

An Empirical Study on Emotional Intensity and the Influence of Product Involvement in the Context of the Integrative Framework

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〈요약〉

A model is proposed for the role of emotional intensity of a web site, and the moderating influence of product involvement, in the Integrative Framework of persuasion (Meyers-Levy and Malaviya 1999). The model also appropriately operationalizes the constructs emotional intensity of a web site and product involvement. The three routes to persuasion, Central, Peripheral, and Experiential correspond to high, moderate, and low involvement (Meyers-Levy and Malaviya 1999). The involvement construct is measured from message recipients using the Personal Product Inventory (PII), which was developed to capture the concept of product involvement (Zaichkowsky 1985). The conceptualization of the Personal Product Inventory is a contextfree measure that also has robust psychometric properties when applied to advertisements (Zaichkowsky 1994). The propositions highlight the expected importance of emotional intensity of a web site. The moderating influence of product involvement is also proposed.

Specifically, what this work proposes is that the emotional intensity of a product site has a larger impact on attitude change under low product involvement, as opposed to moderate product involvement. Support for this reasoning can be found in the persuasion literature (Petty et al 1986). The Petty et al (1986) frame work is a dual process descriptive and predictive frame work in the area of attitude formation and change. Recently, Myers Levy and Malaviya (1999) have proposed a tri-process framework. This is in turn based on the dual process model of Petty et al. (1986). The study outlined in this paper aims to deepen the Meyers Levy and Malaviya (1999) and frame work.

The propositions outlined in the model are empirically tested using a repeated measures experimental design. The emotional intensity is measured using a scale that is based on experts judgments. Using a paired comparison t-test two sites are determined to be of high and low emotional intensity. The model is tested using a repeated measures experimental design. The first independent variable Emotional Intensity of the site is manipulated. The Second independent variable, Personal Product Inventory is measured. While, the dependent variable, product attitude change will also be measured. Utilizing Analysis of Variance (ANOVA) the data is analyzed using SPSS.

The results suggest that besides the rational content of messages their emotional content can also influence attitude change. Specifically, it is proposed that the manipulation of emotional intensity of a product Web site has a greater impact on product attitudes under high and low product involvement conditions, rather than moderate product involvement. However, the results for product involvement as a continuous variable has a p value of 0.09. Further, the results for three levels of product involvement were far from significant. For two levels of product involvement also, the results were insignificant, the p value approached 0.20. This evidence indicates that it is premature to conclude that there are three routes to persuasion. A caveat, however, must be added, in that the manipulations may not have been strong enough to test the proposed hypotheses. Further, undoubtedly, there is unequivocal evidence the emotional intensity of a product Web site, as measured here, has a direct impact on product attitudes.

Key Words : emotional intensity, web site, product involvement

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Introduction

Consumers' attitudes play a key role in persuasion through advertisements. Therefore, the study of consumers' attitudes has played a central role in understanding advertising effectiveness through different media. Probably the most popular way in which marketers attempt to change consumers' attitudes is by advertisements. Over two decades ago Kassarian and Kassarian (1979, p 3) were led to the conclusion that "attitudes have clearly become the central focus of consumer behavior research." This probably still holds true today. Not only are there a large number of empirical studies on consumer attitude formation and change, but there are also a large number of persuasion theories vying for the attention of the discipline (Kassarian, 1982; MacInnis and Jaworski 1989; Petty, Unnava, and Strathmann, 1991). There is contemporary research that has a bearing on Persuasive Advertisements, particularly the Elaboration Likelihood Model (Petty and Cacioppo 1981, 1986; Petty, Cacioppo, and Schumann, 1983) and a recent Integrative Framework of Persuasion Theories (Meyers-Levy and Malaviya 1999), both of which are reviewed.

Comparison between Print and Internet Media

With the growth in the use of Internet, the number and types of advertisements has also grown. Contemporary Advertisements on the Internet can be categorized into different types: Banner, Text, Interstitial, Pop-Up, Opt-In Mailing, Web Sites, Rich Media, and Hybrid advertisements. Web sites are selected, as the unit of analysis, because they are the nearest equivalent to a print advertisement for the specific purpose of the study. This is because sites contain visual and textual information akin to a newspaper.

The evidence regarding the similarity between the Internet and the print media is equivocal. The printed page, according to Rothenberg (2000), "is still the best place for well-formed and clearly articulated ideas". However, in the same breath he adds that he sees great value in the way the Internet exposes people to "ideas in motion," as people can get in touch with authors, watch and participate in debate, and benefit from on-line exchanges.

To fully understand the impact of a web site, marketing researchers must remember theories involving a hierarchy of communications effects that identify steps people go through to learn and acquire a product (Belch and Belch 1995). According to these models, awareness and

interest must be developed before people purchase all products. Further, the level of interest is likely to be greater in high involvement products. In the context of Web sites, receivers must also sometimes move through the desire stage to the action stage, e.g., in e-commerce Web sites. In a health care scenario, it has been pointed out that (Molloy 2000); "On-line advertising is still a mystery to the vast majority of long-term care providers." One of the first tips that he gives for on-line advertising effectiveness is to make the Web site a part of ones overall strategy, if not all of it.

Rationale to Study Attitude Change

In the persuasion paradigm, a number of studies have examined the impact of different variables on persuasion (e.g., Petty, Cacioppo, and Schumann 1983). All these studies have used attitude, and more specifically, in a marketing context, Product Attitude as the dependent variable. In this tradition, Product Attitude is used as the dependent variable.

Here the term attitude is defined. A contemporary definition is a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour (Eagly and Chaiken, 1993, p.1, emphasis in original removed). Consistent with the positions of other

theorists (e.g., Thurstone 1928), attitudes are regarded as general evaluations people hold in regard to themselves, other people, objects, and issues. These general evaluations can be based on a variety of behavioral, affective, and cognitive experiences, and are capable of influencing or guiding behavioral, affective, and cognitive processes. A seven point semantic scale was used to measure Product Attitude. Bi[polar adjectives anchored the two ends of the scale.

To summarize, the research problem is to examine the role of emotions, and the moderating role of product involvement in persuasion. Specifically, in the Integrative Framework of Meyers-Levy and Malaviya (1999). A new scale is proposed to measure emotional intensity of a web site. It is proposed to measure product involvement and examine its effects at three levels: Low, Moderate, and High. The literature suggests that the role of emotions and the moderating influence of product involvement for print advertisements be examined using experimental designs. It is reiterated; all this research has been conducted for print advertisements. Because of the absence of evolved literature on Web sites, research on print advertisements is drawn upon.

This paper comprises of five sections. The second section consists of the following sub-sections Definition of Emotions, the Definition of Emotional

Intensity of a Web site and Effects of Product Involvement on Persuasion, the Personal Involvement Inventory (PII) and reviews of the Elaboration Likelihood Model (ELM) and the Integrative Framework (Petty and Cacioppo, 1986; Meyers-Levy and Malaviya 1999). The third section outlines a Research Methodology to examine the role of emotions and the moderating influence of product involvement. The Research Methodology has the following structure: First, the Communications Model for Web site Effectiveness is described. Second, the Hypotheses are discussed, formulated, and stated. Third, comes the Research Design used to collect the data, which covers the Measures of Interest, Questionnaire, Design of an Experiment, Procedure to Conduct Experiment, Sample, and Analysis. The fourth section presents the Results of the ANOVA. In the fifth section, the results are discussed in the form of Conclusions.

Role of Emotion and the Moderating Influence of Product Involvement

Petty and Cacioppo (1986) address the issue of what makes arguments persuasive. In developing arguments for a topic, they begin by generating a large

number of arguments, both intuitively compelling and specious ones, in favor of some issue. Then, members of the appropriate subject population are given these arguments to rate for persuasiveness. Based on these scores they select arguments with high and low ratings to comprise at least one strong and one weak message. Subsequently, other subjects are given one of these messages and are told to think about and evaluate it carefully. Following examination of the message, subjects complete a thought-listing measure, in which they are instructed to record the thoughts elicited by the message. These thoughts are then coded as to whether they are favorable, unfavorable, or neutral toward the position advocated. They define a strong message as one containing arguments such that when subjects are instructed to think about the message, the thoughts that they generate are predominantly favorable. Importantly, for positive attitude change to occur, the thoughts should be more favorable than those available prior to message exposure. In contrast, they define a weak message as one containing arguments such that when subjects are instructed to think about them, the thoughts that they generate are predominantly unfavorable.

In this work, analogously, Emotional Intensity is viewed as bits of information contained in a Web site, which are

relevant to a persons' subjective determination of an advocated position. Because people hold attitudes for many different reasons, people will invariably differ in the kinds of emotions they feel are central to the merits of any position. Nevertheless, for purposes of this work, it is necessary to specify contents of a Web site that the vast majority of a specifiable population finds high in Emotional Intensity rather than low in Emotional Intensity.

Effects of Product Involvement on Persuasion

In this portion, product involvement is defined. Next the Personal Involvement Inventory is described.

Introduction and Definitions of Product Involvement: Although researchers agree that the study of involvement is interesting and important, there is currently little agreement about how to best define, operationalize, and hence measure, the construct of involvement (Yavas and Babakus 1995). Zaichkowskys (1985) definition of involvement used is,

A persons perceived relevance of the object based on inherent needs, values, and interests. The general view of involvement is one that focuses on personal relevance (Krugman 1965). In the advertising domain, involvement is

manipulated by making the advertisement relevant: the receiver is personally affected, and hence motivated to respond to the advertisement. Germane to this work, in product class research, the concern is with the relevance of the product to the needs and values of the consumer. This term is labeled as product involvement. In purchase decision research, the concern is that the decision is relevant, and hence that the consumer will be motivated to make a careful purchase decision (e.g., Clarke and Belk 1978).

A bipolar adjective scale, the Personal Involvement Inventory (PII), was developed to capture the concept of involvement for products (Zaichkowsky 1985). The scale successfully met standards for internal reliability, reliability over time, content validity, discriminant-related validity, and construct validity. Tests of construct validity demonstrated that the scores were positively related to perceived differences among products, brand preferences, and interest in gathering information about the product category, and comparison of product attributes among brands.

Personal Involvement Inventory (PII)

To summarize, in a subsequent study (Zaichkowsky 1994), concluded that the conceptualization of the Product

Involvement Inventory was a context-free measure applicable to involvement with products, with advertisements, and with purchase situations. Her earlier work (Zaichkowsky 1985) was mainly validated with respect to product categories. Her work extends the construct validation of the PII to involvement with advertisements and also demonstrates that the PII may be reliably reduced from twenty items to ten items. There is some indication the revised PII may then be broken into two sub-scales representing a cognitive and affective grouping. Further details of the PII are given in the Appendix.

The selection of the ten-item PII is justified on the following grounds: First, it is important to distinguish between Emotional Intensity of a Web site and Product Involvement. Emotional Intensity is an attribute of the Web site (Meyers-Levy and Malaviya 1999, use the term message), while, Product Involvement is measured for the Web site surfer, or message recipient. Third, the PII is context free and can be distinguished from purchasing involvement. Fourth, it can be measured and trifurcated into three levels for the purpose of the experimental design. Lastly, it has robust reliability and validity psychometric properties.

The Elaboration Likelihood Model of Persuasion

One advantage of ELM is its parsimony in describing persuasion. Its strength is that it provides a general framework for organizing, categorizing, and understanding the basic processes underlying the effectiveness of persuasive communications. Another advantage is, that ELM has been applied to various fields such as psychotherapy, counseling, mass media, advertising and selling (see e.g. Petty, Cacioppo, and Shumann 1983).

In recent years, in the context of the ELM a number of experiments have been conducted to examine the impact of different cues on persuasion (see Chaiken 1980; Petty, and Cacioppo 1979; Petty, Cacioppo, and Goldman, 1981; Petty, Cacioppo, and Schumann, 1983). The moderating role of different variables, including involvement and comprehension, on the persuasive impact of source cues has also been extensively studied (e.g., Petty, Cacioppo, and Goldman, 1981; Petty, Cacioppo and Schumann, 1983; Ratneshwar and Chaiken, 1991). These experiments have manipulated message quality by using "strong" and "weak" arguments. Petty et al (1983) applied the ELM to an advertising context. In an experimental design they exposed subjects to a magazine advertisement under conditions

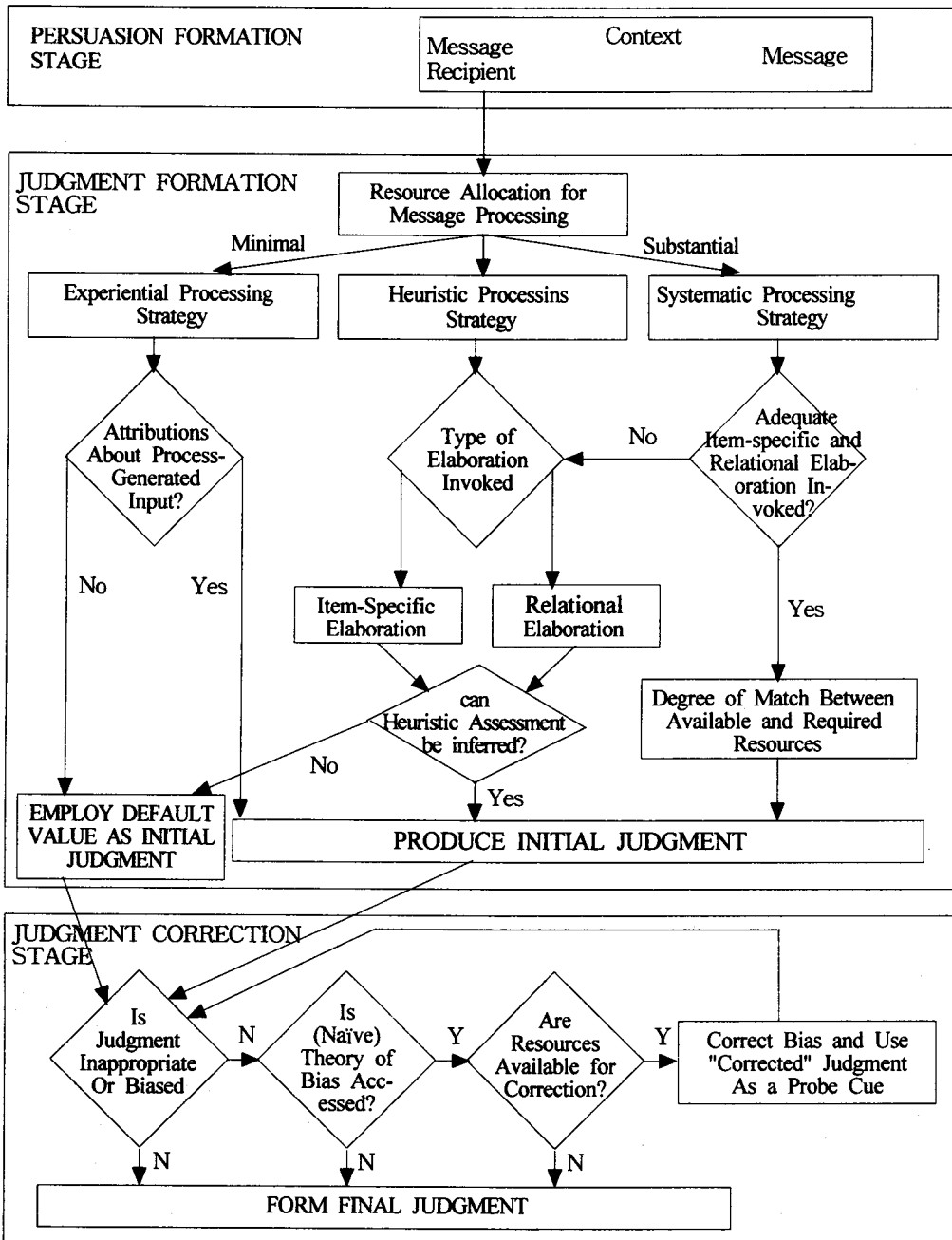
of either high or low product involvement. The advertisement contained either strong or weak arguments for the product and featured either prominent sports celebrities or ordinary citizens as endorsers. They found that the manipulation of argument quality has a greater impact on attitudes under high than low involvement, but the manipulation of product endorser has a greater impact under low than high product involvement. These results are consistent with the view that there are two relatively distinct routes to persuasion.

Overview and Limitation of the Integrative Framework of Persuasion Theories

The dual-process model postulate only two routes to persuasion, the central, and peripheral. This model is the foundation of the integrative framework of judgment formation and persuasion. In contrast, the Integrative Framework, which proposes three distinct routes, the central, peripheral, and experiential. These correspond to high, moderate, and low involvement. The processes postulated by the Integrative Framework are depicted in Figure 1. Thus, the framework assumes that, when exposed to a persuasive message, people use either an effortful

systematic approach to judgment formation or a less demanding heuristic approach. However, in describing the processes of attitude formation and change the peripheral route of the Integrative Framework maps onto the peripheral route of the ELM. Further, the central route of the Integrative Framework maps onto the central of ELM.

However, to incorporate theorizing that goes beyond this basic dichotomy the framework extends the dual process model in several ways. For example, the Integrative Framework incorporates a third fundamental processing strategy, known as experiential processing strategy, in which judgments are not based on thoughts prompted by message content per se but rather on feelings prompted by the act of processing. However, it is only recently that attention is being paid to the idea that judgments can be based on fleeting process-generated sensations. Thus, issues that pertain to the experiential route merit further study. One such crucial issue is why such experiential-based persuasion should be distinguished from persuasion that occurs by the heuristic processing strategy. Research that directly addresses and clarifies these presumed distinctions is greatly needed.



Source: Meyers-Levy and Malaviya 1999

FIGURE 1 : AN INTEGRATIVE FRAMEWORK OF ADVERTISING PERSUASION

Research Methodology

The section on Research methodology is divided into three parts. First, the empirical model is described. Second, the Hypotheses are explicated. Third, the Research Design is comprehensively covered.

Communication Model for Effects of Emotional Intensity and Product Involvement

The following communication model is proposed (see Figure 2), intended to portray the role that emotions and the moderating influence of product involvement play in Web site effectiveness.

The communication model assumes an interaction and main effects. The interaction is based on the three levels of involvement low, moderate, and high. First, the impact of Web site emotional intensity is predicted to be significantly higher under low product involvement compared with moderate product

involvement. Second, there is a significant difference between web site emotional intensity is expected to have an effect only under high product involvement in comparison with moderate product involvement.

Two main effects are also anticipated. First, subjects like the product significantly more when the Web site contains high intensity emotion arguments. Second, involved subjects are more skeptical of the product than less involved subjects.

Hypothesis

Hypothesis1: Some theoretical approaches emphasize the direct impact of emotions on attitude change. Probably the most prominent amongst these is Classical Conditioning (for relevant reviews, see McSweeney and Bierley 1984, Petty, Cacioppo, and Kasmer 1988, and Gardner 1985).

Other work on consumer behavior has shown that the use of pleasant pictures in advertisements can produce favorable

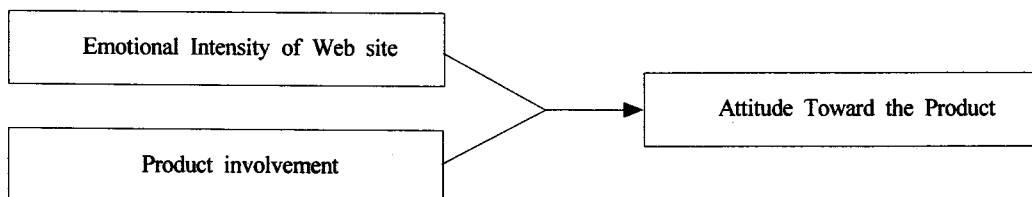


FIGURE 2 : PROPOSED EFFECTS OF EMOTIONAL INTENSITY FOR LOW, MODERATE, AND HIGH INVOLVMENT CONSUMERS

product attitudes even if the pictures are irrelevant to the product (e.g., Mitchell and Olson 1981). Other research has been supportive (e.g., Bierley, McSweeny and Vannieuwkerk 1985). For example, in a series of studies, Stuart, Shimp, and Engle (1987) paired brand names with pleasant pictures (e.g., a mountain waterfall) or with neutral ones several times. To control for contingency effects subjects were divided into those who were and were not aware of the contingency between brand name and picture. Although in one study forty-eight percent of subjects reported awareness of the contingency, the conditioning effect was present for both the aware and the unaware group. Thus, the first hypothesis of the study is:

Hypothesis 1: High Emotional Intensity Web sites have a greater impact on product attitudes than low emotional intensity Web sites.

Hypothesis 2: To comprehend the conditions under which people are persuaded by others, researchers have often invoked the concept of involvement, as early as a decade back Johnson and Eagly (1989), conducted a meta-analysis of the involvement construct. They contend that the effects of involvement on attitude change depend on the aspect of

message recipients' self-concept that was activated to create involvement. One of their classifications of involvement is enduring values (value-relevant involvement).

For, Value Relevant Involvement, from an early point, Social Judgment-involvement theorists regarded highly involving attitudes as components of the ego or self-concept, that is, as aspects of the "self-picture intimately felt and cherished" (Sherif et al, 1965) Ostrom and Brock (1968) Provided a specially clear statement when they proposed that:

the basic feature of an ego-involved attitude is its relation to the manner in which the individual defines himself. The individual defines himself in terms of that "distinct constellation of social and personal values" he has acquired. The closer the relation between his attitude and these values and the more central these values are, the higher the degree of attitudinal involvement.

Hypothesis 2: The higher the product involvement the lower the attitude change on viewing a Web site.

Hypothesis 3: A significant consequence of the experiential route of persuasion is that emotional intensity of a Web site may change product attitudes to a greater extent under low product involvement as opposed to moderate product involvement.

As per the Integrative framework, in perhaps the majority of cases only the most fleeting and scant message processing occurs. In such a situation, the resources people expend are so small that they may be unable to attend to any substantive or even superficial content of the message, as they would if a heuristic strategy were employed.

Rather, people are likely to attend to chance sensations or feelings that might be generated from the process of processing the advertisement. These are inclusive of a vague sensation of familiarity caused by prior exposure to the item (Hawkins and Hoch 1992; Jacoby, Kelley, Brown, and Jasechko 1989) or a sensation of competence generated by the apparent ease with which obviously degraded items are noticed (Witherspoon and Allan 1985). Irrespective of their true cause, such feelings may serve as a basis for attitude change if they are misattributed to the target object (Bornstein and D'Agostino 1994) or some attribute of the target object.

Hypothesis 3: Emotional intensity of a Web site will change product attitudes to a greater extent under low product involvement as opposed to moderate product involvement.

Hypotheses 4: One important implication for web sites is that different kinds of appeals may be the most effective for different kinds of audiences. For example, a person for whom Gap, an apparel brand is highly relevant based on inherent needs, values, and interests (high involvement) may be highly aroused. If the information in the Web site is perceived to be highly emotion intensive and persuasive, favorable product attitudes result.

Support for this reasoning can be found in the persuasion literature. According to Petty et al (1986) a determination of the central merits of an attitude object might involve an analysis of ones' emotions rather than one's beliefs or behaviors. For example, attitudes towards a potential spouse might be based on the extent to which one feels love and warmth in his or her presence; attitudes toward a roller coaster might be based on the extent to which it makes one excited rather than fearful. However, the fact that these attitudes are based on the emotional properties of the attitude object does not mean that people carry these emotional traces with them at all times. Rather it means that attitude change will be based largely on a reconsideration of the emotional properties of the stimulus (e. g., Do I still love you? Am I still afraid of roller coasters? Cacioppo and Petty, 1982). This consideration of emotions as it

relates to the central merits of the object should become more consuming, for example, as the object increases in personal relevance or consequences (e.g., as the date for the marriage comes closer, as approaching the waiting line for the roller coaster).

Hypothesis 4: Emotional intensity of a Web site has a greater impact on product attitudes under high rather than moderate product involvement conditions.

Research Design.

Measures of Interest:

Web site Emotional Intensity: Two Web sites are selected, gap.com and warriorapparel.com, based on the judgment of three experts. Then a pilot study is conducted, in which members of the appropriate subject population were given these sites to rate for persuasiveness. For the Web site Emotional Intensity measure a Likert scale is designed to examine how strongly subjects agree or disagree with statements on a 5 point scale with the following appropriate anchors. The measures for the two sites are listed pair-wise, with the first measure for the gap.com site and the second for the

warriorapparel.com site. Attractiveness (Attract, Attractwar); Enjoyment (Enjoy, Enjwar); Pleasantness (Pleas, Pleaswar); Satisfaction (Sat, Satwar); Smoothness (Smooth, Smwar); Book-Mark (Book; Bookwar); Friend (Friend, Friwar); Favourite (Favourt, Favwar); and Clutter (Pclutter, Pclwar).

For the Web site Emotional Intensity measure a Likert scale is designed to examine how strongly subjects agree or disagree with statements on a 5 point scale with the following appropriate anchors. The responses over a number of items tapping a particular concept or variable are then averaged for every respondent. The interval scale is used here. The differences in the responses between any two points on the scale remain the same. Based on the subjects ratings of these measures, sites were selected with high and low ratings to comprise at least one site high in Emotional Intensity and one low in Emotional Intensity. A paired comparison t-test was conducted to test for differences in the two sites.

For any web site, there seems to be surfers who rate web sites as being high or low Emotional Intensity. Additionally, the average level of Emotional Intensity varies across different web sites. For example, respondents rate gap.com 3.28 on the Emotional Intensity Scale and rated warriorapparel.com 2.70 on the Emotional

Intensity Scale. This demonstrates that the same people perceive different Web sites differently. To investigate the possibility of rating the Emotional Intensity of a web site, the scale was administered for two web sites. Each subject rated two web sites: (1) gap.com (2) warriorapparel.com For this data collection, the sites were counterbalanced across subjects. The related measures t-test was significant at $t(116) = 5.52, p < .001$; therefore the two sites were rated differently on the Emotional Intensity Scale. Please see the first row in Table 1.

The results were highly significant for all the measures of emotional intensity except recoded clutter, with p at the 0.01 level. For clutter, the p value is 0.02. However, against the grain the mean paired difference is negative. This indicates that the two sites are significantly different on the clutter measure. However, the warriorapparel.com

is more highly rated on only this item.

The Reliability of Emotional Intensity of a site is computed using the inter-item correlation measure Cronbach Alpha using SPSS. The validity of the Emotional Intensity construct is examined using Spearmans Rank Correlation Coefficient between the average of the Emotional Intensity measures and the Affect Intensity Measure. The Discriminant Validity is looked at using LISREL models.

Design of Experiment:

A two-factor experiment in which there are repeated measures on the factor Emotional Intensity of a Web site may be represented schematically as shown in Table 2. The symbol G1 represents a group of n subjects, the symbol G2 a second group of n subjects, etc. The subjects in G1 are observed under two

TABLE 1 : t-TESTS FOR PAIRED DIFFERENCES

	Paired Differences			t	df	sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Average Emotional Intensity	.5936	1.1617	.1074	5.527	116	.000
Attractiveness	.7845	1.5312	.1422	5.518	115	.000
Enjoy	.5345	1.5176	.1409	3.793	115	.000
Pleasant	.4957	1.5292	.1414	3.507	116	.001
Satisfaction	.4914	1.5576	.1446	3.398	115	.001
Smoothness	.7257	1.4095	.1326	5.473	112	.000
Bookmark	.5603	1.2669	.1176	4.764	115	.000
Friend	.6121	1.3627	.1265	4.838	115	.000
Favourite	.5948	1.3893	.1290	4.611	115	.000
Recoded Clutter	-.2920	1.3139	.1236	-2.363	112	.020

treatment combinations Low Involvement Low Emotional Intensity, and Low Involvement High Emotional Intensity. Thus the subjects in G1 are observed under all levels of the factor Emotional Intensity in the experiment, but only one level of factor Product Involvement. In this design, the subjects may be considered to define a third factor having n levels. The subject factor is crossed with the factor Emotional Intensity but nested under the factor Involvement.

Sample:

The judgmental sampling approach, where an "expert uses judgment to identify representative samples. The subjects were 125 undergraduate and postgraduate students at a large university in Mumbai. Subjects will be randomly assigned to each of the cells in the experimental design. The sample consists of males ranging in age from 18 to 29 years. The mean age is 22.56. They were

studying in different programs -Master of Management, Bachelor of Technology, Master of Science, Master of Technology, and PhD. They were from different disciplines among them being Management, Information Technology, Civil Engineering, Mathematics

Results of ANOVA

The multivariate approach considers the measurements on a subject to be a sample from a multivariate normal distribution and makes no assumption about the characteristics of the variance covariance matrix. The univariate approach (sometimes called the mixed model) approach requires certain assumptions about the variance covariance matrix. If these conditions are met, especially for small sample sizes, the univariate approach is more powerful than the multivariate approach. In all the

TABLE 2 : MULTIFACTOR EXPERIMENTAL DESIGN HAVING REPEATED MEASURES ON THE SAME ELEMENTS

Emotional Intensity → Involvement ↓	Low Emotional Intensity	High Emotional Intensity
Low Involvement	G ₁	G ₁
Moderate Involvement	G ₂	G ₂
High Involvement	G ₃	G ₃

analyses that were done, the multivariate and univariate results were identical. Thus, only the multivariate results are reported. The Multivariate tests for the Within Group of subjects, with multiple levels of Product involvement, who were unaware of the organization Gap Inc., the organization WarriorApparel Inc., the brand Gap, and the brand WarriorApparel, are now considered. The main effect of Emotional Intensity of a site (FEI), with two levels, is significant at a 0.05 level, with a p value of 0.02. The interaction between Emotional Intensity of a site and Product Involvement (FEI * AINVA1) has a significance level of $p = 0.1$.

For individual confidence intervals, the hypothesis degree of freedom is set to 1, in which case Hotellings, Pillais, Wilks, and Roys intervals will be identical and equivalent.

The study sheds light on the role of emotions and product involvement in the process of attitude change. The results clearly indicate that there is a significant effect, at the 0.05 level, of emotional intensity of a Web site, this is true for the groups high and low Affect Intensity Measure. This result holds, even for the group that is aware of one of the following: the organization Gap Inc., the organization WarriorApparel Inc., the brand Gap, or the brand WarriorApparel. The results also indicate that there is a main effect, with a p value of less than

0.10, of product involvement. For the sub-samples low and high in Affect Intensity Measure, and the group unaware of the organizations or brands the main effect of product involvement is significant at the 0.05 level itself

Conclusions

The proposed communication model deepens the Integrative Framework (Meyers-Levy and Malaviya 1999). Specifically, the Communication Model proposes main and interaction effects between the independent variables Emotional Intensity and Product Involvement, and with the dependent variable as product attitudes is proposed. The aims of the proposed model are twofold. Firstly, there is a main effect of Emotional Intensity of a site and Product Involvement. Secondly, it is proposed that there is an interaction between Emotional Intensity of a Web site and Product Involvement.

At a practical level, the model has the following implications. The model hypothesizes that emotional intensity of a web site has a greater impact under the more extreme levels of product involvement, as opposed to the more moderate level of product involvement. This is intuitively appealing, since when

the level of product involvement is intense, recipients of a message would be inclined to use their hearts rather than their heads. Similarly, when the level of product involvement is low, recipients would make learned conditioned responses based e.g., on affective liking for a stimulus.

It was found that the main effect of Emotional Intensity of a web site is significant at the 0.05 for the entire sample and sub-samples of Affect Intensity Measure and awareness of organizations or brands. One is compelled to interpret this result, by concluding that contemporary researchers and practitioners are missing the emotional half of Web Site Effectiveness. Thus, they are merely using rational measures of Web Site Effectiveness such as Click Through Rates, instead of also obtaining a more complete emotional and rational picture of Web Site Effectiveness.

The main effect of product involvement was also significant at the 0.05 level for all the sub-samples, except the aware sub-sample. This result may be considered to be a replication of earlier research. However, its contribution lies in the fact that it is a replication in the context of Web sites.

The p value of the moderating influence of product involvement is 0.09 for the unaware sub-sample. For the remaining sub-samples it was not significant. For

the unaware group the initial attitude can be considered to be zero. The dependent measure is attitude change. Thus, the results are with a p value of 0.09 for the group for which product attitude change is not confounded by such factors as brand Image, Length of Awareness, etc.

The contribution of the study is the development and testing of the Emotional Intensity scale for web sites. The major contribution of the study is the attempt to deepen the Integrative Framework (Meyers-Levy 1999). The dual-process models primarily the Elaboration Likelihood Model are time tested. These models indicate that there are only two distinct routes, the systematic and peripheral route. These are equivalent to extreme levels of high and low involvement. Moreover, the Integrative Framework postulates the existence of a third experiential route. In this context, the central route corresponds to high involvement, the peripheral route to moderate involvement, and the experiential route to low involvement. There are numerous empirical studies to support these earlier models. Further, undoubtedly, there is unequivocal evidence the emotional intensity of a product web site, as measured here, has a direct impact on product attitude.

To conclude, a number of experiments have been conducted to examine the impact of different cues on persuasion in

the print context (see Petty, & Cacioppo 1979; Chaiken, 1980; Petty, Cacioppo & Goldman, 1981; Petty, Cacioppo & Schumann, 1983). The moderating role of different variables, including product involvement and comprehension, on the persuasive impact of source cues has also been extensively studied, again in the print context (e.g., Petty, Cacioppo & Goldman, 1981; Petty, Cacioppo & Schumann, 1983; Ratneshwar and Chaiken, 1991). These experiments have manipulated message quality by using "strong" and "weak" arguments.

The role of emotions has not been studied in the context of the www. This is a neglected area in contemporary persuasion research. In contemporary web site design, the role of emotions should also be incorporated besides other more rational measures (e.g. click-through rates).

In view of the growing importance of the www, marketers will be forced to consider using it in their repertoire to a greater extent in the near future. As with the emergence of any new medium, theories and models on a whole range of marketing issues and variables will have to be proposed, tested and validated anew for the www. What has been done here is to examine a few particular dimensions using certain logical models and theories proven in the context of print media. Other models and theories proven in other

media, or altogether new theories and models may have to be proposed and studied.

There are some limitations of the study. Analysis of Variance assumes that the data are normally distributed. However, in practice applied researchers never obtain perfectly normal data. Further, Marketing data is obtained. No organization will develop a Web site that is Low in Emotional Intensity. Thus, the dependent variables will be, by definition, inclined to have a standard mean value of greater than zero.

The methodology used is a repeated measures experimental design. Emotional Intensity is the within subjects factor. While, product involvement is the between subjects factor. This is not a very popularly used experimental design. However, it was adopted in this study, to control for other extraneous factors that could possibly affect attitudes.

The repeated measures experimental design, like all designs has certain strengths and weaknesses. However, in the ultimate analysis a choice has to be made. This design has certain strengths in the domain of internal validity. However, it also suffers from a few limitations, in connection with external validity. The strengths and weaknesses are further explicated in the research proposals and the choice is fully justified. The proposed use of undergraduate and

postgraduate IIT ians as subjects puts some limitation on the generalizability of the study. The method of sample selection is also justified in the research proposal of the study.

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Appendix

Important

- 1) Be sure that you check every scale for apparel; do not omit any.
- 2) Never put more than one check mark on a single scale.

Make each item a separate and independent judgment. Work at a fairly

high speed through this questionnaire. Do not worry or puzzle over individual items. It is your first impressions, the immediate feelings about the items that we want. On the other hand, please do not be careless, because we want your true impressions.

Branded Apparel

- | | |
|-----------------------|-----------------|
| 23) Important | : : : : : : : : |
| Unimportant | |
| 24) Irrelevant | : : : : : : : : |
| Relevant | |
| 25) Means a lot to me | : : : : : : : : |
| Means nothing to me | |
| 26) Valuable | : : : : : : : : |
| Worthless | |
| 27) Uninterested | : : : : : : : : |
| Interested | |
| 28) Unexciting | : : : : : : : : |
| Exciting | |
| 29) Appealing | : : : : : : : : |
| Unappealing | |
| 30) Mundane | : : : : : : : : |
| Fascinating | |
| 31) Not needed | : : : : : : : : |
| Needed | |
| 32) Involving | : : : : : : : : |
| Not Involving | |