The Effect of Emotions and Imagery Appeals on Visual Consumption Experiences

By

Alessandra Distefano

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Ph.D. Tutor Dr. Marco Galvagno
To my family
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ABSTRACT

There is currently a mismatch between our traditional models of consumer decision-making and the way consumers actually make decisions, at least for certain product categories. Multi-attribute models have been successful in modeling how consumers make decisions about frequently purchased products or services, where decision-making progresses rationally. But these models cannot account for decisions in which less experience is available, where the problem is not well structured, and where emotional reactions are important. Whereas traditional models assume verbal and semantic processes, the consumption vision perspective focuses on visual and imaginal processing. The consumption vision approach explicitly acknowledges creative sense, making processes consumers use to anticipate the future.

A consumption vision can be defined as a visual image of certain product-related behaviors and their consequences on decision-making processes. Consumption visions consist of concrete and vivid mental images that enable consumers to experience self-relevant consequences of product use. Based on the findings of several studies on consumption visions and on the role of anticipated emotions in consumption experiences, the goal of this study is to understand what triggers consumption visions, and consequently, in what direction consumption visions influence consumers’ decision making processes. I suggest that forming a consumption vision is one possible heuristic approach by which a consumer can decide among alternative courses of action. I discuss the possible effects of consumption visions on consumers’ cognitive and affective reactions to products, intentions, and behaviors.

Three studies examine the mediating role of imagery accessibility during consumption experiences and demonstrate that the difficulty of imagery generation
can reverse the generally observed positive effects on imagery appeals and consumption decisions. The same results indeed, can be achieved considering consumers’ predisposition to emotional experiences. When participants are low in imagery abilities (as well as when they show low need for emotion attitudes), whether there is or not an explicit invitation to imagine a consumption experience, or whether the product is present in a vivid manner or not, imagery appeals are not only ineffective, but even have a negative effect on product preferences. Moreover, this work aims to demonstrate that imagery fluency effect, given its subjective nature, is more likely for individuals with richer personal past experiences or with higher predisposition to use imagination (higher in need for emotions levels). Finally, I discuss how consumer researchers can integrate consumption visions into decision-making research.

**KEYWORDS:** Mental Imagery, Imagery Appeals, Image Vividness, Imagery Fluency, Emotions, Visual Consumption.
CHAPTER 1

“The fact that man is unfinished...does not mean that a description is impossible, but that such a description must be directed to possibilities rather than properties. The fact that each individual is unique does not mean that we are confronted with formless and indescribable multiplicity, for there are limits or horizons within all these unique existents fall, and there are structures that can be discerned in all of them”.

MacQuairre, 1972, p.78.

1. OVERVIEW

1.1. Interpretive approach in consumer research

Despite the extensive body of interpretive consumer research during the past 20 years (Hirschman, 1992; Levy, 1981; Belk et al. 1988; Wallendorf & Arnould, 1991; Hill, 1991; Szmigin & Foxall, 2000), this approach to studying consumers has received many criticisms (Calder & Tybout, 1987, 1989; Hunt, 1989) and has been equally defended (Holbrook, 1987; Holbrook & O'Shaughnessy, 1988) over the years. Much of the controversy over interpretive consumer research has been at the epistemological level (Spiggle, 1994). Specifically, of special consideration has been the issue of how knowledge emanating from such research can be evaluated (Hirschman, 1985; Thompson et al., 1989). Additionally, there has been a scientific debate which questioned which type of research can be classified as “scientific”, and implies different levels of research, from the everyday to the scientific one, and together with this, an implied value judgment of the relative contribution of each (Calder & Tybout, 1987, 1989; Holbrook, 1987; Hirschman, 1985).

Interpretivists emphasize the totality of the human being, which emerges through the course of their lives (Hirschman & Holbrook, 1986). Interpretive researchers see the limitations of quantitative measures primarily in their statistic status, rather viewing consumers as in a process of continuous emergence.
Hirshman and Holbrook (1986) did not reject quantitative approaches, but viewed them as measures based only on one aspect of consumers at one point in time, which they translate as being like a “snapshot of someone no longer there” (Szmigin & Foxall, 2000, p. 188). Similarly they did not reject the concept of a “real world” out there, but presented the reality which mattered the most during consumption as that which is subjectively experienced in the consumer’s mind. Is this experience, they believe, which is real to consumers, and so, researchers should shift from the traditional scientific posture of personal distance and a-priori theoretical structure, to one of trying to understand consumers’ experiences in their own terms. This approach has been supported by Thompson et al. (1989) in their description of the method of existential-phenomenology, where they presented consumer’s experience as “being-in-the-world” and describing this experience as it emerges, or is “lived” (e.g. to express such aspect, consumers might often say, “I just can’t explain it to you; you had to be there to understand it”). In such instances of consumptions, being there is what matter most.

Researchers, thus, become the measuring instruments and their understanding will derive from personal experience rather than manipulation of variables.

A potentially controversial aspect of this research approach is its shift in focus away from managerial relevance. Consumer research becomes grounded with a central focus on consumption while, at the same time, remaining independent of a need to show relevance to marketing interests (Holbrook, 1987). In this sense, it becomes a field of inquiry in its own right and may be closer to the humanities than to science.

Traditionally it has been considered that there is a little overlap between art and science: art has been considered to be concerned with seeking beauty while science has been viewed as seeking the truth (Belk, 1986). However, while some researchers may
not feel the need for their research to have managerial implications, the corollary of this position is not that such research cannot have implications for management. Indeed, as qualitative research in general, the interpretive approach can bring managers closer to their consumers, and by exploring issues that may have previously only been captured by statistics, provide usable insights into how their customers actually consume (Fournier & Yao, 1997).

Hirshman and Holbrook (1986) contend that, ultimately, any model of consumption cannot expect to realistically identify causal effect reliability. To investigate and comprehend the consumption experience the researchers need to be involved with the phenomenon. In this way the researcher cultivates an openness, which will be receptive to the structure and meanings, which come directly from the consumers. Consumers’ experience, then, needs to be understood in their terms rather than forcing them into some pre-existing structure of the researcher’s making.

Hirshman (1985) has suggested that science should be viewed as an inherently normative, person-centered enterprise rather than a phenomenon-based process of truth discovery. Science is still created by people and as such is the subject to the influence of their attitudes, personalities, etc. Both Hirshman (1985) and Belk (1986) refer to Mitroff and Kilmann’s (1978) classification into four types of scientists to support their view of plurality within the scientific approach (Figure 1).

Using this descriptive framework, the Analytical Scientist is closest to the traditional logical positivist view\(^1\) of science. The other types move more toward the

\(^1\) In the past two decades of consumer research the dominant paradigm has been the logical positivism (or a more current version known as modern empiricism), and the implications of this philosophy for research methodology have been widely discussed (Hirshman, 1986; Holbrook & Hirshman, 1982; Hunt, 1983, Peter & Olsen, 1983). Logical positivism has an epistemological focus, and seeks to determine the “truth value” of statements (Pepper, 1942). Some have noted, however, that a broader set of assumptions underlies the use of positivist methods (Giorgi, 1971; 1983; Pollio, 1982). These meta-assumptions have been placed under the more global philosophical rubrics of “Cartesianism” or “rationalism”. Some of the more tenets of Cartesianism are the
feeling and intuiting from sensing and thinking and, in so doing, they shift to some degree from a traditional scientist’s position toward a traditional artist’s position, with the conceptual humanist pursuing knowledge through subjective and speculative insight.

Figure 1: Mitroff and Kilmann’s scientific styles. Source: Belk, 1986.

In conclusion, while intuitively the complexity of human behavior would be likely to result in many differing patterns and realities, this may not always be the case. While there may not be only one “reality”, for some investigations there may be some that are either more convincing or prevalent than the rest.

Whereas in natural science there are some facts that are viewed as unambiguous, the nature of interpretive research means that there can be a number of alternative interpretations from which to choose to represent the phenomenon under study. Similarly, when researching on consumer’s consumption experiences, researchers need to ask themselves if this interpretive approach undermines the trustworthiness of the

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distinction between mind and body and the assumption that “reality” must be deducted and then rendered in mathematical terms.
research, or makes it a better exemplar of the real world.

An immediate application of existential-phenomenology to consumer-behavior phenomena appears to lie in the areas of esthetic, hedonic, and emotional responses (Hirshman & Holbrook, 1982, 1986; Holbrook & Hirshman, 1982).

Perhaps more than any other form of consumption experiences, such aesthetic-hedonic-emotional reactions involve the whole of consciousness: senses, thoughts, feelings, and values. It follows that consumers may find it difficult to reduce such consumption experiences to verbal labels. Marketing researchers lately, have being challenged to change their focus from the observation of the consumption as an external independent phenomenon to the study of consumption experiences under the individuals’ point of view, in order to meet their needs, and make marketing strategies more effective and consumer-oriented.

1.2. Consumers’ Emotions and Marketing

In several fields like product development and brand loyalty, more companies are faced with the need to tailor the creation of their products or services to an increasingly fragmented customer base and a larger range of consumer behaviors. Marketing has a large and growing body of academics that feel the need to move away from the view of highly rational consumer that glut the marketing literature and to formally admit that the “calculating-machine model” of the consumer is a myth.

In the practice of marketing, if we look at this as opposed to the academic view, there seems to be a roughly equal separation between those who perceive consumers as mainly emotional human beings and those whose perspective of consumers is based on something approximating the “rational choice model” of the economist.

Customers are rapidly evolving tastes, needs and behaviors and these changes are
impacting the effectiveness of the distribution models. Marketers are being forced to replace models that were once considered as stable as fully appropriate for a given set of products or services with new models that have uncertainties and implications on the value chain (Ansari et al., 2008; Metha et al., 2006; Tsay & Agrawal, 2004).

Relying on familiar research techniques, consequently, misreads consumers’ actions and thoughts. In general, our resistance to changes increases when the challenge forces us to reconsider not just “what” we think (that is, the content of an idea) but also “how” we think (i.e., the process) (Zaltman, 2003).

The most troubling consequence of the existing paradigm has been the artificial disconnection of mind, body, brain, and society. Only by reconnecting the spread pieces of their thinking about consumers, can companies truly grasp and meet consumers’ needs more effectively.

We should start reconsidering consumers’ perspectives in purchasing or consuming decision-making processes, being aware that marketers usually make many errors in considering consumers as subjects perfectly understandable.

In fact, many of them believe that consumers make decisions deliberately, that is, they consciously contemplate the individual and relative values of an object’s attribute and the probability that it actualizes the assigned values, and then process this information in some logical way to arrive to a judgment. Consumer decision-making sometimes does involve this so-called rational thinking. However, it does not adequately depict how consumers make choices. In reality, people’s emotions are closely interwoven with reasoning processes.

More important, emotions are essential for decision-making. Emotion is always a factor in decision-making and rationality will always be involved by emotional influence.
No experience is completely empty of emotion and emotion is never a semidetached adjunct to consumer process.

For example, a perfume’s fragrance may evoke a particular memory and an associated emotion in a potential buyer. If the memory triggers a sad emotion, then the individual probably won’t buy the perfume, even if the fragrance, price, packaging, and other qualities meet her criteria. If so, marketers will likely judge this behavior as irrational, since they don’t understand why she rejected the perfume (Zaltman, 2003).

Another aspect to consider is that marketers assume that consumers can easily describe their own emotions.

Emotions are by definition unconscious (O’Shaughnessy & O’Shaughnessy, 2003). Most of our thinking doesn’t take place in our conscious mind, but in our unconscious one instead. The consumer whose purchase for a specific perfume is strongly influenced by a memory or a record, and the associated emotion is unlikely to articulate this reason when a researcher explores the decision with conventional research tools.

Rather, the mind, body, brain, and external world constantly influence and are influenced by the others. The most well known examples involve blind taste tests in which the sample lack of brand information alters participants’ taste experience.

Marketing specialists also tend to think of consumers’ brains as a “camera” that takes pictures in the form of memories. They assume that those memories, like photographs, accurately capture what a person clearly saw. They also believe that what a consumer says she/he remembers remains constant over time, and that a shopping experience a consumer recalls today is the exact same experience she/he recalled a week ago or will recall some months from now. But our memories are far more creative and malleable and constantly changing without our being aware of it (Zaltman, 2003).
Another common assumption is that consumers think in words. Of course, words do play an important role in conveying our thoughts, but they don’t provide the whole picture. This belief makes marketers assume that they can inject whatever messages they desire into consumers’ mind about a company brand or product positioning. Because of that, marketers view consumers as white canvas on which they can write anything they want. Instead, when consumers are exposed to product concepts, stories or brand information, they don’t passively absorb those messages. Rather, they create their own meaning by mixing information from the company with their own memories, other stimuli present at the moment, and the images that come to mind as they think about the firm’s message.

In conclusion it is possible to affirm that consumers’ decision-making and buying behaviors are driven more by unconscious thoughts and feelings than by conscious ones, although the latter are also important. They operate from conscious to unconscious forces that mutually influence one another.

1.3. Consumers’ consumption visions and Marketing

Consumers, who construct consumption visions (both conscious or unconscious) may become more committed to achieving actual consumption and may thus demonstrate predictable increases in traditional marketing-related variables such as attitudes and intentions toward a brand, a product or a service.

The concept of consumption vision is derived from that of mental imagery (Phillips, Olson, & Baumgartner, 1995) and entails sensory representations of ideas, feelings, and objects of experiences with objects. From a consumer behavior perspective, specifically in relation to intangible or experiential purchases, a consumers’ mental image of a product is at times primary source of information available to assist
them in forming a judgment (Shwartz, 1986). Furthermore, Horowitz (1972) claims that visual image formation is especially useful in the representation of the self and object relationships as found in the external world through perception, or as fantasized in the trial perception or trial action of thought.

In other words, if the target is not present in the direct physical environment, people may still perform their evaluations by examining their mental representation of the target, or the images that come to mind when they imagine their consumption experience. Phillips, Olson & Baumgartner (1995) identify this experience as being a consumption vision, which Walker & Olson (1994) define as “visual images of certain product related-behaviors and their consequences (...). They consist of concrete and vivid mental images that enable consumers to vicariously experience the self-relevant consequences of product use” (p.27).

However, due to the intangible nature of some consumption experiences such as tourism products or outdoor activities experiences, if the consumer has never visited or has never had any previous experience involving the outdoor activity, the consumption vision may be the only initial source of information and serve as the only influence at early stages of the decision process (Schwarz, 1986).

The effective usage of external stimuli featured in most services advertising and promotional material plays a vital role in the evocation of elaborate consumption visions (Mittal, 1988; Reilly, 1990). It is the external inputs that represent not only the advertised product, but also communicate the product’s attributes, characteristics, concepts, and ideas (Mackay, & Fesenmaier, 1997). For this reason, an understanding of the most effective usage of these various types of external stimuli is of a great importance to marketers.
Previous research in marketing communications and mental imagery has investigated a number of individual forms of external stimuli with regard to their effectiveness in evoking mental imagery. For example, Miller and Stocia (2003) found that photographic images of beach scenes were more effective in evoking mental imagery than artistic version of the same image. Babin and Burns (1997) revealed that concrete imagery eliciting words evoke high instances of product recall, and study by Miller and Marks (1998) found a strong relationship between instructions to imagine and the quantity of imagery.

However, to date, research in this area has failed to investigate the combined usage of these various forms of external stimuli and their combination’s effectiveness in evoking elaborate consumption visions.

The purpose of this work is to identify the most effective combination of external stimuli in evoking elaborate consumption visions among outdoor activities consumers – focusing on printing advertisements with different level of image vividness and different descriptive levels of information.

1.4. Consumers’ Desires and Company’s goals

The intensity and frequency of the interactions among consumers and organizations have increased in recent years, facilitated by the technological advantage (Kraut et al. 2006). This change has had an impact on the effectiveness of marketing since direct information exchanges between the customers influence the way they make purchase decisions (Burt 1998; White 1981). Understanding the consumer behavior in context-specific consuming experiences can be very important and can define the difference between success and failure of companies in the marketplace. Emotions lead any decision consumers take during purchasing and consumption
experiences and it means that companies’ advertisements play a strong role and have a strong impact on people’s decisions to take or not take certain actions. Therefore, in order to maximize their success, companies should consider the type and strength of emotions induced through advertising.

In the marketing literature, emotions and imaginations have existed for decades but there has been too little adaptation of the theory to the evolving of today’s market specifics (Goldie, 2000). The ways people purchase and consume goods and services are constantly evolving and drive a continuous adaptation of the marketing concepts and approaches (Achrol & Kotler, 1999).

Arousing feelings for new purchases has never been easy and the growing number of social stimuli can impact individuals’ choices, needs, preferences and ways of spending their money (Kraut et al., 2006).

The actual behavioral achievement of these acts then becomes the goals the consumer wishes to achieve as a result of their experience purchase. For example, a consumer may ask himself or herself: What do I want from this experience? Do I want to have fun and escape from the routine? Do I want to experience something unique and new? Driven by the answer to these questions, consumers then create images and fantasies in their mind and use these images to direct their information search and purchase. Therefore, a further understanding of how outdoor activities market providers can successfully capture the consumer’s imagination will assist services marketers in acquiring a competitive advantage in the mind of their targeted audience.

Given these premises, the goal of this work is to highlight some of these aspects, with regard to consumers’ emotional and visual imagery dispositions toward an unusual product or service advertisement. Specifically, for the purpose of this research the rock
climbing experience, as an outdoor activity will be considered, since it is becoming well known but is not a common practice yet among the majority of consumers. More often consumers choose it because it is something they have always wanted to do, but search is minimal and expectations are vague. Often consumers articulate the desire for something “beyond their imagination”. The experience is extraordinary because it offers absorption and a newness of perception and process (Arnould & Price, 1993).

The following section will show the design of this dissertation.

1.5. Dissertation framework

Before discussing specific types of consumers’ processes of thinking and feeling, related to consumers’ consumption behavior, it seems useful to place this dissertation in a larger framework.

This work researches on the importance of imagination in consumer behavior literature and the role played by imagery fluency, affects and emotions during consumption visions. The results of this study demonstrate that marketers can use certain advertising tools to help consumers construct consumption visions. These consumption visions, in turn, result in more positive attitudes and intentions, which may energize consumers toward actual consumption.

Therefore, this research is focuses on how imagery appeals, imagination and emotions work within a cultural system of meanings influenced by marketing strategies to give a boost to consumers’ attitudes and intentions toward new products or services unlikely experienced before. The notion of what concerns the consumer can thus tell us what will receive his or her attention.

More contemporary investigations reveal new processes that may be taken in place when consumers engage in imaging the product experience. As research on the
persuasiveness of narrative reveals, narratives are effective in changing attitudes and beliefs because they transport individuals into a different reality, reducing consideration of the positive or negative aspects of the message (Green & Brock, 2000). Another general area of research on the effect of imagery focuses on consumers’ subjective experience of fluency. That is, when forming attitudes, opinion and judgments, individuals are likely to take into account not only the content of the information with which they are presented, but also the ease with which this information comes to mind (Schwarz, 1998, 2004). However, the ease with which consumers can image themselves with the product can also be influenced by factors irrelevant to their intentions.

Engaging consumers in product imagery through the use of commercial images, for instance, can create readily accessible mental representation of having the product and can increase the ease with which such representation will spring to mind during the decision-making process. By increasing the accessibility of such representations, imagery appeals can increase the likelihood of purchasing the product.

Given these premises, the dissertation will develop as follow:

Chapter 1 introduces the study, research questions, grounding theories and research model. Chapter 2 provides a detailed literature review intersecting several theoretical fields and focusing on the role of emotions and imagination in stimulating consumption experiences, imagery appeals, image vividness, and imagery fluency.

Chapter 3 details the proposed research model, lays out the research hypotheses and discusses the selected research design, including survey instruments, approaches to data collection and data analysis of 3 related studies. Specifically, Study 1 examines the impact of imagery appeals on individuals who differ in their dispositional ability to
generate mental images. As shown in previous studies on the effect of imagery with product having an experiential component, this study examines the effect of imagery fluency in the context of a rock climbing advertisement. Study 2 examines the effect of imagery fluency by varying the vividness of the product depiction. Two conditions (high versus low vividness conditions) were created using the same ads of the first study for the high vividness condition, and adding two more muted and stylized versions of the ads for the low vividness conditions. Consistent with the definition of vividness (Nisbett & Ross, 1980) I show that participants report more positive emotions in response to the ad high in vividness than the ad low in vividness. Study 3 replicates and extends the results from the previous two studies in another context, with different manipulations of imagery fluency.

Furthermore in this third study I examine a potential moderator of the observed imagery fluency effect, specifically I used the Need for Emotions scale (Raman, Chattopadhyay & Hoyer, 1995) to test the tendency or propensity for individuals to seek out emotional situations, enjoy emotional stimuli, and exhibit a preference to use emotion in interacting with the world. Lately this chapter describes the steps included in the performed statistical analysis and provides a detailed report of the yielded results and findings.

Chapter 4 offers an analytical discussion of the results and concludes with the limitations of this work and proposed directions for future research.

1.6. Research questions and their importance

Given the complexity of this topic area the present dissertation focuses on the factors that can increase or decrease the emotional potential of a trade-off by associating valued goals with the relevant consumer decisions. Evaluations about
consumption, when based on imaging or visual imaging become complex and cryptic. Images, whether paintings, drawings, photographs, or just mental do not necessarily speak themselves, rather, they make visible a realm of possibilities and potential meanings, many of which are difficult to articulate (Schroeder, 2000). Moreover, looking at the cultural roots, the multicultural identity, the gender, the sexuality and the past experience that mark one’s life makes the study of imagined consumption of experiences even harder.

Therefore, the objective of the present study is to use sociological and psychological variables to explain the possible motivating factors behind the decision making process subsequent to an imagery appeal of a consumption experience. Four questions arise from this study:

1) Do imagery appeals have a positive effect on brand attitudes and purchase intentions?

2) What is the effect of image vividness in enhancing consumption preferences?

3) Are there information that, if added to a vivid depiction, will undermine the effect of the imaging instructions on product choice?

4) And finally, do different need-for-emotion levels enhance the positive effect of imagery fluency on consumers’ attitudes and behavior intentions?

In order to answer these questions I will employ the principles of the theory of reasoned action-TRA (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), which posits that behavioral intentions are a function of salient information or beliefs about the likelihood that performing a particular behavior will lead to a specific outcome, and on the extension of this theory, conceptualized by Ajezen, (1985), called the theory of planned behavior-TPB. This theory includes the role of beliefs regarding the
possession of requisite resources and opportunities for performing a given behavior. The more resources and opportunities individuals think they possess, the greater should be their perceived behavioral control over the behavior.

In addition, I will introduce the positive role played by the imagery appeals in enhancing consumers’ attitudes toward a product or a service. Specifically, it has been demonstrated that the imagery can have a powerful effect on product preferences (Petrova and Cialdini, 2005). However, there are circumstances under which asking consumers to imagine their future experiences with a product may be not only ineffective, but may actually decrease the likelihood of the consequent behavior (e.g., purchasing the product).

This research follows recent findings showing that judgments are influenced not only by the content of the product information, but also by the ease with which one generates or processes the information (Schwarz, 2004).

Using the imagery as the main object of product preferences formation, this research will test the possibility that consumers may decide about purchasing or consuming, grounding their intentions on the ease with which they can imagine their future experience with the product.

To measure individual’s predisposition to imagine new emotional experiences, in the third study I will employ the Need for Emotion Scale (NFE), developed by Niranjan, Chattopadhyay and Hoyer (1995). This scale is based on the assumption that, similar to “thinkers” who enjoy thinking (Murphy, 1947; Cacioppo, Petty, and Kao, 1984), it is possible to conceive for “experiencers” who enjoy experiencing emotions, instead.

The Need for Emotions scale (Table 1) represents a construct which provides
important insights regarding how individual seek out situations of varying emotional intensity, process information (through imagination processes) from communications and engage in decision making (Niranjan, Chattopadhyay and Hoyer, 1995).

<table>
<thead>
<tr>
<th>Scale Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) I try to anticipate and avoid situations where there is a likely chance of me getting emotionally involved.</td>
</tr>
<tr>
<td>2) Experiencing strong emotions is not something I enjoy very much.</td>
</tr>
<tr>
<td>3) I would rather be in a situation in which I experience little emotion than one in which is sure to get me emotionally involved.</td>
</tr>
<tr>
<td>4) I don’t look forward to being in situations that others have found to be emotional.</td>
</tr>
<tr>
<td>5) I look forward to situations that I know are less emotionally involving.</td>
</tr>
<tr>
<td>6) I like to be unemotional in emotional situations.</td>
</tr>
<tr>
<td>7) I find little satisfaction in experiencing strong emotions.</td>
</tr>
<tr>
<td>8) I prefer to keep my feelings under check.</td>
</tr>
<tr>
<td>9) I feel relief rather than fulfilled after experiencing a situation that was very emotional.</td>
</tr>
<tr>
<td>10) I prefer to ignore the emotional aspects of situations rather than getting involved in them.</td>
</tr>
<tr>
<td>11) More often than not, making decisions based on emotions just leads to more errors.</td>
</tr>
<tr>
<td>12) I don’t like to have the responsibility of handling a situation that is emotional in nature.</td>
</tr>
</tbody>
</table>

Table 1: The Need for Emotion Scale (Raman, Chattopadhyay & Hoyer, 1995).

Although extensive studies have demonstrated the importance of effects of affect and moods on consumers' memories, evaluations, judgment and behavior (e.g. Edell and Burke 1987; Gardner 1985), most research in consumer behavior has focused on affective components of ads (Aaker and Bruzzone 1985; Mitchell 1986) or affective responses to ads (Holbrook and Batra 1987; Stout and Leckenby 1986).
Alternatively, many studies in this area have induced a specific emotion in subjects artificially, and then examined the effects of this affect for all subjects in that condition taken together (Booth-Butterfield and Booth-Butterfield 1990). Differences across individuals regarding a need for seeking out and experiencing emotion have, for the most part, been ignored (with the exception of Allen & Hamsher 1974). This omission is surprising, given the potential for such a construct (Niranjan, Chattopadhyay & Hoyer, 1995).

This stream of research centers on the operating hypothesis that *individuals vary in the degree that emotion is sought, and furthermore, that this individuality is relevant to the buyer behavior context*. The rationale for this stems from two points. First, it has been established that individuals may differ in expressiveness, orientation, and intensity of experience of emotion (e.g. Allen and Hamsher 1974; Booth-Butterfield and Booth-Butterfield 1990). Based on these differences, researchers have speculated that individuals may also differ in their need to seek out emotional stimuli (Harris and Moore 1990). Second, many situations in buyer behavior such as information processing, decision-making, and impulse-buying, may be better understood by taking into account individual differences in dealing with emotions and emotional situations.

Given these assumptions, I predict that whenever there will be difficulties in imagine (e.g. low need for emotions levels, absence of imagery vividness stimuli, and obstacles to the imagery fluency) even a positive product experience would lower the likelihood of choosing the product.

The figure below (Figure 1) shows the general framework of this study.
Visual Imagery Disposition

Invitation to Imagine

Image Vividness

Figure 2: Conceptual Framework.

Imagery Fluency

Need for Emotions

Attitudes and Behaviors
2. LITERATURE REVIEW

2.1. The role of Imagination and Consumption Vision in Consumer Behavior

"Science doesn’t know its debt to imagination"
Ralph Waldo Emerson, Poetry and Imagination (1872)

"Imagination is something different both from perception and from thoughts, and is never found by itself apart from perception, any more than is belief apart from imagination. Clearly thinking is not the same thing as believing. For the former it is in our own power, whenever we please: for we can represent an object before our eyes, as do those who range things under mnemonic headings and picture them to themselves. But opining is not our power, for the opinion that we hold must be either false or true. Moreover, when we are of opinion that something is terrible or alarming, we at once feel the corresponding emotion, and so, too, with what is reassuring. But when we are under the influence of imagination we are no more affected than if we saw in a picture the objects which inspire terror or confidence” (Aristotle, On The Soul, Book III, pg.84).

After centuries of researches and discovery on human psychology, anthropology, and sociology, the modern definition of imagination is the “faculty or action of producing ideas, mental images of what is not present or has not been experienced. It is a mental creative activity that allows human beings to deal resourcefully with unexpected or unusual problems, circumstances, experiences, etc.” (Collins English Dictionary, 1991).

Imagination and fantasy are the most important qualities of what has been defined by Penaloza (1998) the “spectacular consumption”. As Deighton (1992) wrote
in his conceptual paper, spectacle can be defined as a particular type of market performance that involves consumer participation, exaggerating displays, social values and emphasizing the knowledge of its mechanics of production as part of the experience. In other words, spectacle is a rich, complex group of images and environments, which conveyed cultural meanings that were integrated into consumers’ understanding of reality (Penaloza, 1998).

Indeed, when people imagine themselves playing the major role in a potential future consumption situation, they are creating consumption visions. These visions consist of series of vivid mental images of product/experience-related behaviors and their consequences, which allow consumers to more accurately anticipate actual consequences of imagined scenarios. The concept of consumption vision is derived from that of mental imagery (Phillips, Olson, & Baumgartner, 1995) and entails sensory representations of ideas, feelings, and objects or experiences with objects. From a consumer behavior perspective, specifically in relation to intangible or experiential purchases, a consumer’s mental image of a product is a primary source of information available to help them in making decisions.

Constructing consumption visions may have thus certain decision-making and behavioral implications. By envisioning oneself performing a particular behavior and picturing the various steps involved in the consumption experience by “touching”, “tasting”, “feeling” it, the consumer may better predict the consequences of actual consumption of the experience and making the imagined scenario more “tangible” can help him/her to make better and more formed decisions.

Consumption visions may even make easier for consumer who engages in imagined consumption, to anticipate that actual consumption will occur. This is because
when people imagine a future scenario, they are more likely to predict that the scenario will actually occur (Theory of Reasoned Action – TRA; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

Strictly connected with visual consumption is the issue regarding what kind of experience consumers imagine, or what kind of product they can imagine to buy or consume in the future.

The consumption vision approach to mental images acknowledges the creative sense-making process that consumers may use to anticipate the future by providing clear, specific images of the self interacting with a product or experiencing the consequences of its use (Pillips, Olson, & Baumgartner, 1995). From a narrative perspective, consumption visions are stories derived from mental simulation that are created by the decision maker and involve a character (the self), a plot (the series of events the consumer imagines taking part in), and a setting (the environment or context in which the event takes place). Other researchers, although the terminology of this concept remains unique in its creation and application to consumer behavior, offer different terminologies to define consumption visions.

Green and Brock (2000), for instance, refer to this form of mental imagery, as “narrative transportation”, which involves the creation of stories via the mental simulation of future events, focusing on goals, behaviors, and desired outcomes. Escalas (2004) refers to this process as “mental simulation”, which entails the cognitive construction of hypothetical scenarios, including rehearsals of likely desired future events about less likely desired future events. Other authors, such as Jenkins (1999), Lubbe (1998), and Gartner (1993) simply refer to the concept of “mental imagery”. Unlike a consumption vision, a mental image does not necessarily entail conscious
representations of the self-experiencing the future consumptive situations.

Thus, a question arises so far: *is it better to verbally describe a situation in which consumers can be involved during the imagined situation or is it better to associate verbal descriptions with visual representations of the experience, since not all of the individuals have previously experienced specific moments?* Some experiences in fact, are so “unique” or “extreme” that most of the people probably have never faced them before.

One method, via which a consumer may refer to his/her consumption vision as a valued information source, is the so-called “*narrative self-referencing*”. This phenomenon has been defined as a cognitive process that individuals use to understand incoming information by comparing it to self-relevant information stored in their memory (Debevec & Romeo, 1992). This method of imagery processing has been shown to affect the persuasion power of the advertisement’s message and is often accompanied by strong affective responses (Green & Brock, 2000). Escalas (2005) suggests that the success of an advertisement in persuading the consumer is due to the positive affect that occurs as a result of the mental simulation that distracts consumers from weak arguments.

If, however, we are interested in knowing what a specific experience means for an individual, we should ask to him/her to show some images that capture their thoughts about our particular request. It means that, using the consumer’s point of view we are able to catch inner feelings and meanings of some new situations not experienced yet.

A clarifying example could be the one mentioned by Zaltman in his book titled “Marketing Metaphoria” (2008), in which he apply the Metaphor Elicitation Process in order to discover the meaning of motherhood for a young first-time mother.
In this example Zaltman explains that to prepare the young girl to the meeting, she was required to collect eight images that represented how she felt about this phase of her life. For about one hour and a half of this new mother’s visit, the interviewers asked her to discuss each picture. The interviewers also asked her to imagine and describe a one-act play or a short movie involving particular characters relevant to the new motherhood. The interview captured verbalizations, sighs, pauses and other indications of the emotions the new mother experienced as she described this recent, life-changing event, all very important to the sponsor of the research, a global leader in product designed for children. During the second part of the interview, was introduced to the young mother, a graphic designer who scanned a participant’s images into a computer just before the interview.

After the interview was ended, the designer asked her which of the chosen images was the most important for her. He was in essence, serving as the girl’s hand while implementing her thoughts. When they finished the collage of all the images the interviewers asked the girl to explain the image created. The explanation that came from her unconscious viewing lens revealed that many new mothers, as consumers, experience the same feelings of transformation, connection, and container.

In other words, what is important to notice at this point, is that imagination as far as being just an exterior reflections of our thoughts and past experience, is a very powerful instrument to understand the innermost feelings, regardless some situations we have never thought about, like for instance, becoming mother for the first time (Zaltman, 2008).

Given the evidence for the effects of imagery on consumers’ judgments and behavior, it is important to understand the mechanisms through which such effects
occur. In the next paragraphs I will present three aspects of the role played by imagery on consumer behavior. Specifically, I will introduce the concepts of imagery appeals, imagery fluency and imagery vividness and how consumer behavior researchers have developed these concepts.

2.1.1. Imagery appeals

There are two different approaches on affect, experience recall, and persuasion. Considering the first “traditional approach”, some studies suggest that since imagery evokes affective responses, it can enhance product evaluation as well (Bolls, 2002; Mani & MacInnis, 2001; Olliver, Thomas & Mitchell, 1993). Another stream of research also reveals that information processed using imagery is stored in two different codes: a sensory code and a semantic code, which means that imagery has multiple linkages in memory (Childers & Houston, 1984; Kieras, 1978). Information accessibility plays an important role in imagery appeals, indeed, has been suggested that vivid information on invitations to imagine the product or experience, are likely to influence preferences, by increasing the accessibility of favorable outcome-related information. This approach is called the “availability-valence hypothesis” and suggests that “because imagery can increase cognitive elaboration, it can increase or decrease product preferences according to the valence of the product information made accessible” (Petrova & Cialdini, 2008, pp. 506). In other words, imagery can increase the accessibility of favorable, but also unfavorable product information. In such cases, asking consumers to imagine the product experience will increase their product preferences.

More recent research suggests that there are other additional processes that take place when consumers imagine the product experience.
Imagery appeals may engage processes that are different from those evoked by simply presenting individuals with a pictorial product depiction. Petrova and Cialdini (2005) found that, consistently with the availability-valence hypothesis, increasing the vividness of the product (service) depiction results in a greater number of product-relevant thoughts, and greater recall of the product information.

Recent investigations reveal new processes that may take place when consumers engage in imaging the product experience. One of these “new approaches” stems from the findings on narrative transportation studies. As research on persuasiveness of narrative reveals, narratives have been found to be effective in changing attitudes and beliefs, since they can easily transport consumers into a different reality, reducing, at the same time, considerations of positive and negative aspects of the message (Green & Brock, 2000). Transportation is a process that implies the consumer to “get lost” in the story that has been told, and allows him/her to access personal opinions, thoughts, previous experiences and knowledge. Imagery likewise may influence product evaluations through a similar process, by transporting consumers into a distant reality and reducing their attention to the favorability of the product information (Escalas, 2004; 2007).

When transported in imagined world, consumers may not be motivated to change their initial assumptions and expectations at least for two orders of reason: 1) because they do not believe that the imagery had an effect on them, and 2) because interrupting the imagery in order to elaborate the information, can make the experience less enjoyable (Petrova & Cialdini, 2005). Recent research suggests that when consumers imagine their experience with the product they are less likely
to evaluate the specific product attributes and counter-argue the message arguments (Escalas, 2004; 2007).

When presented with the narrative description of the product, consumers processed the information in a holistic manner, and were less likely to draw inferences based on the specific attributes presented in the ad. These findings are consistent with the research examining the effects of imagery on comparative advertising: ads comparing the product with its competitors are effective under analytical processing, but not under imagery processing (Thompson & Hamilton, 2006).

2.1.2. Imagery fluency

Another stream of research that introduced new investigations on the process underlying the effects of imagery is the one that focuses on consumers’ experience of fluency. Evidences demonstrate that when forming attitudes, opinion and judgments, individuals are likely to take into account the content of the information with which they are presented and with the ease with which these information come to mind (Schwartz, 1998, 2004; Lee & Labroo, 2004). In other words, this approach focuses on metacognitive experiences involved in processing product information using imagery, rather than examining the impact of imagery on consumers’ elaboration of the message. For instance, when deciding on purchasing a house, consumers might consider how easily they can picture themselves living there. Typically consumers can easily image having products that are suitable for them, that they intend to buy, or that they desire; therefore, the process of imaging a product experience could be an efficient decision making strategy. On the other hand, consumers’ decision-making process can be influenced by factors irrelevant to
their intentions or product appealing features. For example, deciding on a vacation destination, an image of vacation in the Caribbean might come to mind easily if the individual has previously been provided with imagery-evoking information in magazines or advertisements.

Using commercial images to engage consumers in product imagery thoughts of the consumption experience can create accessible mental representations of having the product and can increase the ease with which such representations will come to mind during the decision-making process.

Another research suggests that individuals tend to use the ease with which they create a mental representation of an event to estimate the likelihood of an event (Sherman et al., 1985), as well as the product evaluation (Dahl & Hoeffler, 2004) and purchase intentions (Petrova & Cialdini, 2005). Research on the effect of hypothetical question on consumer behavior has demonstrated that simply asking individuals about the likelihood that they will engage in a certain behavior, might make them actually perform the behavior (Fitzsimons & Morowitz, 1996; Morowitz, Johnson & Schmittlein, 1993). This effect however, has been found, can be moderate by the ease with which consumers can generate a mental representation of the behavior (Levav & Fitzsimons, 2006).

Following the model stated by the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980), and its extension, the Theory of Planned Behavior (TPB) (Ajzen, 1985) consumers’ intentions, which are the immediate antecedents to behavior, are functions of a salient information or belief about the likelihood that performing a certain behavior will lead to a specific outcome.
Moreover, including beliefs regarding the possession of requisite resources and opportunities for performing a given behavior consumers will perceive a stronger behavioral control over the behavior they will perform (Madden et al., 1992). In addition, according to the heuristic principle of the availability heuristic (Tversky & Kahneman, 1973), one basis for the judgment of the likelihood of an uncertain outcome is cognitive availability, that is, the ease with which this outcome can be pictured or constructed.

The more available an outcome is, the more likely it is perceived to be. The availability of any outcome should increase if one has recently predicted, imagined, or explained it. Gregory et al. (1982) suggest two possible explanations by which imagination procedures might lead to heightened availability of an event and thus to an increase in its perceived likelihood. First, a subject who has imagined an event, has constructed a mental image of the event. Because such image has been formed already and is readily available in memory, any subsequent consideration will lead this same image to be reconstructed more easily. Second, an initial construction or representation of an event through an imagination or explanation procedure may create a cognitive set that impairs the ability to picture the event in alternative ways. Once a situation has been pictured in a certain way, it is more difficult to see anything else as possible. Thus, imaging hypothetical future events may increase the subjective likelihood of the events because of their increased availability.

A direct implication of this mechanism is the presumption that the imagination of the event can be achieved easily and with little effort and, thus, that the outcome of such imagination will be to render the event highly available (Sherman et al., 1985).
These findings then suggest that when considering buying a product, individuals may spontaneously attempt to create a mental representation of the product experience. By increasing the accessibility of such representations, thus, imagery appeals can increase the likelihood of purchasing the product.

2.1.3. Imagery vividness

For this research, consumption vision is defined as the visual images that consumers create in their minds when considering the purchase or use of a product (Phillips, Olson, & Baumgartner, 1995; Walker & Olson, 1994). Previous research in this specific area (see, e.g., Bone & Ellen, 1992; Branthwaite, 2002; Keller & McGill, 1994) has confirmed a positive relationship between ad-evoked consumption vision and the consumer’s emotional response to various print advertising stimuli.

Three variables are expected to influence the construction of a consumption vision (Lutz & Lutz 1978), specifically, an explicit invitation to construct the consumption vision, the degree of verbal detail, and the degree of visual detail.

One way to get consumers to form consumption visions is to simply ask them to do so. An invitation could be viewed as an explicit instruction to imagine the self-doing something. One invitation could be, “imagine yourself behind the wheel of a Ferrari.” Such an invitation to imagine the self-engaging in a specific consumption situation should greatly facilitate consumption vision construction.

This is supported by one study which found a positive impact on product judgments for only those subjects who were given instructions to use “the power of your imagination to envision” the product (McGill and Anand, 1989). Indeed, compared to subjects who were not given such explicit instructions, subjects who did receive
these instructions imagined more complex “consumption visions” and more detailed product attributes (McGill and Anand, 1989). This suggests that when advertising copy explicitly invites consumers to imagine themselves performing a variety of product-related behaviors within a consumption vision, consumers may be more likely to construct consumption visions.

Therefore, the direct approach to facilitating consumption vision construction may be an invitation. Nonetheless, there may also be indirect ways to facilitate consumption vision construction: verbal detail and visual detail in the advertisement itself.

One indirect way to encourage consumers to form consumption visions would be to include detailed verbal descriptions of what to expect during actual consumption of the product. Indeed, detailed verbal descriptions facilitate the extent to which individuals construct future scenarios (Carroll 1978).

In two past studies on consumption vision, two groups of individuals were subjected to different treatments. One study had subjects to read a two-page, single-spaced account of a future scenario (Gregory, et al. 1982) while another encouraged subjects to close their eyes and imagine for 2-3 minutes the different steps involved in successfully completing the imagined task within the scenario (Sherman and Anderson 1987).

One underlying mechanism by which concrete and detailed messages exert their influence is to be the greater imagination of detailed messages. That is, descriptions that use concrete language and specific details are easier to imagine and elaborate (Taylor and Thompson, 1982; McGill and Anand, 1989). Another explanation is that verbal detail in the message could trigger greater comprehension of the advertisement.
via the increased ability to make personal, self-relevant embellishments of the message or product (Mick 1992).

Construction of detailed consumption visions should thus be facilitated by fairly detailed verbal descriptions of the consumption experience. Thus, in order to induce consumption vision construction, *print ads must use a high degree of verbal detail*.

The use of concrete words with high visual content may in fact be more effective than concrete pictures alone in eliciting mental imagery as with no pictures present (Babin & Burns, 1997). The individual, in this circumstance, has no choice but to imagine the objects or scenarios described by the text. Instructions to imagine, or directions contained in an ad copy that tell consumers to imagine themselves with the product, is the only technique specifically designed to evoke self-generating images. This method, in fact, is said to be the most persuasive as the images generated have the potential to be more personally relevant and meaningful (Escalas, 2005; Mani & MacInnis, 2001).

Another indirect means by which consumption vision construction can be facilitated in an advertising context is with a pictorial depiction of the consumption experience. A detailed visual representation, or a product-relevant picture, in the advertisement should help consumers anticipate what actual consumption may be like (Mitchell and Olson 1981, Miniard, Bhatla, Lord, Dickson, and Unnava, 1991). However, a study by Petrova and Cialdini (2005) demonstrates that because consumers are likely to base their purchase intentions on the ease with which they can image the product experience, asking consumers to imagine the product experience in the absence of vivid product information may not only be inefficient, but may actually decrease the likelihood of purchasing the product.

Just as a detailed verbal description of the consumption situation should facilitate
the extent to which a detailed consumption vision is created, a visual representation of the situation should also help consumers imagine or picture themselves acting within the consumption context. Indeed, consumption visions are expected to consist of two principal components: the self and the consumption situation. If the situation is presented visually in the advertisement, one half of the foundation for the consumption vision has been already established.

Depending on a consumer’s ability or preference, a consumer may differentially process the visual and verbal components in an advertisement (Childers, Houston, and Heckler, 1985). Previous research also suggests that the addition of a picture in an advertisement may help individuals learn about the product itself (Mitchell, 1986) as well as see connections between the product and the self (Debevec and Romeo, 1992).

As a consequence of constructing consumption visions, consumers may be more likely to have more positive attitudes toward the particular advertisement, more positive attitudes toward enacting the target behavior, and higher behavioral intentions.

However, as has been shown in past studies, vivid information may be more persuasive only under specific circumstances (Kisielius and Sternthal, 1984, 1986; Petrova and Cialdini, 2005). For instance, the vividness of product attributes had an impact on product evaluation when participants relied on their imagination in making the choice but not when they used analytical strategies (McGill and Anand, 1989). Moreover, Petrova and Cialdini (2005) found that a mismatch exists between the type of information and the type of processing utilized by the consumer and that this mismatch can impact the fluency of processing the product information and hamper the effectiveness of marketing communications.

For example, when a photograph of a vacation ad was modified to resemble an
abstract painting, the act of incorporate imagery appeals in the ad decreased its persuasiveness in comparison to that of an ad that lacked such appeals. Moreover, when describing a restaurant with highly positive numerical expert ratings, asking individuals to process the information using their imagination decreased the likelihood of their purchasing intentions (Petrova & Cialdini, 2005).

2.1.4. Individual differences

Individual’s ability to generate vivid mental images has been shown to be a stable dispositional characteristic (Petrova & Cialdini, 2005). One of the several scales that exist to measure dispositional imagery abilities is the Vividness of Visual Imagery Questionnaire (VVIQ; Marks, 1973). This scale assesses imagery abilities in regard to visual images only, without considering other modalities (Sheenan, 1967). Individual’s ability to generate mental images can also influence the effect of imaging instructions.

In a past study (Slee, 1978), individuals with high dispositional imagery vividness levels were better able to memorize a sentence when they were instructed to create a mental image of the situation in the sentence rather than repeat the sentence to themselves. For people low in imagery levels, both strategies were equally ineffective in memorizing the target sentence.

Moreover, because imagery involves processing information by generating an internal representation of the perceived information, individuals who tend to focus on their internal representations and experiences, are likely to be influenced by imagery processes to a greater extent.

Another stream of research analyzed the effect of imagery on individuals who create mental representations involving the self, rather than another person (Anderson, 1983; Bone & Ellen, 1992). Research, examining the effects of self- versus other-
relevant imagery evoked by reading a narrative story about another person, revealed consistent results. Reading about someone else’s success increased participants’ luxury brand preferences and expectations for their own success, but only when participants could easily imagine themselves in the story (Mandel, Petrova & Cialdini, 2006). This study revealed that consumers are more likely to purchase a product when they image themselves performing the act of using the product, rather than another person. However there are some exceptions to these findings. Under some circumstances, for example, when asking to image a novel situation, or innovative products that allow consumers to do something they have never be able to do before (Ulrich & Eppinger, 2000), consumers could no longer rely on their own past experiences. In this case is more effective to encourage more abstract imagery (Dahl & Hoeffler, 2004). This last approach will be employed to address the assumptions of this research. In fact, using a rock climbing experience as the product of an advertisement will bring most of the participants to abandon the reliability of their past experience and embrace a more abstract perspective, given the distinctive traits of the experience.

2.1.5. Conclusions

This brief introduction to imagery and visual consumption processes allows me to clarify the guidelines that will represent the core of this dissertation. Given the contradictory findings surrounding the effectiveness of these three types of imagery evoking stimuli, in this study I take into account the literature review on visual consumption processes, the role played by imagery appeals, fluency and vividness, together with the consideration of individual differences in processing visual representations of consumption experiences.
I will demonstrate how changing the degree of vividness of images in an advertising flyer, as well as introducing invitations to imagine oneself into a consumption experience, can result in different, and sometimes unexpected outcomes. I will also employ the VVIQ scale to assess individuals’ imagery vividness levels and their correlation to the likelihood to perform certain purchasing intentions.

In the next section I introduce the literature review on emotions and the role played by emotions in consumer behavior and decision-making processes. I will explain how emotions and imagination are strictly related when it comes to explain some behaviors linked with merely imagined experiences.

2.2. The role of Emotion in Consumer Behavior

“Human behavior flows from three main sources: desire, emotion, and knowledge”

Plato

As marketing tradition suggests, emotions, as well as imagination, can stimulate buying interests, guide choices, arouse buying intentions, and influence future buying decisions.

Research supports these beliefs and in the past years went even further. Thoughts about buying can be exciting and can involve strong likes and dislikes, anxieties, and aspirations. Emotions intensify wants and desires, as well as motivations. This is the reason why is impossible to separate the emotional from the making trade-offs in decision-making.

Writers on marketing seem to be divided into supporters of Pascal (1623-1662) – “the heart has reasons that reason does not know” – and Descartes (1596-1650), who used exclusively the method of mathematics and non-contradiction to establish truth. It is common then to find researchers in marketing focusing only either on the rational, or
the emotional, though, when it comes to purchasing, neither one can be ignored.

Although feelings are intrinsic to human beings, the study of affect in market persuasion situations has only recently begun. Some interest emerged in 1950s and 1960s regarding emotional exploitation in advertising, but, in general, the role of affect in marketing applications did not begin to be studied until the early 1980s (Holbrook & Hirshman, 1982; Holbrook & O'Shaughnessy, 1984; Derbaix, 1995; Phillips & Baumgartner, 2002). The role of affective processes is an important subject of study in consumer behavior.

Other than study consumers’ responses to advertising, research concerning emotions that results from consumption itself has appeared with increasing frequency in the literature. Scholars have examined the emotions generated by the use of specific products (Holbrook et al., 1984; Mehrabian & Wixen, 1986), by services (Oliver, 1994), or more generally on a variety of consumption situations (Derbaix & Pham, 1991; Havlena & Holbrook, 1986; Richins, McKeage, & Najjar, 1992). Other research has investigated the relationship between consumption, emotions, and satisfaction (Mano & Oliver, 1993; Westbrook, 1987; Westbrook & Oliver, 1991).

All of these studies have found emotions to be an important component of consumer response, and the importance of emotions in the sphere of consumer behavior has been firmly established. Emotions are often conceptualized as general dimensions, like positive and negative affects, but there also been interest in more specific emotions. Specifically to the latter stream of research, some researchers use a comprehensive set of specific emotions, such as surprise, joy, or sadness (Richins, 1997; Ruth et al., 2002). Other researchers instead, concentrate on one or several specific emotions, such as surprise (Derbaix and Vanhamme, 2003), regret (Inman and
Zeelenberg, 2002; Tsiros and Mittal, 2000) and anger (Bougie et al., 2003; Taylor, 1994).

Despite this emerging body of research, two interrelated issues became objects of new research paths: the structure and the content of emotions (Bagozzi et al., 1999).

With regard to the structure, some studies examined all the emotions at the same level of generality (Izard, 1977), whereas others specify a hierarchical structure in which specific emotions are particular examples of more general underlying basic emotions (Shaver et al., 1987; Storm & Storm, 1987). On the other side, there is debate concerning the content of emotions. Questions arise about considering emotions as general factors (e.g., negative/positive; pleasure/arousal). Alternatively, appraisal theorists (Frijda et al., 1989; Roseman et al., 1996; Smith and Lazarus, 1993) argue that each emotion has a distinct set of appraisal, that is, they cannot be combined in broad emotional factors. An attempt to integrate seemingly opposite research streams in consumer behavior has been made by Laros and Steenkamp (2003), who developed a hierarchical model of consumer emotions.

They demonstrate that general dimensions with positive and negative affect are superordinate and at a more abstract level at which emotions can be defined. The second level consists of specific consumer emotions, and is mediated by an intermediate level with basic emotions that links these two levels.

Other studies have focused on trying to define and distinguish emotions from other forms of feelings. More specifically, Bagozzi, Gopinath and Nyer (1999) discussed the differentiation of emotions from affects, moods and attitudes, and outline an appraisal theory of emotions.

By emotion, they mean “a mental state of readiness that arises from cognitive appraisals of events or thoughts; has a phenomenological tone; is accompanied by
physiological processes; is often expressed physically; and may result in specific actions to affirm or cope with the emotion, depending on its nature and meaning for the person having it” (Bagozzi, Gopinath and Nyer, 1999, p. 184). The first difference that they draw is the one between emotions and moods. Conventionally, mood is longer lasting and lower in intensity than an emotion, although exceptions can be found. Another difference is that the former is typically intentional, whereas moods are generally non intentional and global. Attitudes, on the other side, are often considered instances of affect, with the same measure used to indicate emotions and attitudes (e.g., happy/sad, or interested/bored semantic differential items).

However some authors propose that attitudes have two distinct but correlated components: affective and cognitive dimensions (Bagozzi and Burnkrant, 1979; Batra and Athola, 1990). Generally, it should be recognized that the terms affect, emotions, moods, and attitudes have frequently been used inconsistently in the literature. Probably the most important factor differentiating emotions from moods and attitudes is the way emotions arise.

Emotions are said to arise in response to an appraisal one makes for something of relevance (e.g., an incident, an unplanned event, or a behavior one performs) that happens to oneself. However it is not the specific event that produces the emotion, but rather the unique psychological appraisal made by the person evaluating the event. This explains why different people have different emotional reactions to the same stimulus. These differences can be explained considering that the critical determinant of any emotion is the resultant evaluation and interpretation that arises after comparing an actual state with a future state (Lazarus, 1991) and this evaluation, of course, vary among individuals.
Finally, a necessary condition for an emotional response to an event is that a person has a personal interest in it and, at the same time, judges the event to facilitate this interest. This last explanation on how emotions arise and how subjective they are, helps to introduce the interest in understanding how different subjects, even though exposed to the same stimulus, will react with a different level of involvement toward the experience has been asked them to imagine.

2.2.1. Emotions and Cognition

As some researchers in social psychology underlined, affects cannot take place in the total absence of rational beliefs and product attributes; instead, they consider the affect to occur after rational processing has taken place. On the other hand, Zajonc (1980) bears out the independent nature of affective judgments. He assesses affect as a precedent of rational processing.

Zajonc (1980) argues that affective reactions to stimuli often precede extensive cognitive processing. This affect-primacy view is consistent with evolutionary psychology and with the theory that emotions serve to ensure a readiness to respond, such as with approach/avoidance behaviors or by motivating and guiding further information processing.

Another stream of research from neurophysiology (Damasio, 1994) and consumer behavior (Pham, 2004) supports the view that affect can encourage “thought mobilization” by directing attention to information that confirms initial feelings.

In contrast, and as mentioned before, appraisal theorists argue that emotions are a response to meaning that results from the cognitive evaluation of something relative to desired end states, goals, or beliefs (e.g., Bagozzi et al., 1999 and Lazarus, 1991). Extensions of this theory, such as Bagozzi, Baumgartner, and Pieters (1998) model of
goal-directed *anticipatory emotions*, similarly posit that emotions serve as a feedback mechanism for the behavioral system, with progress toward a goal eliciting positive emotions. Consumers then assign both emotional and rational values to products and services.

Research looking at controlled processing of affective information also found that both anticipation of satisfaction (Shiv & Huber, 2000) and emotional expectations (Neelamegham & Jain, 1999) impact choice. Pham (1998) reported that consumers use affect as information when feelings are viewed as representative of a target under consideration and relevant to the judgment task. Yeung and Wyer (2004) showed that consumers’ appraisals of product images produced affect-based impressions that influenced later evaluations, regardless of judgmental criteria normally used. Researchers have also described a motivational role for intense emotions (e.g., thrill, joy, and flow) in decisions to participate in extraordinary experiences such as river rafting (Arnould & Price, 1993). Thus, the pleasure of consumption can begin *before* the act of consuming; that is, the consumer has *fun anticipating consumption and in the experience of choosing, and rationalizing during decision-making sometimes takes the fun out of it*.

Another aspect that needs to be addressed is the one that contrasts the differences in terms of communicational mode between emotions and rational beliefs. As described by Buck (1984), emotions can be spontaneously communicated, whereas rational messages are symbolically communicated. Thus, communication of a stimulus has two different aspects: spontaneous and symbolic. The first one is biologically shared, non-intentional and automatic. It only requires what William James (1890) called *knowledge by acquaintance*, and is expressed through signs that make motivational-
emotional states externally accessible. Symbolic communication instead is socially shared, intentional and propositional. It requires knowledge by description and is based upon learned symbols, which have a learned and arbitrary relationship with their referents. These are two simultaneous streams of communication that usually interact and modify one another, and represent two independent yet interactive dimensions.

Affects do not depend on rational cognitions, whereas all social phenomena involve affects (Zajonc, 1980). Affective reactions may be acquired by virtue of experience with a stimulus, even if not accompanied by a rational message. However, all rational cognitions are accompanied by affects and we use to judge an advertisement, as it is a “good” or “bad” ads.

Similarly, the semiotic approach to consumption (Leiss et al., 1988; Williamson, 1978) suggests that in advertising, material objects are suffused with semiotic codes that, in turn, carry emotional meanings. Consumption thus, is less about the utilitarian value of objects than it is about their symbolic meaning, which each subject interprets and evaluates differently.

Although an emotional stimulus affects the emotional system, the subjective experience engendered informs the rational and cognitive system and is itself informed in turn through the appraisal of internal and external information. Thus, these systems of behavior control interact and inform each other, leading to goal-directed behavior (Perugini and Bagozzi, 2001).

Now, starting from the awareness that consumer behavior does not correspond to a stimulus-response theory is important to understand how emotions can influence attitudes formation. Are attitudes the result of a logical and sequential synthesis or are they intuitive and emotional?
As showed in the Lavidge and Steiner (1961) model, the traditional hierarchy of affects postulates that consumer attitudes are formed through a sequence of mental stages (cognitive, affective and conative). Attitude formation on a brand, thus, starts with beliefs (the cognitive stage) about the brand. This learning process then leads to brand evaluation (the affective stage) or a total attitude towards the brand, which in turn leads to behavior change (the conative stage) in term of action (Figure 2).

However, the cognitive aspects do not need to precede the affective stage necessarily. Ray (1973) showed that attitude formation could start with a conative or behavioral change (as in impulsive purchases) and consumer forms positive or negative beliefs only after the purchasing act (Figure 3).

Gorn (1982) found that positive attitudes towards a product could develop as a result of the association of the product with an external stimulus that has a positive effect on the subject. The positive emotion generated from the external stimulus (e.g. listening to music during the purchasing act, the presence of vivid images representing the product) becomes associated with the advertised product through classical conditioning and becomes part of the brand itself. This can take place in the total
absence of cognitive beliefs.

When considering consumer’s purchasing intentions, these assumptions bring to conclude that while product attributes are undoubtedly important for “high involvement” products (e.g. buying a car, or a house), emotional communication is imperative for differentiating “low involvement” items, where actual product differences are difficult to distinguish. In those cases no one has to decipher the correct meaning for the stimulus.

Our liking is dictated by our personal needs and backgrounds and our interpretation will always be true, since is our own and can be as accurate as long as the stimulus produces a favorable response.

An affective reaction, such as liking, disliking, preference, evaluation and so on, is based on a prior cognitive process in which a variety of content discriminations are made and features are identified, examined for their value, and weighted for their contributions (Zanjonc, 1980). Before starting to like something is important to have knowledge about it and, some of its discriminant features must be identified. Object must be cognized before they can be evaluated.

An interesting exception is given by the “first impression” mechanism, or, as Gladwell (2005) said, the “blink” effect. One cannot be introduce to a person without experiencing some immediate feelings of attraction or repulsion. People evaluate each other and each others’ behavior constantly. There are probably few perceptions in everyday life that do not have a significant affective component.

And this mechanism is even true when we consider that affect reactions are not escapable and cannot be voluntary controlled. It is possible to control the expression of emotion, but not the experience itself. We can completely fail to notice a person’s hair
color, but we can seldom escape the reaction that the person impressed us as pleasant or unpleasant and this retrieval for affect occurs without efforts. Same reaction can be described when we face an experience we have never encountered before. *We might ignore the positive outcomes of a rock climbing experience, but we cannot certainly escape the feeling of curiosity, danger and fear that follow our first evaluation.*

Once formed, a judgment is not readily revoked. We are not easily moved to reverse our impression of a person or a situation we are involved in. We generally believe and trust our reactions because these represent an internal state or condition and affective judgments like those, are always about the self. The communication of affect indeed, relies much more on the nonverbal channels (Ekman and Friesen, 1969).

A question arises at this point: are cognition and affect separated?

Probably the main difference between these two cues may be the difference between what Zanjonc (1980) called “*discriminanda and preferenda*”. The first word refers to what we assume as external information, or, as past researchers have defined it, as “cold cognitions” not depending on personal preference, but just assumed as mere characteristics and features of an individual, an object, or a situation. The second word, instead, refers to certain kind of interactions between some gross object features and internal states of the individual that can be altered while the object remains unchanged as, for instance, when liking for a stimulus increases with repeated experience.

Affective responses are effortless, irrevocable, holistic and more difficult to verbalize. Decisions based on affect require less information and are often based on a different decision scheme than recognition or feature identification.

Both of these processes, nevertheless, have been defined as unconscious ones.
On one hand, some behaviors are under the influence of affective and instinctive factors, without the intervention of cognitive processes, as mood, defense and vigilance; on the other hand, there are actions conducted by utilitarian and automatic sequences of information processing, such as a basic level of interest or a rational predisposition for simple liking.

The part of our brain that leaps to conclusions like this is called the “adaptive unconscious” and the study of this kind of decision-making is one of the most important new fields in psychology (Wilson, 2002; Gladwell, 2005).

2.2.2. Emotions and Consumption

Although emotions play an important role in studies on psychology, it has to be noted that another important role of emotion is its orientation to social environment.

Through emotions individuals enact cultural definitions of sociality as they are expressed in concrete relationship with others. Emotion is thus about where one stands in a web of relationships. What, thus, makes emotion particularly adapted to understand the inner dynamics of consumption?

Consumption is, then, a cultural system characterized by the simultaneous deployment of images, pictures and concepts, creation of affect, and mobilization of the body (Schroeder & Zwick, 2004).

Consumer culture is infused with personal meanings, since both propositional contents and forms of visual images are particularly salient in much of the commodities

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2 “The term “adaptive unconscious” is meant to convey that nonconcious thinking is an evolutionary adaptation. The ability to size up our environments, disambiguate them, interpret them, and initiate behavior quickly and nonconsciously confers a survival advantage and thus was selected for. Without these nonconscous processes, we would have a very difficult time in navigating through the world (...). Consider that any given moments, our five senses are taking in more than 11,000,000 pieces of information (...). The most liberal estimate is that people can process consciously about 40 pieces of information per second (...). What happens to the other 10,999,960? (...). Fortunately, we do make use of a great deal of this information outside of conscious awareness”. (Wilson, 2002, pp. 24).
that are sold in the current market. This is the case of the art, culture, leisure and touristic industries, which sell mostly experiential goods, that is, intangible goods whose value lies in the kind of experience provided by the act of consumption itself.

In addition, another important aspect of the meaning system of consumption is the fact that it has massively recruited the body in multiple ways. As a result, the market encourages the self to think of itself in terms of the visual clues and cues other people can see and evaluate. The body becomes, thus, the surface in which objects of consumption get inscribed and acquire their social meaning (e.g. the plasticity of a fit body, the desirability of self fashioning, etc.).

Emotions provides an empirical ground to explain how the cognitive and evaluative aspects of the culture of consumption translate into behavior because “emotions are not theoretical states; they involve a practical concern, associated with a readiness to act” (Ben-Zeev, 2000, p.61).

Another central feature of emotions that helps account for an important aspect of the culture of consumption, is the fact that emotions are “eudaimonic”, that is, they express one’s point of view on the world from the standpoint of one’s goal, values and conceptions of life (Ryan and Deci, 2001). In this sense they are particularly well suited to understanding the dynamics of consumption.

Market encourages consumer choices to prioritize preferences. It helps consumers to evaluate reality from one’s own emotional perspective, in turns, helping individuals clarifying their priorities (Illouz, 2009). The consumption of non-material

Greek: εὐδαιμονία. It is a Greek word commonly translated as happiness or welfare. Ethymologically, it consists of the words “eu” (“good”) and “daimon” (“spirit”), that literally mean “a good and benevolent spirit”. It is a central concept in Aristotelian ethics and political philosophy, along with the terms "aretē", most often translated as "virtue" or "excellence", and "phronesis", often translated as "practical or ethical wisdom". In Aristotle's works, eudaimonia was used as the term for the highest human good, and so it is the aim of practical philosophy, including ethics and political philosophy, to consider (and also experience) what it really is, and how it can be achieved.
objects, such as a trip to Himalaya, a cruise on the Red Sea, a rock climbing experience on the Dolomites, are instead seen as forms of experiences, despite the fact that they are advertised and treated as products. Experiential consumption provides thus symbolic outlets and enhances interpersonal relationships, such as watching a movie with friends, going to a restaurant with the love one, etc.

2.2.3. Emotions and Imagination

As Elster (1999) says, there are no universal laws when it comes to emotion, either in terms of predicting precisely what conditions will give rise to a specific emotion or to predict the precise action that will be generated by a specific emotional state. Specific contextual circumstances can undermine any generalizations.

Through the formation of images, emotions and feelings express the personal meanings that arise for us within any given context (Chodorow, 1999) and serve to animate thoughts and actions. These meanings arise through individuals’ imaginative connection and engagement with these contexts.

Consumers’ initial construal of meaning within particular emotional situations is largely an act of fantasy and imagination, guided by their emotional connection with both their inner and outer worlds. They help understand and make sense of one’s self, their relationships with others, and the world they inhabit. Their experience of this inner life is inherently emotional and deeply connected to the sense of self they construct and maintain (Chodorow, 1999; Denzin, 1984; Lupton, 1998).

Additional support for this relationship is presented by Goossens (1994), who claims that consumers who imagine themselves interacting with a particular experience have to activate relevant “self-experience” knowledge structures in memory. Consequently, consumers also indirectly activate the emotional structures that align
with such experiences. This view is widely supported by the *Motivational Research* (Dichter, 1960) and, more specifically by Hirschman and Holbrook (1982). This stream of research asserts that *hedonic consumption* (i.e. consumers’ multisensory images, fantasy and emotional arousal in using products), is tied to imaginative constructions of reality (Singer 1966).

Hedonic consumption acts are based not on what consumers know to be real, but rather on what they desire reality to be. Indeed, the consumer’s internal construction of reality may not be congruent with the external, verifiable world. Researchers then have to probe the mental imagery that the consumer constructs around a product, and how the product is seen by the consumer’s subjective reality. It can be done, for instance, by asking the consumer to imagine a specific scenario in which s/he is involved and then by measuring their involvement.

There is evidence, in fact that some of those individuals who engage this type of projective mental imagery may purposely attend a performance because they have foreknowledge that it contains a role in which they would like to imagine themselves (Hirshman, 1982a). Thus, imagination on various themes is an important determinant and consequent of hedonic consumption. These experiences have been defined *absorbing experiences* (Swanson, 1978), because the consumer is absorbed into the reality created by the act of imaging a relationship of any kind with the product/experience.

**2.2.4. Seeking emotional situations: individual differences**

Although extensive studies have demonstrated the importance of effects of affect on consumers’ memories, evaluations, judgments and behaviors (Gradner, 1985; Edell & Burke, 1987), most research in consumer behavior has focused on affective
components of ads (Aaker & Bruzzone, 1985; Mitchell, 1986), or affective response to ads (Holbrook & Batra, 1987; Stout & Leckenby, 1986). Alternatively, many studies in this same area have induced a specific emotion in subjects artificially, and then examined the effects of this affect for all subjects in that condition taken together (Booth-Butterfield & Booth-Butterfield, 1990). Differences across individuals regarding a need for seeking out and experiencing emotions have, generally, being ignored.

In this research I center on the operating hypothesis that individuals vary on the degree that emotion is sought, and furthermore, that this individuality is relevant to the buyer behavior context. As shown in past studies, individuals may differ in expressiveness, orientation, and intensity of experiencing emotions (Allen & Hamsher, 1974). Based on these differences, researchers have suggested that individuals may also differ in their need to seek out emotional stimuli (Harris & More, 1990). Second, many situations in consumer behavior, such as information processing, decision-making, and impulse-buying, may be better understood by taking into account individual differences in dealing with emotions and emotional situations.

Based on these assumptions, in Study 3 I will employ the Need For Emotion (NFE) scale, which is defined as the tendency for individuals to seek out emotional situations, enjoy emotional stimuli, and exhibit preferences to use emotion in interacting with the world. Emotions have been differentiated from longer affective states such as moods as being more intense (Clark & Insen, 1982). Individuals are usually aware of their emotions, while longer emotional states, like moods, are more general, less intense and may operate without and individual’s consciousness (Gardner, 1985). The NFE scale construct should help to explain short-term emotions, rather than long-term emotional states.
Despite the existence of the Need For Cognition scale (NFC), which captures the differences among individuals in their tendency to engage and enjoying thinking (Cacioppo & Petty, 1982), “cognition” represent only one aspect of the modes of information processing.

Individuals may also differ in their tendency to process affective or emotional stimuli. Thus, the employment of a new construct that takes into account the emotional aspect of individuals’ personality can explain the possibility to define subjects as “experiencers” or “feelers” and might be conceived of as a construct that taps into a tendency to seek out and enjoying emotional situations. The employment of this construct into my research studies will help to measure the level of emotion seeking personality and associate higher level of NFE with higher positive attitudes of consumers toward product depictions with different degree of vividness and toward consumers’ behavioral intentions.

2.2.5. Conclusions

In this second section of Chapter 2 I introduced a review of the literature on emotions, focusing my attention on the relationship that connects emotions and consumption behaviors. Following the assumption mentioned before, that is, emotions, as primal motivations in the human condition, are crucial determinants in our choices of products and services and in processing of commercial advertising messages, I point out that, knowing how consumer elaborate their feelings when exposed to an invitation to imagine an experience, can help marketers to understand what indicators to use when interested in appeal consumers’ interests. Despite the fact that consumers assign both emotional and rational values to products and services, affective reactions can sometimes overtake the cognitive judgments and persuade consumers to undertake
emotional experiences, especially in situations in which the stimulus comes from an invitation to immerse oneself into an unusual experience (e.g. rock climbing).

Moreover, I argue that when exposed to a depicted experience (both through an artistic and stylized images or a more realistic photography), individuals who experience higher levels in the NFE scale will, in turn, enjoy more the exposure, even though they were not directly invited to imagine themselves experiencing the scene, whereas, individuals low in NFE, not only will not enjoy the imagined experience, but their likelihood to maintain a positive attitude toward the product, might decrease.

In addition, I will demonstrate that higher results in NFE will explain why, even in the presence of mere descriptive depictions of a heavenly place, they will judge more positively the ad and will be more motivated to engage in behavior that will lead them to enjoy the experience. Individual differences are thus taken into account when measuring the various levels of emotional involvement of the subjects.
CHAPTER 3

3. METHOD

3.1. Experimental Design

Before discussing the experimental design adopted in this work, I consider notable a brief introduction on the basics of experimental design in marketing research. The goal of marketing research is to increase the understanding of consumers. This knowledge can be used to make more informed marketing decisions.

One way of doing marketing research is to ask people about why they buy, how they make buying decisions, what features of the product are important, etc. Such questions attempt to capture the knowledge that people have about their own behavior. Another way of doing marketing research is to see what consumers do or say when confronted with a real or simulated setting of marketing interest.

The difference between the two ways of doing marketing research is obvious. The first way, asking questions, is relatively easy to do and can yield rich information. However, it is limited to people’s insight into their own behavior and by their willingness and ability to reveal what they know. The second approach to research circumvents this disadvantage. Knowledge comes not from people’s own insight, but from what they do or say in response to what they are presented with in the experiment. Knowledge, thus, comes from observed causality. The observation of causality is the defining aspect of the use of experiments (Cattel, 1988).

However, in order to understand how experiments can increase our knowledge, we must go beyond the basic observation of causality. There are in fact two approaches to producing knowledge from experiments. One approach we term
generalization and the other theoretical explanation. The first approach reasons as follow: there is a particular situation of marketing interest and, before deciding what to do, let us conduct an experimental test of alternatives. The alternatives will constitute different variables and the levels of these variables in the experimental design. The test will be conducted so as to correspond to the actual marketing situation in critical respects.

In general, the key to generalization approach is to equate the variable relationship in the test experiment to the marketing situation via an analogy. Although the approach is intuitively appealing, it is not without problems. An alternative approach is to use the experiments to test a theoretical explanation, and then to apply the explanation to marketing situations. This is the theoretical explanation approach.

Whatever the specific problem that motivates testing theoretical explanation, the questions posed for research deal with causal relations among constructs. A construct is an abstract notion. Its existence is inferred from examination of the relationships between variables. When a construct is hypothesized to cause some effect in another construct, this relationship is referred to as a nomological network. Thus in the laboratory experiment, the nomological network specifies how the constructs of the cause, ability and predisposition to process visual consumption experiences jointly determine the construct of the effect, attitudes and behavioral intentions.

Theories are represented by constructs in a nomological network. Introducing variables that represent the constructs tests these relations among abstract notions.
When the variable is thought to represent or influence a causal agent, it is referred to as an independent variable.

In the present study, invitation to imagine and vividness are the independent variables. Invitation to imagine is hypothesized to influence imagery fluency (i.e., the ability to create vivid images under a direct request), and vividness is thought to represent the construct of processing information (i.e., as image vividness is presented positive attitude toward the product is assumed to increase). Research participants’ evaluations of the imagery appeals on attitudinal scales such as Pleasant/Unpleasant and like/dislike are dependent variables that represent behavioral intentions.

Another important decision that must be made in theoretical experiments seeking explanation is whether to employ manipulated or measured independent variables.

Manipulated independent variables are constructed by introducing two or more levels or conditions of a variable and randomly assigning research participants to the different levels. Both invitation to imagine and vividness were manipulated independent variables in the first two studies. The other type is a measured independent variable.

Here, research participants naturally vary on, or self-selected themselves to, a level of an independent variable depending on some personal state, experience, or disposition such as their gender, expertise, or motivation. The third study employs the Need for Emotion scale as measured independent variable to assess participants levels of NFE as independent variable that influences imagery fluency and the consequent product attitudes and purchase intentions (dependent variables).
3.2. Research Model and Hypotheses

The investigation of the effects of imagery on likelihood judgments suggests that individuals tend to use the ease with which they generate a mental script of an event as an indicator of the likelihood of the event (Carroll, 1978; Gregory, Cialdini & Carpenter; Sherman et al., 1985). That is, participants base their likelihood evaluations on the accessibility of mental images of a depicted situation. However, little evidence for the medial role of imagery accessibility has been provided (Petrova & Cialdini, 2005).

Despite the extensive research on accessibility and fluency effects, still little is known about the conditions under which these metacognitive experiences play a role in guiding attitudes and behaviors.

In three studies, following the model proposed by Petrova and Cialdini (2005), I investigate several factors that can impact the ease with which consumers can image the product experience and, consequently, reverse the effect of imagery appeals on product preferences. As the researchers proposed in their model, I first examined the role of dispositional ability to create vivid mental images (Marks, 1972, 1973). Past research, in fact, has demonstrated that individuals, who differ in their imagery abilities, are differentially impacted by vivid information (Pham, Mevys & Zhou, 2001). Extending these findings, I retested the possibility that differences in imagery abilities can reverse the positive effects of imagery appeals on attitudes and behaviors toward the product experience. In doing so, I employ the VVIQ scale (Marks, 1973).

Consequently, while such appeals would be expected to enhance product attitudes and purchase intentions among individuals high in imagery abilities, those same appeals would be expected to lower products attitudes and purchase intentions among individuals with low imagery abilities. Given these premises, the first hypothesis
states that:

**H1:** Attitudes and behaviors are positively (negatively) related to imagery appeals for individuals with high (low) visual imagery disposition.

Strictly connected with this first hypothesis is the H1a, which states that individuals with high levels of dispositional imaging vividness (DIV), as result of the VVIQ scale, have a more positive attitude toward the ad even though they did not received an explicit invitation to imagine the advertised experience. It means that the invitation/no invitation to imagine has different impact on different subjects with opposite visual imagery disposition. Hence:

**H1a:** The subjective accessibility of the consumption imagery (high/low visual imagery disposition) influences the interaction effects of the invitation to imagine and the presence of imagery appeal on attitudes and behaviors.

The research further examines the vividness of the product depiction as an external factor that can impact imagery accessibility and reverse the effect of imagery appeals.

Past research has defined vivid information as representations that can be: 1) concrete and image provoking, 2) emotionally interesting, and 3) proximate in a sensory temporal, or spatial way (Nisbett and Ross, 1980).

In past studies vividness has already been manipulated using 1) the presence versus absence of pictures (Keller & Block, 1997); 2) concrete versus abstract pictures
(Babins & Burns, 1997); 3) concrete versus abstract words (Rook, 1994), and 4) narrative versus numerical information (Keller & Block, 1997). I manipulated the degree to which the product information was vivid either by varying the concreteness of the pictorial product depiction (study 2) or by presenting easy to imagine verbal product description versus non-experiential information such as numerical ratings (study 3).

I expected that, when consumers rely on the presented information to generate the consumption imagery without vivid cues, they would experience difficulties in generating these images.

Since the experience of difficulty would be used as information for future decisions, I expect that it would not only render the imagery appeals ineffective, but would lead to more negative product evaluations. Thus the second hypothesis states that:

**H2: When individuals are invited to imagine an experience high in vividness and with high levels of accessibility of the consumption imagery, imagery appeals will result in stronger experiencing preferences. When the experience information is low in vividness, and therefore, low in accessibility levels, asking individuals to imagine the rock climbing experience will lead to weaker experiencing preferences.**

Difficulty constructing consumption imagery might even arise when the product is depicted in both vivid experiential information and non-experiential ones, such as numerical information, technical specifications, or attribute comparisons. Although could be normal to think that such information is often intended to provide additional
motivation for purchasing the product, it might intrude upon cognitive resources necessary to create a mental image of the consumption vision (Shiv & Huber, 2000). Consequently the third hypothesis is:

**H3: Adding non-experiential (numerical) information to a vivid experience depiction will weaken the effects of the imaging instruction on experience choice (i.e. imagery fluency).**

Another final goal of this research is to provide insight into the situation under which accessibility and fluency may occur. If these effects are driven by the degree of which each individual seek to be involved in situations where there is a potential for emotion laden stimuli to be presented, whether a person is comfortable with and even enjoys experiencing such situation. I expect accessibility and fluency experiences to impact subjects’ consequent attitudes and behavior for individuals high in NFE levels. The forth hypothesis thus states that:

**H4: Imagery fluency will impact experience preferences only for individuals high in Need for Emotion levels.**

In order to better understand the flow of this research, and the approach used to design the studies, the figure below (Figure 4) gives a deeper look to the framework that will be adopted. Specifically, the arrows represent the direction of the relationships (hypotheses) I suggest existing between constructs, whereas the boxes represent the variables involved.
Figure 5: Research Framework and Hypotheses.
3.3. Research Design

Table 1 illustrates the experimental design of the three studies.

<table>
<thead>
<tr>
<th>STUDY #</th>
<th>Conditions</th>
<th>Type of Image</th>
<th>Invitation to imagine</th>
<th>Scale</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDY 1</td>
<td>1</td>
<td>Concrete</td>
<td>Yes</td>
<td>Vividness of Visual Imagery Questionnaire (Marks, 1973) and Brand attitudes and purchase intentions Scale (Smith et al., 2007)</td>
<td>To examine the impact of imagery appeals on individuals who differ in their dispositional ability to generate mental images.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Concrete</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STUDY 2</td>
<td>1</td>
<td>Concrete</td>
<td>Yes</td>
<td>Brand attitudes and purchase intentions Scale (Smith et al., 2007)</td>
<td>To examine the effects of imagery fluency on brand attitudes and purchase intentions by varying the vividness of the product depiction.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Concrete</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Stylized</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Stylized</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STUDY 3</td>
<td>1</td>
<td>No images - Description only</td>
<td>Yes</td>
<td>Need For Emotion Scale (NFE) (Niranjan, Chattopadhyay and Hoyer, 1995)</td>
<td>To extend the results from the previous two studies in a different context, with slightly different manipulations of imagery fluency. And to examine a potential moderator of the observed imagery fluency effect.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>No images - Numerical information only</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>No images - Description and Numerical information only</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Experimental Design.

3.3.1. Study 1

As mentioned before, in Study 1 I examined the impact of imagery appeals on individuals who differ in their dispositional ability to generate mental images (Petrova & Cialdini, 2005). Previous research has already demonstrated the effect of imagery with products having an experiential component (Holbrook & Hirschman, 1982). In this research I aim to apply these components of imagery appeals in the context of a rock climbing experience. The decision to employ this experience is based on the assumption that rock climbing is an extraordinary experience\(^4\), which offers absorption, personal control, a newness perception and imagination process (Arnould & Price, 1993). The

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\(^4\) I employ the term “extraordinary experience”, as mentioned by Arnould and Price (1993). This term entails “a sense of newness of perception and process” (Privette, 1983, p. 1366). By contrast with flow, extraordinary experience is triggered by unusual events and is characterized by high levels of emotional intensity and experience. By contrast with peak experiences (Celsi, Rose, & Leigh, 1993), extraordinary experience implies neither superior levels of effort nor an independent relational mode.
first study has been constructed as follow.

Two versions of the advertisement were created. One version contains phrases inviting consumers to imagine experiencing the advertised activity, while the other version does not contain such imagery appeals, but asks consumers to read carefully the ad (Appendix A). The Independent variable for this study is, then, the actual invitation to imagine (IV). Two conditions were provided: in the treatment group participants were invited to imagine themselves in the specific consumption situation, whereas in the control group subjects did not receive any specific invitation. The dependent variables are consumers’ attitudes (i.e. Overall FEELINGS) and behavior toward the ad (i.e. Overall BEHAVIOR), and their purchase intentions (i.e. PI).

The direct measure of attitude and behavior toward the ad and purchase intentions were assessed with six items. Respondents were asked to respond to the questions: “Please rate the extent to which the following words describe your feeling toward the ad” (unpleasant-pleasant, exciting-not exciting, appealing-not appealing, interesting-not interesting) 7-point semantic differential scale (Smith et al., 2007) (α=.91); “Please rate the likelihood of considering the adventure in the future”; “Please rate the likelihood of requesting more information about this sport adventure”; “Please rate the likelihood of visiting the website shown in the ad”; “Please rate the likelihood of experiencing the advertised rock climbing given that you were already planned such an experience and had the necessary time and money to perform it” (7-point Likert scale: very unlikely- very likely) (α=.87). These questions represent the measure of attitudes and behaviors toward the ad. The items related to attitudes measurement were reverse scored, in order to get higher scores for positive feelings, and lower scores for negative feelings. The categorical dependent variables behav1, behav2, and behav3
were summed up in order to create an Overall BEHAVIOR index as well as the
categorical dependent variables Excitement, Appeals, Interest, and Pleasure were
added up in order to create an Overall index of feelings (i.e. Overall FEELINGS). The
Dispositional Imagery Vividness (DIV) was measured through the Vividness of Visual
Imagery Questionnaire (VVIQ) (Marks, 1973) (α=.92). The scores of each items were
summed up and categorized in two subgroups, identified by labels (High vividness if the
total scores were >= 47 / low vividness if the total scores were <47). If the conditions
hypothesized are met I expect that people with high DIV respond with higher levels of
attitudes, behaviors and purchase intentions toward the ad, than people with low DIV,
which, in turn, will not reveal positive responses toward the stimulus.

Method

The subjects participated voluntary and were compensated with money after
completing the task, and after verifying the reliability of their answers. Participants
completed first the Vividness of Visual Imagery Questionnaire (VVIQ) (Marks, 1973)
through an online survey built using Qualtrics\(^5\). The aim of this test is to determine the
level of vividness of consumers’ visual imagery (even called “dispositional imagery
vividness” – DIV). Thereafter, participants viewed one of the two versions of the ads
provided and then responded to nine-point semantic differential items assessing
attitude (unpleasant-pleasant, exciting-not exciting, appealing-not appealing,
interesting-not interesting on a 7-point semantic differential scale) and behavior toward
the ad (likelihood of considering the rock climbing experience in the future, requesting
a brochure for further product information, visiting the website shown on the ad), and
purchase intentions (visiting the advertised climbing center given that they were

\(^5\) Qualtrics.com is a web-based software that allows users to create surveys and generate reports (2002).
planning such an experience and had the necessary time and money) on a 7-point Likert scale (very unlikely-very likely). The two sets of item were randomly and evenly presented.

At the end of the survey they were asked to complete some demographic questions (Gender, Age, and Ethnicity).

Results and Discussion

As shown in Figure 6, an overall of 157 participants completed this task (57.96% males and 42.04% females).

![Figure 6: Study 1 - Demographic data.](image)

First, H1 was verified considering the relationship between the levels of dispositional imaging vividness (DIV) and attitudes and behavior toward the ad. The relationship between the levels of DIV and behaviors toward the ad were submitted to MANOVA with one fixed factor (DIV) and four dependent variables (Overall BEHAVIOR, behav1, behav2, and behav3).

As shown in Table 3, the Overall BHEAVIOR (F(1,155)=4.91, p=.028), as well as each component of this index (i.e. “considering the adventure in the future” (behav1) (F=13.29, p<.001), “requesting more information” (behav2)(F=38.45, p<.001), and “visiting the website” (behav3) (F=15.55, p<.001)) resulted significant, which means that different levels of DIV (high/low) influenced participants’ behavior.
toward the ad. In other words, having high (low) levels of DIV increases (decreases) the likelihood to get involved with the content of the ad, given the ability of the individual to identify himself or herself with the subject climbing in the ad. These results thus confirm H1 when considering the participants’ behavior toward the ad.

Table 3: MANOVA - Study 1: Relationship between Overall BEHAVIOR, behav1, behav2, behav3, and DIV levels (HIGHLOWVivid).

Another multivariate analysis was conducted to assess the relationship between DIV and attitudes toward the ad. As expected, individuals with high levels of DIV presented higher levels of Excitement ($F=18.27$, $p<.001$), Appeals ($F=71.79$, $p<.001$), Interest ($F=71.56$, $p<.001$), and Pleasure ($F=65.30$, $p<.001$) toward the ad, if compared with subject low in DIV. Consequently, even the relationship between DIV and the Overall FEELINGS is significant ($F=28.41$, $p<.001$). Table 4 shows these results. Hence, H1 is confirmed even in regard to subjects’ attitudes toward the ad.
Table 4: MANOVA - Study 1: Relationship between DIV and Overall FEELINGS, Excitement, Appeals, Interest, and Pleasure.

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
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<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
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<td>1</td>
<td>1074.772</td>
<td>28.411</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Excitement</td>
<td>60.374*</td>
<td>1</td>
<td>60.374</td>
<td>18.279</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Appeals</td>
<td>71.791</td>
<td>1</td>
<td>71.791</td>
<td>24.404</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>71.561</td>
<td>1</td>
<td>71.561</td>
<td>26.929</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Pleasure</td>
<td>65.308*</td>
<td>1</td>
<td>65.308</td>
<td>20.038</td>
<td>.000</td>
</tr>
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<td>.000</td>
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<td></td>
<td>Excitement</td>
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<td>1</td>
<td>60.374</td>
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<tr>
<td></td>
<td>Appeals</td>
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<tr>
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<td>71.561</td>
<td>26.929</td>
<td>.000</td>
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<tr>
<td></td>
<td>Pleasure</td>
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<td>1</td>
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<td></td>
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<td>8138.000</td>
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<td></td>
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<tr>
<td></td>
<td>Interest</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Pleasure</td>
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<td>570.484</td>
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<td>572.331</td>
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<tr>
<td></td>
<td>Excitement</td>
<td>527.771</td>
<td>156</td>
<td>483.452</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Appeals</td>
<td>570.484</td>
<td>156</td>
<td>570.484</td>
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<td>a. R Squared</td>
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<td>b. R Squared</td>
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<td>c. R Squared</td>
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<tr>
<td>d. R Squared</td>
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<td>e. R Squared</td>
<td>.114 (Adjusted R Squared = .109)</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

Table 4: MANOVA - Study 1: Relationship between DIV and Overall FEELINGS, Excitement, Appeals, Interest, and Pleasure.

Finally, the dependent variable “Purchase Intentions” was submitted to ANOVA to assess its relationship with DIV levels. Table 5 shows significant results (F=16.54, p<.001). Again, H1 is confirmed. Individuals who differ in their dispositional imagery vividness responded to the ad in accordance to their levels of attitudes and behaviors toward the ad. Specifically, subject with high DIV result more inclined to buy the ticket to climb than subject with low DIV. Supporting the H1, these results suggest that participants based their product evaluations on the ease of imaging the consumption experience.
Table 5: ANOVA - Study 1: Positive relationship between Purchase Intentions and DIV.

To test H1a I conducted ANOVA considering, first, the Overall BHEAVIOR as the dependent variable and Invitation to imagine and DIV as fixed factors. As shown in Table 6, the interaction between Invitation to imagine and DIV is not significant (F= 1.285, p=.259). In this case, therefore, it cannot be said that the Invitation to imagine enhance behaviors for subjects with high DIV, suggesting that the predictive effect of the imaging instructions could not be attributed to differences in behavioral response to the message. However, both Invitation (F=3.945, p=.049) and DIV (F=4.541, p=.035) have a significant effect on Overall BEHAVIOR, which means that people who have high DIV or get an Invitation to imagine show more positive behavior toward the ad in terms of “considering the adventure in the future”, “requesting more information”, and “visiting the website”.

Table 6: ANOVA – Study 1: Interaction between Invitation to Imagine and DIV.
However, if we look at each component of the Overall BEHAVIOR index (i.e. “considering the adventure in the future” (behav1), “requesting more information” (behav2), and “visiting the website” (behav3)), the results from ANOVA show a significant interaction between Invitation to Imagine and DIV (F=4.385, p=.038) on behav1 and (F=.166, p=.024) on behav3, but no significant interaction is found on behav2 (F=2.592, p=.109) (Tables 7-8 and 9, and Figure 7). It allows us to affirm that participants who saw the ad containing imagery-inviting appeals further reported stronger attempts to “considering the adventure in the future”, and “visiting the website”. In this case, hence, H1a is supported.

Table 7: ANOVA – Study 1: Interaction between Invitation to Imagine and DIV on behav1.

Table 8: ANOVA – Study 1: Interaction between Invitation to Imagine and DIV on behav2.
Figure 7: Plot – Study 1: Interaction between the Invitation to Imagine and the levels (high/low) of DIV, on behav1 and behav3.

Table 9: ANOVA – Study 1: Interaction between Invitation to Imagine and DIV on behav3.

Secondly, ANOVA was conducted considering the Purchase Intention as the dependent variable and Invitation to imagine and dispositional imaging vividness (DIV) as fixed factors. No significant effects of the interaction between the presence of imagery appeals and DIV were observed in regard to Purchase intentions, as
shown in Table 10 (F= .303, p= .583). Hence, again, this suggests that in the context of this study, the imagery appeals did not increased cognitive elaboration of the ad in terms of purchase intentions. The lack of significant effects in regard to the relevance of the interaction between invitation to imagine and DIV further suggests that the manipulations did not impact the favorability of the positive responses. However, DIV alone had a significant effect on Purchase Intentions (F=15.973, p<.001), which means that participants who have high DIV show more positive purchase intentions toward the ad, than participants with lower levels of DIV, independently form the invitation.

<table>
<thead>
<tr>
<th>Tests of Between-Subjects Effects</th>
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<td>Source</td>
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<tr>
<td>Intercept: 3148.044</td>
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<tr>
<td>Invitation: 1.553</td>
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<tr>
<td>HIGHLOWvivid: 27.516</td>
</tr>
<tr>
<td>Invitation (^\ast): 0.522</td>
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<tr>
<td>Error: 263.570</td>
</tr>
<tr>
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<tr>
<td>Corrected Total: 295.478</td>
</tr>
<tr>
<td>df</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
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<td>153</td>
</tr>
<tr>
<td>157</td>
</tr>
<tr>
<td>156</td>
</tr>
<tr>
<td>Mean Square</td>
</tr>
<tr>
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<td>.000</td>
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<td>.344</td>
</tr>
<tr>
<td>.001</td>
</tr>
<tr>
<td>.583</td>
</tr>
</tbody>
</table>

a. R Squared = .108 (Adjusted R Squared = .090)

Table 10: ANOVA – Study 1: Interaction between Invitation to Imagine and DIV on Purchase Intentions.

Thirdly, I conducted ANOVAs in order to assess the effectiveness of the interaction between Invitation to imagine and DIV, looking at the Overall FEELINGS index (as the sum of the items Excitement, Appeals, Interest, and Pleasure). As shown in Table 11 and Figure 8, this interaction is significant (F=15.14, p<.001), and it allows us to assert that Invitation to imagine has a major effect on people who differ in DIV levels. Specifically, subjects with low DIV result more sensitive to the presence/absence of the invitation to imagine (in terms of attitudes toward the ad), than people with high DIV level who, by contrast, result less sensitive to the
invitation, given their high levels of DIV. Moreover, both Invitation (F=41.75, p<.001) and DIV (F=32.18, p=.001) have a significant effect on Overall FEELINGS, thereby supporting H1a.

Similarly, as expected, the interaction between invitation to imagine and DIV resulted significant for each feeling separately considered: Excitement (F=10.45, p<.001), Appeals (F=10.30, p<.001), Interest (F=9.52, p<.002), and Pleasure (F=14.18, p<.001) (see APPENDIX B).

### Table 11: ANOVA – Study 1: Interaction between Invitation to Imagine and DIV on Overall FEELINGS.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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</thead>
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<td>.000</td>
</tr>
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<td>1248.364</td>
<td>41.759</td>
<td>.000</td>
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<td>.000</td>
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<tr>
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<td>15.145</td>
<td>.000</td>
</tr>
<tr>
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<td>29.894</td>
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<tr>
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<td>157</td>
<td></td>
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<tr>
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<td></td>
<td></td>
</tr>
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</table>

a. R Squared = .341 (Adjusted R Squared = .328)

### Figure 8: Plot – Study 1: Interaction between Invitation to Imagine and DIV on Overall FEELINGS.

In conclusion, these results show that the ad containing imagery appeals resulted in more positive attitudes and behaviors for participants high in DIV, rather
than the ad without imagery appeals. For low imagers, moreover, the ad without imagery appeals (e.g., no invitation) resulted in more negative attitudes and behaviors than the ad that had such appeals. Being consistent with these results, H1a is confirmed: the subjective levels of DIV influence the interaction effects of the invitation to imagine and the presence of imagery appeal on attitudes and behaviors.

3.3.2. Study 2

In study 2 I examined the effects of imagery fluency by varying the vividness of the product depiction. For the high vividness conditions I used the same ads employed in study 1. For the low vividness conditions I modified the images of the ad shown in study 1, by creating a muted and colorful version of the original image (Appendix C). The aim of this manipulation was to make the less concrete picture, less identifiable in terms of recognition. This approach was adopted by Babin and Burns (1997) and was found useful by the researchers in terms of the investigation of the evocation of mental imagery.

During the experiments participants viewed one of the four versions of the ad and then, as in Study 1, responded to 7-point semantic differential items assessing attitudes toward the ad (unpleasant-pleasant, exciting-not exciting, appealing-not appealing, interesting-not interesting) (Cronbach’s α=.95), behaviors and purchase intentions (likelihood of considering the rock climbing experience in the future, requesting a brochure for further product information, visiting the website shown on the ad, and visiting the advertised climbing center given that they were planning such an experience and had the necessary time and money) on a 7-point Likert scale (very unlikely-very likely) (Cronbach’s α=.95). As well as in Study 1, these questions represent the measure of attitudes and behaviors toward the ad.
The items related to attitudes measurement were reverse scored, in order to get higher scores for positive feelings, and lower scores for negative feelings. The categorical dependent variables behav1, behav2, and behav3 were summed up in order to create an Overall BEHAVIOR index as well as the categorical dependent variables Excitement, Appeals, Interest, and Pleasure were added up in order to create an Overall index of feelings (i.e. Overall FEELINGS). The four sets of item were randomly and evenly presented. Moreover respondent were asked to visualize the adventure and answer three questions: “Where you able to image the experience?”; “How easy it was for you to imagine the experience?”; “How long it took you to create the mental image?” (Not at all-very much on a 9-poin Likert scale) (Cronbach’s α=.91); and eventually they were asked, “How vivid was the image you imagined?” which was followed by vivid and clean-vague, alive and dynamic-not dynamic, detailed-not detailed (Cronbach’s α=.92). These three last items identify and measure what I called imagery appeals. Whenever participants show higher levels of imagery appeals for each condition, the interaction between vividness of the image and invitation to imagine will be enhanced, demonstrating that images high in vividness, if accompanied by the invitation to imagine will address attitudes and behaviors toward more positive product choices.

**Method**

After viewing one of the four versions of the ad, the subjects indicated their attitudes and purchase intentions on the scale used in study 1. To assess the accessibility of the consumption imagery, participants were asked to visualize the rock climbing experience and provide the answers to few questions on the ease to create mental images. Specifically they were asked whether they were able to imagine the
experience, how easy it was for them to imagine the rock climbing activity, and how long did it take them to create mental images (i.e. imagery accessibility). Lately participants rated the mental images as vivid versus vague, alive and dynamic versus not dynamic, and detailed versus not detailed, in order to assess the vividness of the image. At the end of the survey participants were asked to complete some demographic questions.

Results and Discussion

Serving as subjects in the main experiment for Study 2 were 181 participants: 55.25% males and 44.75% female (Figure 9). The subjects participated voluntarily and were compensated with money after completing the task, and after verifying the reliability of their answers. Small groups of subjects (45 subjects per each sub-group, except one subgroup which had 46 subjects) were randomly assigned to one of the four treatment conditions. Specifically, the four conditions have been labeled as: HI (i.e. High Vividness – Invitation), HN (i.e. High Vividness – No Invitation); LI (i.e. Low Vividness – Invitation); and LN (i.e. Low Vividness – No Invitation).
The study employed a 2 (vivid vs. pictorial images) x 2 (invitation to imagine vs. no invitation to imagine) between-subject design, with each experimental factor corresponding to a manipulation of an imagery-evoking strategy. In each study, the fixed factors were the Invitation to imagine and the vividness of the images, whereas the dependent variables were considered separately in several ANOVAs.

The overall ratings of the images vividness (“How vivid was the image you imagined?” vivid and clean/vague, alive and dynamic/not dynamic, detailed/not detailed) resulted internally consistent (α=.92) and thus summed up (after reverse scoring) into a single overall score, called Overall VIVIDNESS, where high scores reflected more vivid imagery and low scores revealed less vivid imagery. Together with imagery vividness, another factor was considered in this study as the main factor to assert the vividness of the ad: the imagery accessibility.

The imagery accessibility was assessed considering the ability (α=.87), the ease (α=.89), and the time employed to depict the experience (α=.87), given the visual stimulus from the ad. An overall index was created (i.e. ACCESSIBILITY) (α=.91), as the sum of these three components, in order to measure the symbolic power of the images shown in each condition of the experiment. The results of the interaction between vividness and presence of imagery appeals are shown further on.
Participants reported more positive emotions (measured by the extent to which they perceived feelings of excitement, interest, pleasure, and appeal) in response to the ad high in vividness than the ad low in vividness (see Table 12). Specifically, analysis of variance shows that the effect of the interaction between Invitation to imagine (F=5.61, p=.019) and the vividness of the images resulted significant (F=5.41, p=.021) for the Overall FEELINGS index, thereby supporting H2.

The main effect of imagery appeals and the interaction between vividness and imagining were significant in regard to attitudes, suggesting that the predicted effect of imaging instructions could be attributed to differences in the emotional response to the message.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>8169.894*</td>
<td>3</td>
<td>2723.298</td>
<td>75.532</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>58690.133</td>
<td>1</td>
<td>58690.133</td>
<td>1627.799</td>
<td>.000</td>
</tr>
<tr>
<td>VIVIDLABEL</td>
<td>6572.165</td>
<td>1</td>
<td>6572.165</td>
<td>182.282</td>
<td>.000</td>
</tr>
<tr>
<td>Invitation</td>
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<td>1</td>
<td>202.342</td>
<td>5.612</td>
<td>.021</td>
</tr>
<tr>
<td>VIVIDLABEL * Invitation</td>
<td>195.055</td>
<td>1</td>
<td>195.055</td>
<td>5.410</td>
<td>.021</td>
</tr>
<tr>
<td>Error</td>
<td>6381.719</td>
<td>177</td>
<td>36.055</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>129383.000</td>
<td>181</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>14551.613</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .561 (Adjusted R Squared = .554)

Table 12: ANOVA – Study 2: The effect of the interaction between image vividness and Invitation to imagine the ad, on Overall FEELINGS.

Moreover, another ANOVA shows that the main effect of imagery appeals and the interaction between vividness and imaging were significant in regard to Purchase Intentions (F=6.68, p=.011) (Table 13) and Overall BEHAVIOR (F=3.88, p=.05) (Table 14), as well as for behav3 (F=5.72, p=.018), but not for behav1 (F=3.02, p=.084) and behav2 (F=1.54, p=.216), suggesting that the predicted effect of the imaging instructions could not be fully attributed to differences in behavioral intentions toward the message, since only one of the three items relating to the behavior toward the ad was found significant.
Table 13: ANOVA - Study 2: the effect of the interaction between vividness and imaging were significant in regard to Purchase Intentions.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
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<th>F</th>
<th>Sig.</th>
</tr>
</thead>
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<td>Corrected Model</td>
<td>315.632</td>
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<td>105.211</td>
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<tr>
<td>Intercept</td>
<td>1907.455</td>
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<td>828.905</td>
<td>.000</td>
</tr>
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<td>VIVIDLABEL</td>
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<td>202.436</td>
<td>87.971</td>
<td>.000</td>
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<td>Invitation</td>
<td>22.955</td>
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<td>22.955</td>
<td>9.975</td>
<td>.000</td>
</tr>
<tr>
<td>VIVIDLABEL * Invitation</td>
<td>15.379</td>
<td>1</td>
<td>15.379</td>
<td>6.683</td>
<td>.013</td>
</tr>
<tr>
<td>Error</td>
<td>407.308</td>
<td>177</td>
<td>2.301</td>
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<td>Total</td>
<td>4456.000</td>
<td>181</td>
<td>2.301</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>722.939</td>
<td>180</td>
<td>2.301</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .437 (Adjusted R Squared = .427)

Table 14: ANOVA - Study 2: the effect of the interaction between vividness and imaging were significant in regard to Overall BEHAVIOR.

<table>
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<th>F</th>
<th>Sig.</th>
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</thead>
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<td>2581.374</td>
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<td>860.458</td>
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<td>.000</td>
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<tr>
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<td>1370.293</td>
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</tr>
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<td>VIVIDLABEL</td>
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<td>1813.886</td>
<td>134.188</td>
<td>.000</td>
</tr>
<tr>
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</tr>
<tr>
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<td>3.886</td>
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</tr>
<tr>
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<td>13.518</td>
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<td></td>
</tr>
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<td>181</td>
<td>13.518</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>4973.978</td>
<td>180</td>
<td>13.518</td>
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</tr>
</tbody>
</table>

a. R Squared = .519 (Adjusted R Squared = .511)

Finally, the interaction between invitation to imagine and the accessibility of the consumption imagery (Table 15 and Figure 10) (F=11.86, p<.001) had a significant effect on the dependent variables “Purchase Intentions” and “Overall Behavior” (Table 16). While inviting imagery increased the perceived ease of subsequent imagery generation in the high accessibility of the consumption imagery condition, it had a lower effect in the low accessibility condition. Again, these results provide support for H2.
Table 15: ANOVA - Study 2: Interaction between invitation to imagine and accessibility of the consumption imagery on Purchase Intentions.

![Tests of Between-Subjects Effects](image)

Table 16: ANOVA - Study 2: Interaction between invitation to imagine and accessibility of the consumption imagery on Overall BEHAVIOR.

![Tests of Between-Subjects Effects](image)

In conclusion, these results indicate that the main effect of the interaction between imagery accessibility and invitation to imagine has a positive effect on both...
attitudes and purchase intentions, but not fully on behavioral intentions, which suggests that other future studies should deepen this interaction, considering more specific behavioral variables.

However, when considered separately, invitation to imagine or vividness of the ad had significant effects on the behavioral and attitudinal outcomes. It suggests that more vivid ads, in which the image recalls concrete experience, are more appealing than ads where the image is less concrete and barely evocative of a real product depiction.

Similarly, when the ad contains an invitation to imagine the product experience, the outcomes of the request result in more positive attitudes and behaviors toward the object of the ad, suggesting that participants are more stimulated to respond more positively to an ad where they are asked to visualize themselves performing the experience.

3.3.3. Study 3

In study 3 I replicated and extended the results from the previous two studies in a different context, with slightly different manipulations of imagery fluency.

Furthermore I examined a potential moderator of the observed imagery fluency effect, specifically, the individuals’ levels of Need for Emotion (Niranjan, Chattopadhyay, & Hoyer, 1995).

Method

I used a touristic destination review and varied the original review’s vividness in two additional versions. In the second version, the original information was presented in a table with corresponding numerical ratings. In the third version, the original information was presented by including the numerical ratings in parentheses.
after the vivid description of each of the items (Appendix D). I employed a previously validated manipulation of processing instructions (Keller & McGill, 1994) such that in the imagery processing condition (first condition), participants were instructed to rely on their imagination, not to be coldly analytical, to close their eyes, visualize the description, and utilize the power of their imagination to envision it. In the analytical processing condition (second condition), participants were told to be careful, to be well reasoned, and not to let their imagination to get the better of them. No specific instructions were provided in the third condition.

After reading the ad participants indicated the extent to which the review made them feel good, bad, excited, stressed, happy, pleasant, unpleasant, interested, bored, positive emotions, and negative emotions on a 9-point Likert scale (Not at all—very much) (Cronbach’s α=. 90). To test the predicted moderating role of emotional seeking status, participants were asked to complete the Need for Emotions Scale (9-point Likert scale varying from Very strong agreement to Very strong disagreement) (Cronbach’s α=.90). Then, as in Study 1 and 2, responded to 7-point semantic differential items assessing attitudes toward the ad (unpleasant-pleasant, exciting-not exciting, appealing-not appealing, interesting-not interesting) behavioral intentions (α=.92) and purchase intentions (likelihood of considering the rock climbing experience in the future, requesting a brochure for further product information, visiting the website shown on the ad, and visiting the advertised climbing center given that they were planning such an experience and had the necessary time and money) on a 7-point Likert scale (very unlikely—very likely). As well as in Study 1 and 2, these questions represent the measure of attitudes and behaviors toward the ad. The items related to attitudes measurement were reverse
scored, in order to get higher scores for positive feelings, and lower scores for negative feelings. Two more variables were created in order to discern the overall Negative feelings (Negative TOT) and the overall Positive feelings (Positive TOT). The categorical dependent variables behav, behav1, and behav2 were summed up in order to create an Overall BEHAVIOR index. Participants were randomly and evenly assigned to one of the three conditions. At the end of the survey they were asked to complete some demographic questions.

Results and Discussion

A total of 125 valid responses were collected for this study. 59 females and 66 males (40.8% between 26 and 35 years old) completed the questionnaire (Figure 10).

To test H3 MANOVA analysis was performed to reveal any relationship between type of information (descriptive, descriptive and numerical or numerical only) and attitudes and behaviors toward the product experience. As shown in Table 17, the three conditions (i.e., description, description and numbers, and numbers only) have a significant effect on Purchase Intentions (F=702.004, p<.001) (Figure 12), Overall BEHAVIOR (F=1335.56, p<.001) (Figure 13), Positive Emotions (F=152.33, p=.001), and Negative Emotions (F=74.72, p<.001), which means that simply adding
information to the ad changes significantly participants’ attitudes and behaviors toward the ad. In other words, when adding more detail to the ad participants have the tendency to decrease the likelihood of buying the product, asking for more information, considering the adventure in the future, and visit the website. These results support H3.

In more detail, difficulty constructing consumption imagery arises even when the product is depicted in both vivid experiential information and non-experiential ones, such as numerical information, technical specifications, or attribute comparisons. Although could be normal to think that such information is often intended to provide additional motivation for purchasing the product, it might intrude upon cognitive resources necessary to create a mental image of the consumption vision (Shiv & Huber, 2000).

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<td>9497.154</td>
<td>1335.564</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>PositiveTOT</td>
<td>25869.944b</td>
<td>3</td>
<td>8623.315</td>
<td>152.337</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>NegativeTOT</td>
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<td>3532.474</td>
<td>74.721</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Pi</td>
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<td>702.004</td>
<td>.000</td>
</tr>
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<td>3532.474</td>
<td>74.721</td>
<td>.000</td>
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<tr>
<td></td>
<td>Pi</td>
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<td>3</td>
<td>1122.633</td>
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</tr>
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</tr>
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</tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .970 (Adjusted R Squared = .970)
b. R Squared = .789 (Adjusted R Squared = .784)
c. R Squared = .648 (Adjusted R Squared = .639)
d. R Squared = .945 (Adjusted R Squared = .944)

Table 17: The effect of Conditions on Attitudes and Behaviors.
Subsequently, in order to test H4, I considered the predicted moderate role of Need for Emotion in the interaction between vividness of the description and attitudes toward the ad. Participants were first asked to complete the Need for Emotion Scale (Niranjan, Chattopadhyay, & Hoyer, 1995) (α=.92).
MANOVA analysis was performed to reveal any interaction between type of information (descriptive, descriptive and numerical or numerical only) and NFE levels, considering each dependent variable separately (Table 18).

As shown in the table 18, despite the fact that no interaction was found within the fixed factors (NFE levels and descriptive conditions) in regard to the dependent variables Purchase Intention ($F=0.92$, $p=0.400$), Overall BEHAVIOR ($F=0.33$, $p=0.714$) and Negative Emotions ($F=1.02$, $p=0.361$), significant interaction effects were found between NFE levels and descriptive condition in regard to Positive Emotions ($F=3.61$, $p=0.030$). This allows us to assert that people with low NFE reacted more favorably to the ad with increased level of detail, as compared to people with higher levels of NFE, who only marginally preferred the descriptive and numerical condition to the other two.

The pattern of these interactions, however, was in a direction different from the hypothesized. When the touristic destination was described with vivid and numerical information simultaneously, the imaging instructions resulted in a greater number of positive emotions (Figure 14) for both levels of NFE.

Consistent with definition of vividness by Nisbett and Ross (1980), in fact, participants reported more positive emotions (as measured by the extent to which the ad made them feel good, bad, excited, stressed, happy, interested, bored, sense of pleasure or unpleasure) in response to the ad, when the interaction between levels of NFE and vividness of the description where compared (Figure 14 and Table 18). In fact, the analysis revealed a significant interaction between type of emotions, vividness of the description and levels of NFE ($F=3.61$, $p=0.030$). These results partially support H4.
### Tests of Between-Subjects Effects

<table>
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<tr>
<th>Source</th>
<th>Dependent Variable</th>
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<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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</thead>
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<td>OVERALLBEHAV</td>
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<td>125</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>PositiveTOT</td>
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</tr>
<tr>
<td></td>
<td>NegativeTOT</td>
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<tr>
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<tr>
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<tr>
<td></td>
<td>NegativeTOT</td>
<td>5803.392</td>
<td>124</td>
<td></td>
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</tr>
</tbody>
</table>

<sup>a</sup> R Squared = .586 (Adjusted R Squared = .569)<br><sup>b</sup> R Squared = .724 (Adjusted R Squared = .712)<br><sup>c</sup> R Squared = .117 (Adjusted R Squared = .080)<br><sup>d</sup> R Squared = .040 (Adjusted R Squared = -.001)

Table 18: MANOVA - Study 3: the effect of the interaction between description levels and NFE levels.
Participants’ affective responses revealed a main effect of type of information. For participants high in NFE, imaging instruction had opposite effect on Purchase Intention and Overall BEHAVIOR revealing that when the description included both descriptive and numerical information participants’ behaviors and purchase intentions toward the ad resulted positive for both levels of NFE (Table 19).

These results did not support H4, and suggest that the levels of NFE, when interacting between the vividness of the description and attitudes and behaviors toward the ad are an unlikely mediator of these effects.
It leads us to conclude that when adding more information to a given product description individuals with different levels of NFE show higher positive attitudes for those descriptions that include more details. However, technical or numerical information only, as well as mere descriptive ones lead subjects to decrease the likelihood to adopt favorable attitudes the ad.
CHAPTER 4

4. DISCUSSION AND CONCLUSION

4.1. General Discussion

In a market based on images (e.g., brand images, and corporate images), vision is central to management in the information society. Today’s organizations are faced with a constant production of images, which represent “ideal companies”. Global consumers enthusiastically consume images; brand images, corporate images, and self-images are critical economic and consumers’ value. Global market culture is constructed of symbolic environments and visual consumption emerges as critically important for understanding contemporary consumers.

Visual consumption begins with images. By focusing on visual issues in consumer behavior, we gain an understanding of the prominence of the image in brand-building campaigns, consumer self-construction, and visual consumption processes that dominate contemporary culture. Visual consumption characterizes life in the information age (the computer, the Web, and television structure) commanding time and attention, providing a steady stream of images that appear to bring the world within. Whether images are approached from psychophysiological, semiotic, or art historical perspectives, it is clear that they are critically important for understanding elusive consumption. Visual consumption places the image within a multidisciplinary matrix, underscoring the complexity, their connections to ethics and values, and their psychological nature. The image, now as in the past, provides a key to understanding how we make sense of our word.
In today’s economy, brands and brand management have become cornerstones of success in attracting and maintaining a profitable customer base. Brand management has grown to challenge traditional models of product management and industrial production. Brands often compete on brand image, driven by marketing strategy to differentiate brands via marketing communication and competitive advantage.

The Internet has made integration of core management functions – research and development, product design, logistics, and customer service – not only possible, but also necessary for efficient management. Marketing communication – which includes advertising, corporate communication, Websites, customer service information, product manuals, and packaging – is thus, critical for success in a competitive marketplace. And visual consumption plays a key role in this process of communication.

4.2. Conclusion

The use of imagery in advertising may engage consumers more fully in response to the ad. Under a consumer behavior perspective, the findings of this study confirm that individual differences in mental imagery ability exist.

The three studies reported herein demonstrated that generally observed positive effect of imagery appeals can be reversed by conditions that impair the fluency with which consumers imagine experiencing products.

This work focused on two variables related to the fluency of imagery generation: the individual’s dispositional ability to create vivid mental images (DIV) and the vividness of the product depiction (Imagery accessibility). Study 1 showed evidences for the role of dispositional imagery vividness, which demonstrated that
when participants differ in DIV, imagery appeals were effective and reduced the persuasiveness of the ad. These results confirm what Petrova and Cialdini (2005, 2008) showed in their studies. Study 2 demonstrated that without a vivid product depiction, asking consumers to imagine a product experience had a negative effect on attitudes toward the ad and purchase intentions. Such an invitation, just as a detailed verbal description of the consumption situation should facilitate the extent to which a detailed consumption vision is created. A visual representation of the situation should also help consumers imagine or picture themselves acting within the consumption context. Consumption visions are expected to consist of two principal components: the self and the consumption situation. If the situation is presented visually in the advertisement, one half of the foundation for the consumption vision is established. All the individuals must do is imagine him/herself in that situation. Depending on a consumer’s ability or preference, a subject may differentially process the visual and verbal components in an advertisement (Childers, Houdson, & Heckler, 1985). Importantly, along with these findings, study 3 revealed that giving only vivid descriptions, as well exclusively non experiential, numerical information to the description undermined the positive effect of imagery appeals. That is, imagery instructions were effective only when the vivid information was accompanied with the numerical ones. These results were partially in contrast with what Cialdini and Petrova (2005) hypothesized. Specifically, they suggested that the positive effect of imagery appeals in the vivid condition was accompanied by a decline in the product related thoughts and attitudes. These results render cognitive elaboration unlikely mediators of the effect of imagery appeals. Moreover, the findings of this work are consistent with previous research suggesting that vivid
information may be more persuasive only under specific circumstances (Kisielius & Sternthal; 1984, 1986). Specifically, the vividness of the product attributes had an impact on product evaluations when participants relied on their imagination in making the choice, but not when they used an analytical strategy (McGill & Anand, 1989). In fact, as showed in study 3, under analytical processing, the vivid information was not only ineffective, but even undermined product evaluation.

In addition, the present research provided evidence that the accessibility to the images (i.e., vividness of the images) and the fluency of the depiction (i.e. the ease to imagine the experience) impacted product preferences.

Moreover, in both studies 2 and 3 participants’ behavioral responses were impacted by the imagery appeals. The observed effects of imagery appeals on behavioral intentions could thus be attribute to differences in image vividness (study 2) or personal levels of NFE (study 3).

4.3. Theoretical Implications

Overall, the findings from these three studies have implications for several marketing domains. In regard to imagery, this research demonstrated that the generally observed positive effect of imagery appeals might reverse when individuals experience difficulty in generating consumption imagery. Past research demonstrated that imagery appeals are more effective for individuals high in imagery ability (Bone & Ellen, 1992), or when the product was described in a vivid manner (Keller & McGill, 1994). The present research extends the existing research on the effect of vivid information. The results form study 3 demonstrated that in the absence of imagery appeals, vividness did not impact product evaluations except that for eliciting positive emotions toward the ad. This finding is consistent with
previous research, suggesting that vivid information may be more persuasive only under certain circumstances (Kisielius and Sternthal, 1984, 1986).

Finally, the present findings advance our knowledge regarding accessibility and fluency effects. Previous research has been focused on examining the impact of subjective experiences such as the ease-of-retrieval and processing fluency (Reber, Schwarz, & Winkielman, 2004). The present research reveals that there could be effects of subjective approaches to an experience that could be found in the use of imagery in processing product information. The use of other self-report responses to assess participants’ current feelings or basic predispositions even referred as Measures of Affects or Measure of Emotions might result extremely useful when working on testing the effect of images and imagery appeals on attitudes and behaviors. Suggestions for future research would be to investigate other factors that can impact personal emotions and consequently moderate the impact of extraordinary experiences.

Given the many positive effects of mental imagery identified in the literature, it is important for marketing organizations to take imagery ability and processing style into account when deciding which features to include on their advertisements.

4.4. Managerial Implications

The findings have important implications for advertisers. In fact, they should first ensure that their target audience could easily comprehend the message they want to communicate and find it easy to generate mental imagery based on their messages.

This research suggests two possible ways to enhance comprehension fluency and thus, imagery fluency: present a matching picture of the described message, or
present an ad for which the target audience already has readily accessible representations. Unlike viewing a drama or reading a magazine article, reading advertising rarely gets consumers fully involved. Consumers may find it less interesting and consequently may allocate less cognitive efforts to process a difficult-to-comprehend advertising story. Facilitating comprehension and mental simulation thus appears the key to a successful advertisement campaign.

Another important conclusion for marketing managers derived from these findings is that extraordinary experiences ads need to cater individuals with a variety of information processing abilities and emotions seeking attitudes. Thus, it is critical to provide information in a multitude of format so that a wide audience of potential sensations seekers can efficiently process information about the services provided. It is also important to find ways in which mental imagery processing can be encouraged for those consumers who have problem experiencing vivid mental imagery by themselves. Future research need to focus on identify those design features and strategies that can best support individuals with varying abilities.

New generation advertisements cannot longer rely on standard designs to attract and support customers in their decision-making processes. Consumers expect increasing levels of personalization regarding products as well as information presentations. Thus, allowing consumers to interact with an ad will likely create competitive advantage for brand marketing and advertising organizations.

4.5. Limitations and Suggestions for Future Research

As with works of academic research, this study has several limitations. At the same time, the limitations and findings in this work suggest several directions for future research. In particular, this study utilized an experimental method, which
created artificial manipulations, so limitations exist in terms of the external validity and generalizability of findings in the current study.

First, the inconsistent uses of singular and plural wording when introducing the advertising product as well as the use of particular types of product and model images might have affected the results of the present work. Therefore, collecting additional data with revised stimuli is required to rule out the potential effect, which might cause misinterpretations of the findings. In terms of visual graphics, future research should use images with more neutral valence than those employed in the present study. The use of advertisement stimuli, which only contains product images, without any human models, can be recommended to avoid the undesired influence of a model image in subjects’ perception and responses.

Second, this study used fictitious advertising as the experimental stimuli to avoid potential effects of prior knowledge about existing products during the assessment of subjects’ attitudes toward the ads. Therefore, the findings might not be directly applicable to all existing brands with different characteristics and under different circumstances. Particularly, there is a possibility that the effect of imagery appeals in advertising interacts with the particular characteristics of existing products. A recent study of attitude function (LeBoeuf & Simmons, 2010) found that consumers’ attitude function could vary not only based on the characteristics of product categories, but also based on the specific images of individual brands.

Moreover, to generalize the observed effects of this research, future replications with the use of other value-expressive and multi-function products from different categories are required.
Third, participants were randomly selected using Qualtrics, an on-line survey administrator software, without any categorical ratio. As argued in a previous work of literature (Calder, Phillips, & Tybout, 1981), an examination of homogeneous respondents including a student sample has merits especially in minimizing the potential effects of undetected covariations.

Forth, the present study reveals that product involvement is a very important variable for understanding the effect of imagery appeals. However, the product involvements were not hypothesized in the present study, and the sample size in the data analyses were too small to investigate its effects in depth. Therefore, future studies with a larger sample size may investigate how imagery appeals, image fluency, and vividness moderate behaviors and emotion seeking of consumers with different VVIQ in various products domains.

A recent study for example, shows that when consumers are exposed to high imagery ads, as opposed to low imagery ones, they tend to believe that they have experienced the product (Rajagopal & Montgomery; 2011), likely because the vivid picture enhances imagery fluency and leads them to form such mistaken beliefs. Advertising research could study processing fluency effects on consumers’ confidence that an ad is informative, and the perceived likelihood that the product will deliver what the ad promises.

Moreover people who differ in their experiential processing tendency vary in the fluency with which they generate mental imagery. Other individual differences could be associated with the tendency to generate imagery, such as visual versus verbal processing orientations. People who score higher in visual processing, as opposed to verbal processing, scales tend to rate ad pictures as more effective
(Heckler & Hudson; 1993), exhibit more favorable ad and brand attitudes when instructed to image (Burns, Biswas & Babin; 1993) and express a greater tendency to visualize what they are going to buy when they plan shopping trips.

Lastly, further research should examine whether dispositional imagery vividness and internal focus (Petrova and Cialdini; 2008) predict variations in imagery fluency or moderate the effect of ad content on imagery fluency. It would be also important to determine whether people consider subjective experiences to the same degree when making judgments. Prior research indicates that people differ in their sensitivity to subjective experiences, which determines how they weigh those subjective experiences in their evaluations (Chang; 2012c).

Therefore, exploring the impacts of individual differences in weighing imagery fluency in judgments is another interesting research direction.

Regardless, this study offered a clearer picture of how subjective experiences in processing ads influence product evaluations and behaviors toward the ad. Understanding the influence of processing imagery fluency might have critical implications for understanding and improving ads’ imagery appeal effectiveness.
BIBLIOGRAPHY


APPENDIX A
STUDY 1 EXPERIMENTAL MATERIAL

Rock Climbing

This different world has just opened its doors

Visualize yourself there.
Take a moment and imagine yourself in an unique adventure of rock climbing in undiscovered and wild mountains.

For more information go to www.climbthemountain.com

High Vividness, Imagery Appeals

Rock Climbing

This different world has just opened its doors

Take a closer look at this image.
Make your rock climbing experience a unique adventure in undiscovered and wild mountains.

For more information go to www.climbthemountain.com

High Vividness, No Imagery Appeals

APPENDIX B
STUDY 1: TEST of H1a
These tables show the interaction between the Invitation to imagine and the DIV levels for each component of the Overall FEELING index (e.g. Excitement, Appeals, Interest, and Pleasure).

### Tests of Between-Subjects Effects

#### Dependent Variable: Excitement

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<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
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a. R Squared = .260 (Adjusted R Squared = .246)

#### Dependent Variable: Appeals

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a. R Squared = .284 (Adjusted R Squared = .270)

#### Dependent Variable: Interest

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a. R Squared = .309 (Adjusted R Squared = .295)

#### Dependent Variable: Pleasure

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a. R Squared = .256 (Adjusted R Squared = .241)
APPENDIX C
STUDY 2 EXPERIMENTAL MATERIALS

High Vividness, Imagery Appeals
This different world has just opened its doors
Visualize yourself there.
Take a moment and imagine yourself in an unique adventure of rock climbing in undiscovered and wild mountains.
For more information go to www.climbthemountain.com

High Vividness, No Imagery Appeals
This different world has just opened its doors
Take a closer look at this image.
Make your rock climbing experience a unique adventure in undiscovered and wild mountains.
For more information go to www.climbthemountain.com
This study replicates and extended the results from the previous two studies in another context, with different manipulations of imagery fluency. Furthermore, it examined a potential moderator of the observed imagery fluency effect. To test H3 and H4
**VIVID INFORMATION**

“This place reminds one of desert beaches that would be found in the Caribbean. Lampedusa is one of the small islands around Sicily, in the Mediterranean sea. Cliffs that fall into the pristine beaches that sparkle and shine, gentle breezes that caress and embrace, giving the place a very warm and relaxing feeling can be reached only through a small boat. The water is just the perfect temperature. It is so crystal clear that while walking into the water loads of fish swim around you. The soft atmosphere at dusk and the gentle breeze gives you the feeling of being in an enjoyable and cozy place. The turquoise water, white sand, lemon and orange trees add the scent of the Sicilian lifestyle to this place.”

**NUMERICAL INFORMATION**

**BEACH REVIEW WITH RATINGS**

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<td>Overall</td>
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</tr>
<tr>
<td>Atmosphere</td>
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<tr>
<td>Intimacy</td>
<td>36</td>
</tr>
<tr>
<td>Facilities accessibility</td>
<td>31</td>
</tr>
<tr>
<td>Sea</td>
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<tr>
<td>Water Cleanliness</td>
<td>36</td>
</tr>
<tr>
<td>Services available on the beaches</td>
<td>30</td>
</tr>
<tr>
<td>Natural Environment</td>
<td>36</td>
</tr>
<tr>
<td>Sea bottom variety</td>
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<td>Seashore Cleanliness</td>
<td>35</td>
</tr>
<tr>
<td>Services</td>
<td>30</td>
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</table>

**VIVID AND NUMERICAL INFORMATION COMBINED**

“This place reminds one of desert beaches that would be found in the Caribbean. Lampedusa is one of the small islands around Sicily, in the Mediterranean Sea. The atmosphere is unique (a rating of 33). Cliffs that fall into intimate (a rating of 36) pristine beaches that sparkle and shine, gentle breezes that caress and embrace, giving the place a very warm and relaxing feeling can be reached only through a small boat (facility accessibility rated 31). Only one small but well supplied bar (services available on the beach rated 30) gives this place a wild touch to this place. The water is just the perfect temperature. It is so crystal clear (a rating of 36) that while walking into the water loads of fish swim around you (sea bottom variety rated 35). The soft atmosphere at dusk and the gentle breeze gives you the feeling of
being in a Caribbean lost island (Natural environment rated 36). The turquoise water, white sand (seashore rated 35), lemon and orange trees add the scent of the Sicilian style to this place. This island received an overall rating of 33.3 (excellent).”
BIOGRAPHICAL SKETCH

Dr. Alessandra Distefano earned her bachelor’s degree in Economics from University of Catania, Italy, in 2006. She received a master’s degree in Business Management from the same university in 2008. In the fall 2009, she joined the doctoral program at the University of Catania. She received her Ph.D. from the same university.

During her doctoral years, Dr. Distefano examined various topics in consumer psychology, brand attitudes, the role of emotions in consumer behavior, sustainable marketing, corporate social responsibility, and brand management. Her studies were presented at national conferences and published in conference proceedings and online journals. Her current research investigates how social cues related to visual brand consumption (e.g., user imagery, imagery appeals and imagery fluency) affect consumer perceptions and attitudes toward brands. While pursuing her degree, Dr. Distefano worked as a graduate assistant for the department of Business Administration and taught undergraduate marketing courses.

Prior to join the doctoral program, Dr. Distefano worked as a certified Accountant for her family accounting business in Catania, her hometown. Previously, she taught accounting and principles of economics in private schools in Catania.