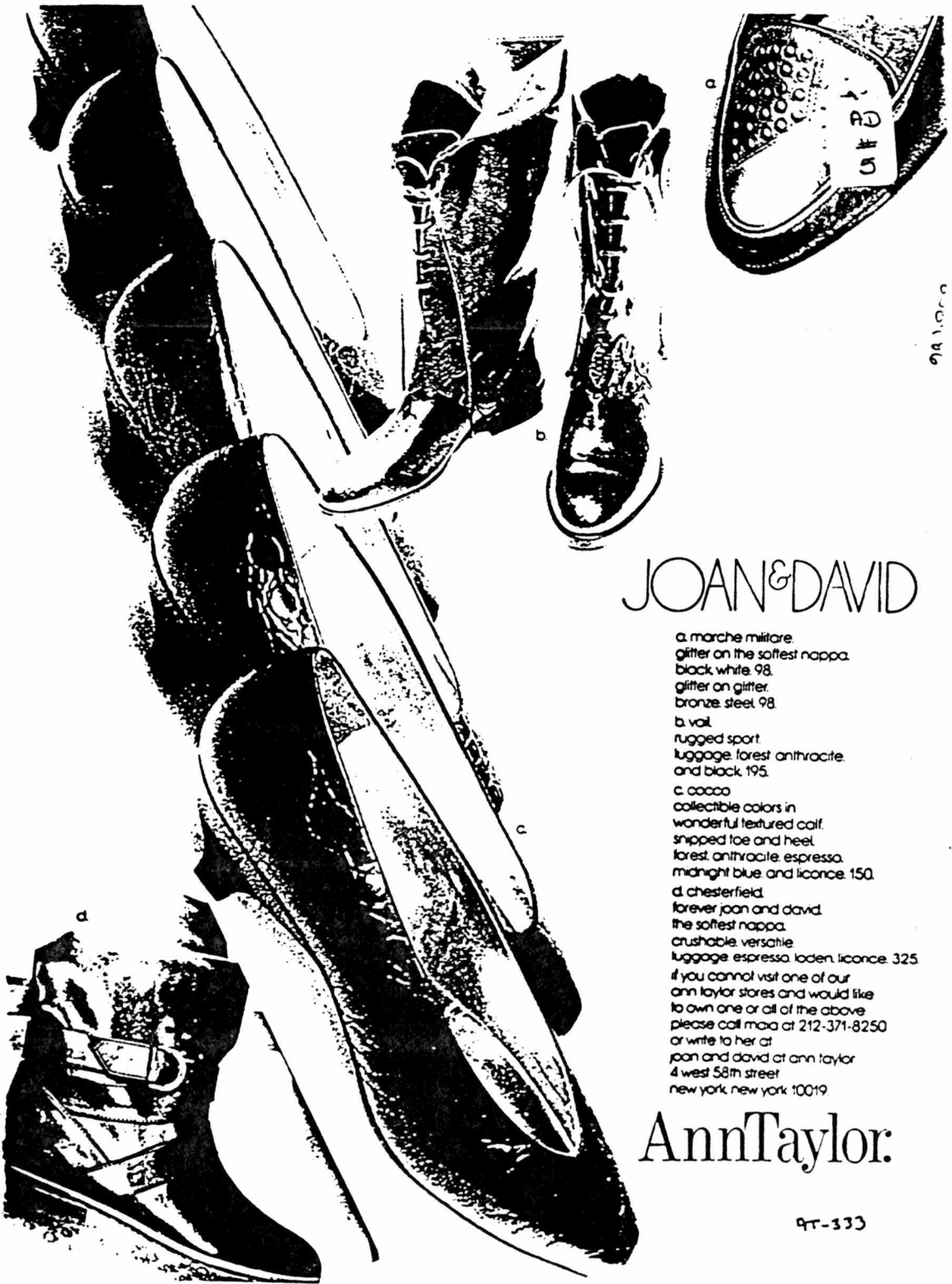
INNOVATIONS IN COMFORT
72 Howe Street, Marlboro, MA 01752

R-63



GUCCI No. 3
The New Classic

macy's



JOAN & DAVID

a. marche militaire.
glitter on the softest nappa.
black, white, 98.
glitter on glitter.
bronze, steel, 98.

b. vail.
rugged sport.
luggage, forest, anthracite,
and black, 195.

c. cocola.
collectible colors in
wonderful textured calf.
snipped toe and heel.
forest, anthracite, espresso,
midnight blue, and licence, 150.

d. chesterfield.
forever joan and david.
the softest nappa.
crushable, versatile.
luggage, espresso, laden, licence, 325.

if you cannot visit one of our
ann taylor stores and would like
to own one or all of the above
please call maia at 212-371-8250
or write to her at
joan and david at ann taylor
4 west 58th street
new york, new york 10019

AnnTaylor.

9T-333

7 # 2
If it isn't Genuine Vaseline[®]
you can't get all this:
PETROLEUM JELLY

Trusted skin care
for 125 years.

Unsurpassed skin softening
for rough hands, elbows,
knees and heels.

Vaseline TRADEMARK[®]
PURE PETROLEUM JELLY

100% purity—no additives
to irritate sensitive skin.

Safe and gentle
skin protection.

Genuine Vaseline[®]
PETROLEUM JELLY
Why trust your skin to anything less?

© 1987 Chesebrough-Pond's Inc.,
owner of registered trademark Vaseline.



"I AM SHALIMAR,
ALL OVER."
GABRIELLE LAZURE

PD
00 #10

THE SHALIMAR BODY.

The New Collection:

- Body Lotion
- Body Shampoo
- Bath Oil
- Talc
- Deodorant Powder
- Body Creme
- Soap

SHALIMAR



GUERLAIN
PARIS

G-38

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RD

9

YOUR HEART BEATS QUICKER.
YOUR FACE IS FLUSHED.
YOU FEEL SUDDENLY EUPHORIC.
YOU'RE EITHER IN LOVE OR IN REEBOK.

INTRODUCING THE REEBOK FITNESS WALKER.

Is it possible for walking to be as exhilarating as love? Yes, if you pick up the pace a bit. And do it in the proper equipment.

Reebok Fitness Walkers are made with an exclusive Spring System heel-cushion-

ing device that works like a pogo stick: with each step, they'll absorb your heel's impact, then return that energy back into your stride.

And to make the sport of walking even more appealing, new Fitness Walkers are available

in soft, supple garment leather and in a wide variety of colors.

Altogether, they could well be the best walking shoe you can buy today. For love or money.



Reebok 
FITNESS WALKERS

RE-98

VITA

Evelyn L. Brannon was born in Gadsden, Alabama on January 27, 1947. She attended elementary schools in that city and was graduated from Gadsden High School in June 1965. The following September she entered Auburn University, and in June 1969 she received a Bachelor of Science degree in Clothing and Textiles. In the fall of 1969 she accepted a teaching assistantship at Auburn University and began study toward a Master's degree. The degree was awarded in June 1971.

After two years of teaching in the Department of Consumer Affairs, Auburn University, she moved to New York City where she worked for Butterick Fashion Marketing Company as editor of educational audio-visual products and, later, acquisitions editor for trade books. She left New York to accept the post of Editor in Chief for a special interest magazine owned by Progressive Farmer/Southern Living. In 1980 she joined the Alabama Cooperative Extension Service State Staff, Auburn University.

In 1984 she entered The Graduate School of The University of Tennessee, Knoxville. After completing course work, she returned her position with the Alabama Cooperative Extension Service. She received the Doctor of Communications degree in May, 1989.