

# Assessing the Imagination Scale's Nomological Validity: Effect of Hedonic versus Utilitarian Product Types and Abstract versus Concrete Advertising Execution

*Ike Janita Dewi<sup>a</sup>, Swee Hoon Ang<sup>b</sup>*

<sup>a</sup>Universitas Sanata Dharma Yogyakarta, Indonesia

<sup>b</sup>National University of Singapore, Singapore

**Abstract:** This research builds on the study of an advertisement-evoked imagination scale developed by Dewi and Ang (2015). The imagination scale contains four types of imagination, that is, benevolent-anticipatory imagination, emotional-bonding imagination, symbolic imagination, and mind-wandering imagination. In this paper, the proposed constructs of the imagination types are related to other relevant constructs that already exist in the marketing literature. The purpose of this research is twofold. First, it establishes the nomological validity of the imagination measures by placing it in the context of hedonic-utilitarian concepts proposed by Holbrook and Hirschman (1983). Second, the research empirically studies the effect of a situational factor, which is concrete versus abstract advertisement execution, on imagination elicitation. The study is an experiment which employs a mixed factor design involving eight subgroups of participants. The results of the research demonstrate the nomological validity of the imagination scale where the four types of imagination were elicited in response to a hedonic/utilitarian product depicted in the advertisement and situational factors (which are abstract versus concrete advertisements).

**Keywords:** imagination, hedonic, utilitarian, abstract advertisement execution.

**JEL Classification:** M3

## Introduction

The marketing field's interests in the measurement of subjective experiences (e.g., Unger and Kernan, 1983) in particular, as well as the complex responses of consumers toward advertising or other marketing stimuli (e.g., Edell and Burke, 1987; Hirschman and Holbrook, 1982) have been lacking in their conceptualization and the measurement of imagination. Imagination has oftentimes been interpreted interchangeably with imagery and discussed in the domain of cognitive or even clinical psychology (Leopod and Mayer, 2014; Peason et al., 2015). While scholars have attempted to also conceptualize imagination (Abraham, 2016; Phillips, 2017, Rebecca and Molesworth, 2017; Thomas, 2014), the measurement of imagination, as a response to marketing stimuli and its one empirical validation, have posed a challenge to marketing scholars. With much advertising expenditure being wasted on ineffective campaigns (Abraham and Lodish, 1990), advertisers should be concerned with the complex relationships which exist between consumers and advertisements or other marketing stimuli.

A study by Dewi and Ang (2015) proposed the concept of imagination, identified the four components of imagination, and developed the communication-evoked imagination scale. Imagination was proposed as an absorptive, transcendental, and future-oriented subjective experience. Their study also offered empirical findings which supported the existence of the four types of imagination derived from the various components of imaginative experience. Benefit-anticipatory imagination, emotional-bonding imagination, symbolic imagination, and mind-wandering imagination were present as responses to a variety of advertisements depicting various products. The invariant factorial structur-

al analysis and the multitrait-multimethod procedure demonstrated that such a categorization of imagination qualifies as more than tentative, in which there was no systematic bias caused by different product types.

Those proposed constructs of four imagination types, and the developed imagination scale by Dewi and Ang (2015), need to be assessed in terms of their nomological validity. Therefore, this present research related imagination to other relevant constructs in the marketing literature. In doing so, this present research reviewed and adopted the literature surrounding hedonic-utilitarian concepts (Babin, Darden, and Griffin, 1994; Batra and Ahtola, 1990; Chandon, Wansink, and Laurent, 1998; Hirschman and Hoolbrook, 1982; Holbrook and Hirschman, 1982; Kempf, 1999; Mano and Oliver, 1993; Spangenberg, Voss, and Crowley, 1997), imagination (Lindaeur, 1983; Giorgi, 1987) and affect versus cognition in the structure of attitudes (Breckler, 1984; Breckler and Wiggins, 1989; Zajonc, 1989).

Hoolbrook and Hirschman's (1982) hedonic-utilitarian concept suggested a meaningful relationship between hedonic products and imagination. They contend that evaluating a hedonic product involves feeling, fun, and fantasy.<sup>1</sup> This present study elaborates such concepts and identifies the role of imagination in evaluating a product's hedonic dimension. Such an evaluation goes beyond its functional benefits. For instance, imagination's transcendental quality facilitates the

---

<sup>1</sup>The term "fantasy" has a somewhat negative connotation. In differentiating and contrasting the concept of fantasy with that of imagination, Lynch (1974, cited in Giorgi, 1987) states that fantasy is a failure of imagination. Freud (1907, cited in Singer, 1975) states that "*happy people do not make fantasies, only unsatisfied do.*" Fantasy is often used in associations with speculation about unconscious or subconscious processes (Sutherland, 1974). Even though frequently "fantasy" is used interchangeably with "imagination", this present study prefers not to confuse these two terms and therefore to use "imagination" in the whole study.

construction of a symbolic meaning for a product. However, the role of imagination decreases in the more-cognitive-involving utilitarian information processing. This study compares imagination elicitation in hedonic vis-à-vis utilitarian information processing to empirically assess the relationship between imagination and hedonic concepts.

The present research takes the views that imagination is a conscious processing (Giorgi, 1987; Singer, 1975) and that an individual can be induced to engage in processing certain information (Alesandrini and Sheikh, 1983). Therefore, an attempt is made to identify the type of stimuli which induce imagination elicitation. On such a stimulus type, this present study argues that imagination is induced and facilitated when external stimuli are reduced (Antrobus, Singer, and Greenberg, 1966) as well as when freedom to interpret the stimuli is given (Lindaeur, 1983). In other words, “incomplete information” is conducive for imagination elicitation. This present study proposes abstract vs concrete advertising execution as another means to examine the imagination scale’s construct validity and nomological validity. This is based on Lindaeur’s (1983) study of imagination in the context of abstract vs concrete paintings. While more concrete advertising will elicit more imagination (Alesandrini and Sheikh, 1983), the effects of abstract vs concrete advertising execution on imagination will provide insights to compare imagination vis-à-vis imagery. As argued by Dewi and Ang (2015), conceptually imagination differs from imagery and the difference should be implied in one important aspect pertaining to the nature of the stimuli (abstract or concrete) which is conducive for their elicitation.

Therefore, the purpose of this study is twofold. First, it establishes the nomo-

logical validity of the imagination measures developed by Dewi and Ang (2015) by placing it in the context of the hedonic-utilitarian concepts proposed by Holbrook and Hirschman (1982). It would also extend the studies surrounding hedonic-utilitarian concepts. This present research builds on Kempf’s (1999) and Mano and Oliver’s (1993) studies into the relationships between hedonic (utilitarian) product evaluations and affective (cognitive) responses by empirically examining imagination’s role in hedonic vs utilitarian product evaluations. Second, this research studies the effect of a situational factor, which is concrete vs abstract execution, on imagination’s elicitation.

## Literature Review and Hypotheses

### *Hedonic Dimension and Utilitarian Dimension*

The categorization of product attributes into hedonic and utilitarian is insightful as it captures the cognitive-affective and thinking-feeling of the information. Holbrook and Hirschman (1982) proposed the hedonic dimension of consumption as “experiential” consumption. It enlarges the concept of affect which captures only valenced feeling states of like or dislike for a product (Babin et al., 1994; Batra and Ahtola, 1990; Hirschman and Holbrook, 1982; Spangenberg et al., 1997).

Affect plays an important role in evaluating a product’s hedonic dimension. Involving feelings, fun, and fantasy (Hirschman and Holbrook, 1982; Holbrook and Hirschman, 1982), hedonic information processing deals with emotive responses and pursues the fulfillment of desires (Holbrook and

Hirschman, 1982). It involves the basic motivation of a human being to have pleasure, fun, amusement, and enjoyment (Orbach, 1995) which become the criteria for the evaluation of a product. Therefore, in an overall evaluation, hedonic information processing requires sensation, fantasy, imagination, emotional arousal, pleasure, and symbolic meanings (Holbrook and Hirschman, 1982). These are likely to be found in the intrinsic values or intangible attributes of a product.

The utilitarian dimension is evaluated based on a rational consideration. It pertains to the functional or instrumental benefits of the product (Babin et al., 1994; Batra and Ahtola, 1990; Hirschman and Holbrook, 1992; Spangenberg et al., 1997). Utilitarian processing corresponds to secondary process thinking which reflects the way mental processes function as a result of taking into account “the consequences of action” (Holbrook and Hirschman, 1982). With normal shopping behavior, the utilitarian shopping experience is illustrated as task-related and rational. A product is purchased in a deliberate and efficient manner (Babin et al., 1994), and valued for its utility-maximizing function. Product evaluation tends to be based on the product’s tangible benefits and its objective features, such as calories (in food), fluoride (in toothpaste), and miles per gallon (in gasoline; Holbrook and Hirschman, 1982). Thus, a product’s tangible benefits serve as the primary determinants of product quality (Hirschman and Holbrook, 1982). In contrast to the hedonic dimension which deals with product symbolism, the utilitarian dimension views products as objective entities. It is inferred therefore that utilitarian information processing requires cognitive efforts involving rational considerations of a product’s functional performance.

A product carries both hedonic and utilitarian dimensions in varying degrees. Consumer choices can be based more dominantly on one dimension over another (Dharand Wertenbroch, 2000). In evaluating a product, consumers can take either the hedonic dimension or utilitarian dimension as the main criterion. For example, in evaluating sport shoes, a consumer can take the hedonic dimension as his/her main consideration. In which case, s/he sees the shoes as fulfilling his/her inner desire to be an athlete. If the utilitarian dimension is more dominant, then s/he will consider the shoes’ durability.

Such a scenario depicts a product’s hedonic and utilitarian dimensions in relation to the way a consumer evaluates a product. When the hedonic (utilitarian) dimension becomes the dominant criterion, a consumer is engaged in hedonic (utilitarian) information processing. The use of the terms “hedonic and utilitarian information” processing refers to the product evaluation process where a consumer chooses product features that become their primary basis in making a purchase decision and then he/she evaluates them.

When a product’s hedonic dimension is dominant, a consumer turns inward and seeks “information” sourced from his/her inner desires and imagination. S/he also responds to imagination-eliciting stimuli and evokes affective reactions and imagination. In contrast, when the utilitarian dimension dominates a consumer’s information processing, s/he will “logically” seek out information about the product’s performance. In doing so, s/he elicits cognitive “efforts.”

In this study, we examine the apparatuses – cognition, affect, and/or imagination – how they function under hedonic and utilitarian information processing. We are interested in the outcomes of hedonic/util-

itarian information processing, but not the processes or staff involved in information processing. This study pertains to the antecedents and consequences of information processing. The processing of the stimuli itself is therefore implicitly inferred. The antecedents of the information processing are the product type and advertising execution that induce consumers to engage in more hedonic or utilitarian information processing.

### *Imagination in Hedonic Information Processing*

Another distinctive characteristic of hedonic information processing vis-à-vis utilitarian information processing is the involvement of imagination. The degree of imagination involved in the information processing depends, to a large extent, on the nature of the product dimension (hedonic or utilitarian) being evaluated. Evaluating a utilitarian dimension requires cognitive effort pertaining to the objective performance of a product, therefore utilitarian information processing contains little imagination. When evaluating the hedonic dimension, the hedonic processing elicits information which affects cognition as well as the imagination. Holbrook and Hirschman (1982) ascribed the meaning of hedonic consumption as being beyond an affect, by encompassing a steady flow of fantasies, feelings, and fun. This proposition indicates that there is more than an affect involved. Additional resources, such as imagination, are required.

Spangenberg et al., (1997) suggested the importance of imagination in hedonic information processing. They contend that *“it is, therefore, possible that successful measurement of hedonic consumption may also help to gauge the extent to which such images are adopted by con-*

*sumers.”* It implies that imagination serves to facilitate hedonic consumption, but it is considered a latent construct. If a hedonic evaluation is made, imagination is activated.

A product's hedonic dimension deals with symbolic meaning and an imaginative construction of reality (Holbrook and Hirschman, 1982; Hirschman and Holbrook, 1982). These are beyond the tangible attributes of a product. Both tangible and intangible attributes serve as stimuli evoking cognitive and affective responses, upon which the perceptions of a product are formed. Yet, the perception remains as an impression if there is no “bridge” to transform it into an abstract idea connected to the product. Although in affective reactions, stimuli are evaluated holistically, they cannot create abstract ideas to “see” beyond a product's tangible attributes. In other words, affect is merely a passive “response” such as liking or disliking an object. Imagination is needed to “interpret” and “synthesize” the stimuli. In the words of Singer (1975), imagination functions to *“reproduce faces of persons, snatches of dialogue, or objects no longer immediately available to the primary senses and to reshape further the memories of these experiences into new and complex forms.”*

To illustrate, when a consumer looks at a pair of Nike shoes, such an exposure leaves perceptions and impressions about the shoes' features – the color, sole thickness, style, and price. The exposure can also elicit feelings – happy, warmhearted, etc. – about the product. The processing of the objective and functional benefits involves cognitive functioning; while the elicited feelings are affective reactions. To engage in imagination, a consumer detaches himself/herself and assumes a distance from the object. Then

imagination calls upon his/her experience as a local athlete who aspires to become a national athlete. In his/her imagination s/he can “see” himself/herself wearing sport shoes in an international basketball match. A pair of sport shoes then carries a subjective meaning and symbolizes one’s wishes and desires. Therefore, imagination accompanies hedonic information processing. It serves as the resource utilized in evaluating a product. Therefore, hedonic information processing compared to utilitarian information processing involves greater imagination.

### *Affect and Cognition in Hedonic-Utilitarian Information Processing*

The process of evaluating hedonic and utilitarian dimensions generates reactions which in turn influence people’s attitudes toward a product. The present study argues that the affect and cognition exist in hedonic and utilitarian information processing, but there is a dominance of one over the other in one particular form of information processing.

It has been argued that the traditional view of purchase decision-making emphasizes rational behavior while overlooking the immediate affective responses that consumers may have toward a product (Holbrook and Hirschman, 1982). This view of immediate affective responses corresponds to Zajonc’s (1980) proposition of the primacy of affect in which consumers form attitudes without any awareness of the product’s attributes. Affective reactions are crude responses which involve feelings and emotions, rather than thinking, and tend to be holistic – that is, they are not concerned about the functional attributes of the products (Zajonc, 1980). Affective reactions are also spontaneous. Therefore, affect comes into play when there

is hedonic information processing. Also, affect signifies the occurrence of hedonic information processing (Holbrook and Hirschman, 1982). Attitude toward a product, as a result of hedonic information processing, will therefore be more affect-based.

In contrast, utilitarian information processing deals with an evaluation on the functional benefits of a product (Holbrook and Hirschman, 1982). Such processing requires consumers to make conscious judgments when evaluating a product’s attributes. It generates cognitive reactions (Mano and Oliver, 1993) such as the evaluation of the attributes (Fishbein and Ajzen, 1975; Smith and Swinyard, 1982), like the price. These cognitive reactions signify utilitarian information processing. Such information processing is more cognition-based and therefore produces a more cognition-based attitude.

Relationships between hedonic information processing and affect-based attitude, and between utilitarian information processing and cognition-based attitude have received empirical support. Mano and Oliver (1993) found that hedonic evaluation correlates with the affect. They also suggested that utilitarian information processing works along with the cognitive dimension of attitudes. In the context of a product’s trial, Kempf (1999) argued that there is a relationship between affective/cognitive reactions and hedonic/utilitarian product evaluations. The evaluation of a hedonic product requires more affective resources, while the evaluation of a utilitarian product requires more cognitive resources. She found that arousal was an important determinant in trial evaluations of hedonic products, but not for utilitarian products. Further, cognition – compared to affect – was more dominant in trial evaluations for utilitarian than hedonic products (Dewi and Ang, 2001).

### *Effects of Product Type and Ad's Execution on the Elicitation of Different Types of Imagination*

Based on the contention that imagination is a conscious processing (Giorgi, 1987; Singer, 1966) and that one can be induced to elicit certain kinds of responses (Edell and Staelin, 1983; Smith, 1993), we examine how advertising stimuli can influence the elicitation of the different types of imagination. As ads depict different types of products (that is, hedonic or utilitarian) and/or different types of executions (that is, abstract or concrete pictures), we argue that these different stimuli will have different implications on the elicitation of different types of imagination.

These two elements are chosen to address two issues. As elaborated earlier, products can naturally possess more hedonic or utilitarian attributes, where the former evokes more imagination. Hence, this serves as a nomological validity test for imagination's scale (Dewi and Ang, 2015). Second, since situational factors (that is, elements of ads) can also influence imagination elicitation, we examine the different effects of concrete vs abstract ad execution on the elicitation of the four types of imagination and the formation of attitudes.

### *Effects of Hedonic vs Utilitarian Product Type*

One of the factors influencing imagination elicitation is the product type. This can induce consumers to engage in a particular type of processing because consumers have a relatively established schema about how each product should be evaluated (Edell and Staelin, 1983; Meyers-Levy and Tybout, 1989). In other words, consumers will have their set of criteria for a product which they expect the

product to have and upon which they will base their evaluation of the product. Meyers-Levy and Tybout (1989) suggested that product type is the basic category for the consumers' processing of a product. That is, in a product's evaluation, consumers will first consider the product type and then look for the product's attributes to confirm their expectations.

The two types of products – hedonic and utilitarian – examined in this study have characteristics which will induce the elicitation of different types of imagination. Hedonic products have a hedonic personality – they are more emotionally involving, inspired by more imagination, and strong in their symbolic values rather than by their tangible features (Hirschman and Holbrook, 1982; Holbrook and Hirschman, 1982; Kempf, 1999). Hence, such a product evokes processes which are more imagination and affect-based. On the other hand, a utilitarian product will “lead” consumers to spend more effort to evaluate the functional benefits of the product and therefore, induces a cognition-based process. For example, a product that sells its image more than its core or functional benefits, such as cosmetics or fragrances, is naturally more hedonic. Products whose functional benefits are not apparent, such as paintings or antiques, also possess hedonic properties.

A hedonic product, when compared to a utilitarian product, can elicit more benefit-anticipatory imagination. There are two aspects involved in this imagination type, that is, as-if activities and utilitarian-like imagination. One may argue that the minimum content of cognition involved in hedonic information processing will not lead to imagining the “consequences” in consuming the product. It is due to the motive for consuming the product – for fun and enjoyment (Holbrook and Hirschman, 1982). On the other

hand, a utilitarian product, which delivers more cognition-oriented benefits (Kempf, 1999) provides a sounder basis for the elicitation of benefit-anticipatory imagination, one should at first engage in an imaginative experience. As a utilitarian product by its nature induces an analytical mindset, an evaluation of the product's functional benefits will inhibit a consumer in eliciting imagination. Consequently, utilitarian products will lead to a straight evaluation of the products, which does not involve make-believe activities. It is less likely that one will engage in as-if activities by using the products or a future projection of them if one were to use the products. Hence, a hedonic product vis-à-vis a utilitarian product will generate more benefit-anticipatory imagination.

The effect of product type on emotional-bonding imagination is similar. Emotional-bonding imagination concerns the emotional content of a product. Therefore, as a hedonic product evokes an affect and emotions (Holbrook and Hirschman, 1982; Kempf, 1999), it is suggested that a hedonic product will evoke the elicitation of such emotional-bonding imagination. In contrast, a utilitarian product evokes more cognition rather than affect; it will elicit less emotional-bonding imagination.

Besides containing emotions, a hedonic product "needs" consumers to imagine, in order to "appreciate" the product (Holbrook and Hirschman, 1982; Spangenberg, Voss, and Crowley, 1997). Imagination's capacity to transcend immediate stimulus objects and construct a meaning to a product suggests that a hedonic product can be enjoyed, particularly since a hedonic product's values lie mostly beyond the product's objective and functional performance. Therefore, a hedonic imagination will induce the

elicitation of symbolic imagination. In contrast a utilitarian product "conditions" consumers to focus on its functional benefits, because its value lies in its functional benefits" (Kempf, 1999). There is minimal incentive to "see" what lies beyond its functional or objective performance. Therefore, compared to a hedonic product, a utilitarian product elicits less symbolic imagination.

Yet the transcending ability of imagination can generate stimulus-independent thoughts (Singer, 1966). That is, one can drift away from the object and one's mind wanders around. As a hedonic product suggests that you to look beyond its functional and objective performance, it induces mind-wandering imagination. Whereas, as a utilitarian product's evaluation is based more on its tangible attributes (Holbrook and Hirschman, 1982; Kempf, 1999), its evaluation will induce an analytical mind-set which is more occupying, which therefore reduces the tendency to let one's mind wander-off.

The aforementioned reasoning that the product type can influence the elicitation of various types of imagination also applies to the product type's influence on attitude formation. As a hedonic product elicits more affect (Kempf, 1999; Mano and Oliver, 1993) and imagination – which also contains emotion – in its evaluation, both imply that attitude towards a hedonic product will be more affect-based rather than cognition-based. On the other hand, a utilitarian product which elicits more cognitive responses (Kempf, 1999; Mano and Oliver, 1993) and less imagination will lead to a cognition-based attitude rather than an affect-based attitude.

Therefore, the effect of the product's type on the elicitation of the various types of imagination, as well as the formation of attitude, is formally stated in Hypothesis 1.



Hypothesis 1: compared to ads for utilitarian products, those for hedonic products will generate:

- a. more benefit-anticipatory imagination
- b. more emotional-bonding imagination
- c. more symbolic imagination
- d. more mind-wandering imagination
- e. less cognition-based attitude, and
- f. a greater affect-based attitude.

### *Effects of Advertising Executions: The Use of Abstract/Concrete Stimuli*

The type of stimuli used in an ad can also influence the consumers' processing of the ad. In particular, the use of pictures can influence the consumers' processing of the advertising, in that they can influence the consumers' inferences of the product (Smith, 1993) and alter the consumer's activity and structure while viewing the ads (Edell and Staelin, 1983; Janiszewski, 1990). This research proposes two types of stimuli—abstract and concrete pictures—that can have differential influences on imagination elicitation.

Compared to concrete stimuli, abstract stimuli tend to be more open to interpretation (Lindaeur, 1983). Such a condition induces consumers to generate more imagination, for example, by creating as-if situations. However, these *as-if* thoughts can also distract consumers from imagining, in particular, the “costs and benefits” of using the product which requires more cognitive effort. If a stimulus tends to distract consumers from focusing on the product depicted by the ad, then consumers' cognition plays a less important role. Such reasoning is based on Edell and Staelin's (1983) contention that if a consumer is distracted by an ad's stimulus,

s/he will activate from memory less stored information about the product being advertised. This results in a smaller allocation of cognitive resources. Although the use of abstract stimuli induces imagination, the content of imagination will not pertain to a consideration of the product's “costs and benefits.” Therefore, the use of abstract stimuli does not guarantee a significant difference in the elicitation of benefit-anticipatory imagination.

Yet, abstract stimuli in ads can serve as “cues” for consumers by inducing them to engage in emotional-bonding imagination. This is based on the reasoning that abstract stimuli give more “freedom” to consumers to generate their own interpretations, where consumers can include their personally relevant information as well as create whatever they desire. This makes their emotional-bonding imagination more pronounced. Concrete stimuli, however, depict ready-made stimuli. These induce an analytical mind-set (Lindaeur, 1983) and provide less “room” for consumers to generate their own interpretations (Valkenburg and van der Voort, 1994). Both factors reduce the elicitation of emotional-bonding imagination in concrete stimuli.

A similar reasoning applies for the use of abstract or concrete stimuli in the elicitation of symbolic imagination. Compared to concrete stimuli, abstract stimuli induce more symbolic imagination based on two reasons. First, as it is more open for alternative interpretations (Lindaeur, 1983), consumers are not bound to the stimuli depicted by the ad. Rather, they can develop their own interpretations depending on how they would like to see the stimuli. Second, an abstract stimulus induces some sense of distance and dissociative feelings (Lindaeur, 1983) because it does not quite represent an object as it is seen in the real world. Some distance and dissociative feelings provide a

condition conducive for symbolic imagination elicitation, where one needs to transcend the objective stimuli and create one's own interpretations of the product (Sartre, 1972). Therefore, the use of abstract stimuli in ads will generate more symbolic imagination.

Abstract and concrete stimuli incur different implications for the elicitation of mind-wandering imagination. Abstract stimuli – which depict less realistic images – provide a lack-of-concrete-focus condition (Algom and Lewin, 1981; Lindaeur, 1983) inducing consumers to drift away from the actual stimuli. In contrast, as a concrete product depicts realistic images, they induce an analytical mind-set (Lindaeur, 1983) directing consumers to engage in a more concrete product evaluation. This activity is more occupying and therefore will reduce the tendency to wander-off (Singer, 1966).

The use of abstract stimuli will also affect attitude formation, that is, to be more affect-based or cognition-based. As argued earlier, abstract stimuli are more open to interpretation and give consumers the freedom to see the stimuli as they like. This will make the consumers' attitude more affect-based. On the other hand, concrete stimuli induce an analytical mind-set which in turn makes the consumers' attitude more cognition-based. Based on the above lines of reasoning, we formulate Hypothesis 2.

Hypothesis 2: compared to the use of concrete stimuli in ads, the use of abstract stimuli in them will generate:

- a. a similar level of benefit-anticipatory imagination
- b. more emotional-bonding imagination
- c. more symbolic imagination
- d. more mind-wandering imagination
- e. less cognition-based attitude, and
- f. a greater affect-based attitude.

## Research Method

### *Design of the Study*

This study employed a 2 (hedonic vs utilitarian product) x 2 (abstract vs concrete advertising execution) mixed-factor design. The two levels of the product's type factor were designed as a within-subjects factor. Meanwhile, the two levels of the advertising execution factor were designed as a between-subjects factor. Each participant evaluated one set of products consisting of one hedonic product and one utilitarian product. There were two hedonic products (a chocolate bar and sparkling wine) and two utilitarian products (instant coffee mix and a ballpoint pen) included in the study. The 2-between-subjects factors were the abstract or concrete ads execution. Since there were two product sets evaluated, there were eight groups involved in the study. The subjects were 120 undergraduate students. The participants were randomly assigned to each of the eight between-group conditions.

### *Stimulus Materials*

A booklet of ads was presented to each participant. Following the experimental design, there were eight types of booklets containing two ads for a set of two products. The order of presentation of the ads in the booklet was randomized. These sixteen ads, which acted as stimulus material, were generated from three pretests that were conducted. The pretests included tests of products which had hedonic/utilitarian properties, advertising messages/copies which served as hedonic/utilitarian, and pictures in the ads which were concrete/abstract. Two aspects of the ads were manipulated, which were the product type (within subject) and the advertisements' execution (between sub-

jects). While the brand name was specific for each product, the other aspects of the ads, such as the position of the pictures and the font sizes, were kept constant across the ads. Each ad was printed in full color on A4-size paper. The two ads in each group were compiled and presented in a booklet.

### *Dependent Variables and Covariates*

For testing the hypotheses, the dependent variables were: benefit-anticipatory imagination, emotional-bonding imagination, symbolic imagination, mind-wandering imagination, the affective properties of attitude, the cognitive properties of attitude, and the purchase intention. There were also covariates included, which were the overall product attitude (in the measurement of the affective and cognitive properties of attitude) and the tendency to imagination (in the measurement of imagination elicitation).

Measures of the four types of imagination were based on the imagination scale developed by Dewi and Ang (2015). Participants were asked to respond to statements measuring the four types of imagination. Possible responses ranged from 1 (disagree) to 7 (agree).

Measures of benefit-anticipatory imagination included three items which were: 1) The ad induces me to imagine how I would think about myself if I were using the product. 2) Looking at the ad, I can imagine how the product would fit my lifestyle. 3) The ad makes me imagine the things I can achieve if I use the product. Measures of emotional-bonding imagination consisted of three statements which were: 1) The ad reminds me of experiences or feelings I've had in my own life. 2) I think the ad somehow inspires me to try out alternative ways to express myself with the product. 3) It is hard to give

the specific reason but I think the product is for me. Symbolic imagination was measured using a scale consisting of three items as follows: 1) I feel the ad conveys that the product has benefits other than those I usually think of. 2) The ad suggests that the product symbolizes alternative ways of seeing and behaving. 3) The ad induces me to think that there is an underlying value to the product which cannot be judged based only on its functional benefits. Measures of mind-wandering imagination consisted of three statements as follows: 1) When I look at the ad, I can dissociate myself and think of meanings for the product other than those stated in the ad. 2) The ad does not seem to be speaking to me directly. 3) When I look at the ad, thoughts unrelated to the product can easily creep in.

Measures of the cognitive properties of attitude, affective properties of attitude, and overall product attitude used a semantic differential scale (1 to 7) with endpoints of cognitive adjectives, affective adjectives, and general evaluative terms for the cognitive scale, the affective scale, and the product attitude scale respectively. Since the structural characteristics of the measures (for example, the response format of the measures) can be confounded with the construct being measured, similar response formats were preferred to tease out the affective and cognitive properties constituting the overall product attitudes (Crites, Jr., Fabrigar, and Petty, 1984).

Operationalization of these variables followed Crites, Jr., Fabrigar, and Petty's (1984), Edell and Burke's (1987) and Trafimow and Sheeran's (1998) work as follows. The cognitive scale word pairs were: ineffective/effective, unbelievable/believable, and useless/useful. The affective properties of attitude used were: not excited/excited, not inspired/inspired, not enjoyable/

enjoyable. The affective scales required the subject to: “attend to the feelings that you have towards the product and indicate how the product makes you feel.” Whereas for measuring the overall product attitude, the assessment used three pairs of very general evaluative terms that do not describe affective states or traits of the object’s attitude. The participants were presented with the stem “Having considered your thoughts and feelings toward the product, what is your overall rating for the product?” They responded by circling one of the 1 to 7 numbers with endpoints labeled bad/good, dislikeable/likeable, and pleasant/unpleasant.

Although this study proposes that the nature of the product (hedonic or utilitarian) and situational factors (that is, the ad execution) can influence imagination elicitation, we recognize that the tendency to imagine varies amongst individuals. Although such a difference is not an innate characteristic, Swanson (1978) contended that corresponding with the environment/education in which an individual is nurtured, some individuals are more open to imagining experiences. Therefore, this study held the tendency to imagine as a covariate when measuring the elicitation of the four imagination types. Tendency to imagine was measured by adopting Swanson’s (1978) absorbing experience scale.

### *Control Variables*

The control variables were measured to rule out other explanations, besides the manipulated variables, accounting for the subjects’ responses toward the stimulus materials. This study identified two variables – that is, ad attitude and product involvement, which can confound the dependent variables’ measures. Past research indicates

that ad attitude influences product attitude (Mitchell and Olson, 1981). Therefore, this study checked the ads’ equality in favorability. Measures for the ad attitude were adopted from those of Edell and Burke (1987). As well, given that past research suggests that product involvement influences the types of information processing (Petty and Cacioppo, 1986), this confound check was to ensure that differences in product involvement level were not the factor which explained the subjects’ affective and cognitive properties of attitude. Measures for product involvement were adopted from the Personal Involvement Inventory (PII) scale (Zaichkowsky, 1985).

### *Manipulation Check*

To verify that significant differences in the perceptions of the ads’ abstractness existed, this study included three measures of ads’ abstractness. These measures stem from the abstract/concrete picture characteristics implied in Lindaeur’s research (1983). As part of the overall evaluation of the ads, the participants rated the ad’s abstractness on a 1 to 7 scale anchored by concrete/abstract (reverse coded), difficult to visualize/easy to visualize, and not lifelike/lifelike.

## **Results and Discussion**

### *Control and Manipulation Check Items*

The ANOVA results (see Table 1) showed that hedonic products’ advertising vs utilitarian products’ advertising were perceived equal in advertisement attitude and involvement. As well, the subjects’ perceptions of the abstract vs concrete ads were equal in terms of the ad attitude and involvement.

As a manipulation check, the subjects' perceptions of the ads' concreteness were measured. Results verified that the abstract vs concrete ads were perceived as intended. As shown in Table 1, the concrete ads' concreteness score was significantly different from that of the abstract ads.

*Dependent Variables*

The two hypotheses proposed are about the main effect of hedonic vs utilitarian product types and the main effect of abstract vs concrete advertising execution. The hypotheses were tested using a 2x2 analysis of covariance with the tendency to imagine as a covariate for measuring the elicitation of the four imagination types, and product attitude as a covariate for measuring the affect-based and cognition-based attitudes. Tendency to imagine was held as a covariate to ascertain that individuals' differences were not the source of different levels of imagination elicitation. The researcher also treated product attitude as a covariate since the present study examines the cognitive and affective component of attitude. While product attitude may involve cognitive and affective components in a variety of combination (Edwards, 1990;

Hypotheses 1a to 1f examined the effects of hedonic vs utilitarian products on imagination elicitation. These hypotheses also served as an assessment for the imagination scale's (Dewi and Ang, 2015) nomological validity, where hedonic products, compared to utilitarian products, are expected to generally generate more imagination since an evaluation of hedonic products involves imagination and affect (Babin et al., 1994; Batra and Ahtola, 1990; Chandon et al., 1998; Hirschman and Holbrook, 1982; Holbrook and Hirschman, 1982; Kempf, 1999; Mano and Oliver, 1993; Spangenberg et al., 1997).

Hypotheses 2a to 2f pertain to the examination of the effects of concrete vs abstract ad execution, where the latter ad execution was predicted to generally elicit more imagination. Stemming from Lindaeur's (1983) contention that abstract stimuli will elicit more imagination, these hypotheses serve as a nomological validity check for the imagination scale as well as an attempt to examine the distinction of imagination from imagery.

*Effects of Product Type*

Hypotheses 1a and 1b proposed the main effect of hedonic vs utilitarian prod-

**Table 1.** Manipulation Check Items: Cell Means and ANOVA Results

	Cell Means				ANOVA Results	
	Product Type		Ad Execution		Product Type Fscore	Ad Execution Fscore
	Hedonic Product Ads	Utilitarian Product Ads	Abstract Ads	Concrete Ads		
Ad Attitude	4.31	4.36	4.37	4.33	0.087	0.133
Involvement	4.33	4.38	4.30	4.43	0.113	0.616
Ad Concreteness	-	-	2.55	4.58	-	193.44***

Note: \*\*\* = significant at the 0.01 level

Zajonc, 1980), the present study is interested in measuring the cognitive vis-à-vis the affective basis of attitude, but not the overall attitude (which may vary between individuals).

ucts, where hedonic products were hypothesized to evoke more benefit-anticipatory imagination, more emotional-bonding imagi-

nation, more symbolic imagination, and more mind-wandering imagination. People’s attitudes towards hedonic products, compared with utilitarian products, were also predicted to be less cognitive but more affect-based.

As shown in Table 2, measures of the dependent variables showed a significant main effect for different product types. Hedonic products vs utilitarian products generated significant differences in terms of benefit-anticipatory imagination, emotional-bonding imagination, symbolic imagination, and mind-wandering imagination. Significant differences were also found in terms of the cognition-based attitude and affect-based attitude. Accordingly, the empirical findings supported Hypotheses 1a to 1f.

### Effects of Advertising Execution

The nature of stimuli is argued as one aspect to distinguish imagination vis-à-vis

and elicitation of the four types of imagination. Based on the contention that less concreteness (or more abstractness) provides more “freedom” to interpret, we expected that the four types of imagination and the concreteness of stimuli would demonstrate a negative relationship. That is, less concrete stimuli elicit more imagination.

Secondly, we tested Hypotheses 2a to 2f which were based on the prediction that concrete ads vs abstract ads generate more emotional-bonding imagination, symbolic imagination, mind-wandering imagination, less cognition but more affect-based attitude. However, we proposed that the effect of concrete vs ad execution on benefit-anticipatory imagination would be different. That is, both elicit a similar level of this imagination type.

For testing the first contention on the negative relation between concreteness of ad execution and imagination elicitation, we constructed a path model testing the rela-

**Table 2.** Product Type Effects: Cell Means and ANCOVA Results

	Cell Means		ANCOVA Results		
	Product Type		Product Type Fscore	Covariates	
	Hedonic Product Ads	Utilitarian Product Ads		Product Attitude	Tendency to Imagine
Benefit-anticipatory Imagination	4.21	3.77	6.65**	-	0.079
Emotional-bonding Imagination	4.36	3.99	5.98**	-	0.008
Symbolic Imagination	5.00	3.41	126.17***	-	4.64
Mind-wandering Imagination	4.60	3.89	58.61***	-	5.65
Cognition	3.50	4.40	47.59***	0.064	-
Affect	4.58	4.14	9.80***	0.380	-

Note: \*\* = significant at the 0.05 level; \*\*\*= significant at the 0.01 level

imagery. That is, while concrete stimuli are conducive for imagery elicitation (Alessandrini and Sheikh, 1983), the researcher proposes that less concrete stimuli facilitate imagination elicitation (Lindaeur, 1983).

Therefore, we first examined the relationship between abstract and concrete ads

relationship between the variables (see Figure 1). Such a model showed an adequate model fit of 0.941 (GFI), 0.963 (NFI), 0.965 (CFI), chi-square value = 114.042, and p = 0.007.

Table 3a depicts the results of the test suggesting the negative significant relationships between the four types of imagina-

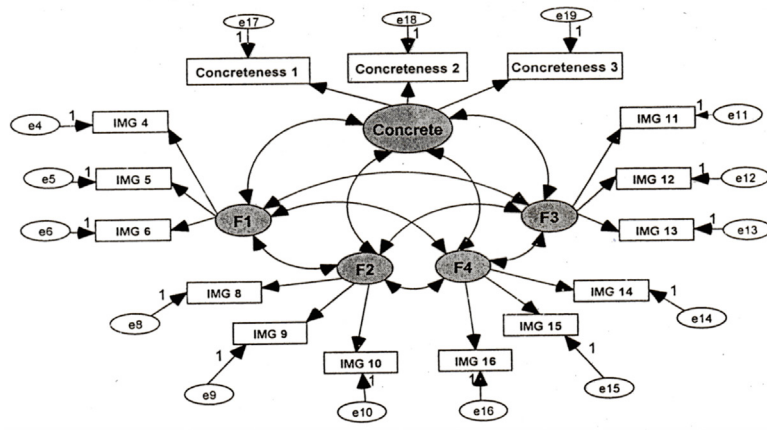


Figure 1. Imagination types and concreteness of stimuli

tion and the concreteness of stimulus. This confirms the hypothesis that imagination is elicited in a situation, or by stimuli which induce freedom to interpret, but does not induce an analytical mind-set (Hamlyn, 1994; Lindaeur, 1983). Further, we provide more

nation, less cognition-based attitude, and more affect-based attitude. Table 3b depicts the results of such hypotheses testing.

The results showed that the entire Hypotheses 2 on the effects of abstract ads vs concrete ads was supported. Hypothesis 2a

Table 3a. Covariances Between Imagination Types and Concreteness of Stimuli

Pairs of Variables	Covariances
Benefit-anticipatory Imagination	-0.338***
Emotional-bonding Imagination	-0.267***
Symbolic Imagination	-0.511***
Mind-wandering Imagination	-0.250***

Note: \*\* = significant at the 0.05 level; \*\*\*= significant at the 0.01 level

evidence that imagination differs from imagery, in that the latter requires concrete stimuli for its elicitation (Alesandrini and Sheikh, 1983), whereas the later does not.

Meanwhile, comparing the effects of abstract advertising vis-à-vis concrete ads, we predicted that abstract ads would elicit a similar level of benefit-anticipatory imagination to concrete ads, but more emotional-bonding imagination, symbolic imagination, mind-wandering imagi-

which predicted an insignificant difference in the elicitation of benefit-anticipatory imagination was supported by the data. Table 3b also shows that abstract ads versus concrete ads generated significant differences in the elicitation of emotional-bonding imagination, symbolic imagination, mind-wandering imagination, cognition-based attitude, and affect-based attitude. Accordingly, Hypotheses 2a to 2f were supported.

**Table 3b.** Ad Execution Effects: Cell Means and ANCOVA Results

	Cell Means		ANCOVA Results		
	Ad Execution		Ad Execution <i>F</i> score	Covariates	
	Abstract Ads	Utilitarian Ads		Product Attitude	Tendency to Imagine
Benefit-anticipatory Imagination	4.05	3.93	0.446	-	0.079
Emotional-bonding Imagination	4.36	3.98	5.82**	-	0.008
Symbolic Imagination	4.50	3.91	17.68***	-	4.64**
Mind-wandering Imagination	4.26	3.83	8.55***	-	5.65**
Cognition	3.77	4.12	6.97***	0.064	-
Affect	4.89	3.82	59.52***	0.380	-

Note: \*\* = significant at the 0.05 level; \*\*\*= significant at the 0.01 level

## Conclusion and Limitation

This study provided empirical evidence for the imagination scale developed by Dewi and Ang (2015). In the context of hedonic and utilitarian products, the scale behaved as expected in which hedonic vis-à-vis utilitarian products evoke more imagination (Hirschman and Holbrook, 1982; Holbrook and Hirschman, 1982; Spangenberg et al., 1997). Empirical evidence also accounts for the hedonic vs utilitarian product evaluation, which causes attitude formation to be more affect-based or more cognition-based.

This study also provides empirical support for the contention that imagination is facilitated by limiting the stimuli and less concrete stimuli, which induce more freedom for interpretation (Lindaeur, 1983). Negative relationships were found between the concreteness of stimuli and the four imagination types.

However, the hypotheses formulated in this study do not deal with the combined effects of product type and advertising execution. Further study into the interaction effects of these two factors on the elicitation of the four types of imagination will provide evidence of the more salient factor influencing consumers' processing. Consumers have

a relatively definite schema pertaining to how a product is evaluated (Edell and Staelin, 1983; Meyers-Levy and Tybout, 1989). Holbrook and Moore (1981) argued that verbal stimuli (and also visual appeals) will be processed depending on the consumers' evaluative judgments about the product. That is, consumers' existing schema about a certain product will firstly determine their product perception. Then consumers will process advertising stimuli to come up with a product evaluation. As a product can be more hedonic or utilitarian in nature, the consumers' evaluative judgement depends primarily on the product's hedonic or utilitarian values. Each will evoke different information processing strategies, where the first involves a highly subjective evaluation (for example, pertaining to the symbolic values of the product) and the latter involves objective criteria. Although the use of abstract or concrete advertising stimuli will serve as cues for the consumers to respond to the stimuli in certain ways (Burton and Lichtenstein, 1988; Edell and Staelin, 1983), it is a less salient factor compared to the product type. Still, the interaction effects of these two factors in eliciting each of the imagination types would be an intriguing future research agenda.



Further, this study has not tested a link between imagination elicitation and purchase intention. Such a link is worth noting since purchase intention can be the proxy to a real purchase (Hoch and Ha, 1986). Research into the relationship between purchase intention and imagination would also provide further nomological validity for the imagination scale since imagination is defined as make-believe activity which is future-oriented (Dewi and Ang, 2015).

Last but not least, there should be further nomological testing as well as application studies undertaken to examine various advertising execution strategies and their comparative effectiveness at eliciting imagination. The potential advertising execution strategies to be studied are the transformational versus informational, conclusion versus non-conclusion, and expected versus unexpected ads.

## References

- Abraham, Anna. 2014. The Imaginative Mind. *Human Brain Mapping*, 37, 4197–4211.
- Abraham, Magid M. and Leonard M. Lodish. 1990. Getting the Most Out of Advertising and Promotions. *Harvard Business Review*, 3 (May/June), 50-63.
- Alesandrini, K. L., and A. A Sheikh. 1983. Research on imagery: Implications for advertising. In Anees A. Sheikh (Ed), *Imagery: Current theory, research, and application* (pp. 135–147). New York, NY: John Wiley and Sons, Inc.
- Algom, D., and I. Lewin. 1981. An experimental cross- Validation of mental imagery. *Imagination, Cognition, and Personality*, 1(1), 49–65.
- Antrobus, J. S., J.L. Singer, and S. Greenberg. 1966. Studies in the stream of consciousness: Experimental enhancement and suppression of spontaneous cognitive processes. *Perceptual and Motor Skills*, 23, 397–417.
- Babin, B. J., W.R. Darden, and M. Griffin. 1994. Work and/or fun: Measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, 20(4), 644–656.
- Batra, R., and O.T. Ahtola. 1990. Measuring the hedonic and utilitarian sources of consumer attitude. *Marketing Letters*, 2(2), 159–170.
- Breckler, S. J. and E.C. Wiggins. 1989. Affect versus evaluation in the structure of attitude. *Journal of Experimental Social Psychology*, 25(3), 253–271.
- Breckler, S. J. (1984). Empirical validation of affect, behavior, and cognition as distinct components of attitude. *Journal of Personality and Social Psychology*, 47(6), 1191–1205.
- Burton, S. and D.R. Lichtenstein. 1988. The effect of ad context on attitude toward the advertisement. *Journal of Advertising*, 17(1), 3–11.
- Chandon, P., Wansink, B., and G. Laurent. 1998. Hedonic and utilitarian consumer benefits of sales promotion. Working Paper. London: Centre for Marketing, London Business School.
- Crites, Jr., S. L., L.R. Fabrigar, and R.E. Petty. 1994. Measuring the affective and cognitive properties of attitude: A conceptual and methodological issues. *Personality and Social Psychology Bulletin*, 20(6), 619–634.
- Dewi, I. J. and S.H. Ang. 2001. Between imagination and reality: A study on the comparative effectiveness of advertising and product trial. In P. M. Tidwell, and T. E. Muller (Eds.), *Asia Pacific Advances in Consumer Research*, 1, 74–80, Valdosta, GA: Association for Consumer

- Research.
- (2015). The conceptualization and development of advertisement-evoked imagination scale. *Asia Marketing Journal*, 17(2), 15–37.
- Dhar, R., and K. Kertenbroch. 2000. Consumer choice between hedonic and utilitarian goods. *Journal of Marketing Research*, XXXVII (February), 60–71.
- Edell, J. A. and M.C. Burke. 1987. The power of feelings in understanding advertising effects. *Journal of Consumer Research*, 14(3), 421–433.
- Edell, J. A., and R. Staelin. 1983. The information processing of pictures in print advertisements, *Journal of Consumer Research*, 10(1), 45–61.
- Edell, Julie A. and Marian Chapman Burke. 1987. The Power of Feelings in Understanding Advertising Effects. *Journal of Consumer Research*, 14 (December), 421-433.
- Edwards, K. 1990. The interplay of affect and cognition in attitude formation and change. *Journal of Personality and Social Psychology*, 59(2), 202–216.
- Fishbein, Martin. and I. Azjen. 1975. Belief, attitude, intention and behavior: an introduction to theory and research. MA: Addison Wesley.
- Giorgi, Amedeo. 1987. Phenomenology and the research tradition in the psychology of the imagination. In Edward L. Murray (Ed), *Imagination and Phenomenological Psychology* (pp. 126-136). Pittsburgh: Duquesne University Press.
- Hamlyn, D.W. 1994. Imagination. In S. Guttenplan (Ed.), *A companion to the philosophy of mind* (pp. 361–365). Oxford: Blackwell Publishers Ltd.
- Hirschman, E. C., and M.B. Holbrook. 1982. Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, 46 (3), 92–101.
- Hirschman, Elizabeth C and Morris B. Holbrook. 1982. Hedonic Consumption: Emerging Concepts, Methods and Propositions. *Journal of Marketing*, 46 (Summer), 92-101.
- Hoch, Stephen J. and Young-Won, Han. 1986. Consumer learning: advertising and the ambiguity of product experience. *Journal of Consumer Research*, 13(September), 221-233.
- Holbrook, M. B. and E.C. Hirschman. 1982. The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 9(2), 132–140.
- Holbrook, M. B., and W.L. Moore. 1981. Feature interactions as mediators of consumer responses to advertising. *Journal of Consumer Research*, 8 (June), 404-420.
- Janiszewski, Chris. 1990. The influence of print advertisement organization on affect toward a brand name. *Journal of Consumer Research*, 17(June), 53–65.
- Jenkins, Rebecca and Molesworth, Mike 2017. Conceptualizing Consumption in the Imagination: Relationships and Movements between Imaginative Forms and the Marketplace, *Marketing Theory*, 18(3), 327-347.
- Kempf, Deanna S. 1999. Attitude formation from product trial: distinct roles of cognition and affect for hedonic and functional products. *Psychology and Marketing*, 16(1), 35–51.
- Leopold, Claudia and Mayer, Richard. 2014. An Imagination Effect in Learning from Scientific Text. *Journal of Educational Psychology*, June, 1-17.
- Lindaeur, M. 1983. Imagery and the arts. In. A. A. Sheikh (Ed), *Imagery: Current theory, research, and application*. New York: John Wiley and Sons, Inc.
- Mano, H., and R.L. Oliver. 1993. Assessing the dimensionality and structure of the consumption experience: Evaluation, feeling, and satisfaction. *Journal of Consumer Research*, 20(3),

451–466.

- Meyers-Levy, J., and A.M. Tybout. 1989. Schema congruity as a basis for product evaluation. *Journal of Consumer Research*, 16(1), 39–54.
- Mitchell, A. A. and J.C. Olson. 1981. Are product attribute beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research*, 18(3), 318–332.
- Orbach, Mikulincer M.I. (1995). Attachment styles and repressive defensiveness: the accessibility and architecture of affective memories, *Journal of Personality and Social Psychology*, 68(5), 917-925.
- Pearson, Joel, Naselaris, Thomas, Holmes, Emily A., and Kosslyn, Stephen M. 2015. Mental Imagery: Functional Mechanisms and Clinical Applications. *Trends in Cognitive Sciences*, 19(10), 590-602.
- Petty, Richard E. and J.T. Cacioppo. 1986. The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*, 19 (December), 123-205.
- Phillips, B.J. 2017. Consumer Imagination in Marketing: A Theoretical Framework, *European Journal of Marketing*, 51 (11/12), 2138-2155.
- Sartre, J.-P. (1972). *The psychology of imagination*. London, UK: Methuen and Co. Ltd.
- Singer, J. L. (1975). *The inner world of daydreaming*. New York, NY: Harper and Row Publishers.
- Smith, R. E. (1993). Integrating information from advertising and trial: processes and effects on consumer response to product information. *Journal of Marketing Research*, 30(2), 204–219.
- Smith, R.E. and W.R. Swinyard. 1982. Information response model: an integrated approach. *Journal of Marketing*, 46 (Winter), 81-93.
- Spangenberg, E. R., K.E. Voss and A.E. Crowley. 1997. Measuring the hedonic and utilitarian dimensions of attitude: A generally applicable scale. In M. Brucks, and D. J. MacInnis (Eds.), *Advances in Consumer Research*, 24 (pp. 235–241). Provo, UT: Association for Consumer Research.
- Sutherland, M. B. 1971. *Everyday imagining and education*. London, UK: Routledge.
- Swanson, G. E. 1978. Travels through Inner space: Family structures and openness to absorbing experiences. *American Journal of Sociology*, 83(4), 890–919.
- Thomas, Nigel J.T. 2014. The Multidimensional Spectrum of Imagination: Images, Dreams, Hallucinations, and Active, *Imaginative Perception. Humanities*, 3, 132–184.
- Trafimow, David and P. Sheeran. 1998. Some tests of the distinction between cognitive and affective beliefs. *Journal of Experimental Social Psychology*, 34, 378-397.
- Unger, Lynette S. and Jerome B. Kernan. 1983. On the Meaning of Leisure: An Investigation of Some Determinants of the Subjective Experience. *Journal of Consumer Research*, 9 (March), 381- 392.
- Valkenburg, P. M. and T.H.A van der Voort. 1994. Influence of tv on daydreaming and creative imagination: A review of research. *Psychological Bulletin*, 116(2), 316–339.
- Zaichkowsky, J. L. 1985. Measuring the involvement construct. *Journal of Consumer Research*, 12(3), 341–352.
- Zajonc, R. B. 1980. Feeling and thinking: Preferences need no inferences. *American Psychologist*, 35 (2), 151–175.