# AN EMPRICAL EXAMINATION OF THE ROLE OF CONTEXT ON THE PSYCHOLOGICAL MEANING OF PRODUCTS AND BRANDS

by

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(Under the Direction of Roberto Friedmann)

## ABSTRACT

Meaning is all around us each and every day. Psychological meaning focuses on the factors that underlie the meaning an individual derives from and ascribes to a particular product. For decades, consumers' psychological meaning of products and brands has been known to play a key role in purchasing decisions. This dissertation attempts to better understand the meanings that consumers attach to their possessions. The framework presented here examines psychological meaning in terms of tangible attributes and intangible attributes, as well as contextual influences on these meanings. Products are known to have tangible attributes, which are objective and verifiable, but also to contain intangible attributes which are the results of cognitive associations and abstractions. The combination of these attributes contributes to the overall meaning that is ascribed to a product or brand.

It is also important to note that meaning is always meaning in a given context. In the framework presented in this dissertation, contextual variables fall into three main groups: psychosocial characteristics, demographic characteristics, and situational characteristics. In this

work, we focus on one contextual variable to study from each of these groups. In psychosocial characteristics, we examine materialism; in demographic characteristics, we look at gender; and in situational characteristics, we focus on product involvement. Therefore, this research is intended to contribute not only to the field of studies on psychological meaning, but also to the fields of these three contextual variables.

The framework is challenged using the word *car* as the stimulus. This particular stimulus was chosen for its balanced blend of both tangible and intangible attributes. It is also a product for which all respondents will have at least some level of familiarity and which most consumers have an awareness of various brands. Data is collected in the form of free, stimulus-bound, one-word associations, as widely used in the prior research. The data is then clustered into "components of meaning" by independent judges in a manner compatible with the literature. With the components of meaning for *car* identified, standard non-parametric statistical tests are used to look at significant differences across the contextual variables.

INDEX WORDS: Psychological Meaning, Product Meaning, Brand Meaning, Materialism, Gender Differences, Product Involvement, Automobile Involvement

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# CHAPTER 1

# INTRODUCTION

> Out of the multitude of our sense experiences we take, mentally and arbitrarily, certain repeatedly occurring complexes of sense impressions… and we attribute to them a meaning – the meaning of the bodily object. Considered logically this concept is not identical to the totality of sense impressions referred to, but is an arbitrary creation of the human (or animal) mind… [W]e attribute to this concept of the bodily object a significance, which is to a high degree independent of the sense impression which originally gives rise to it. This is what we mean when we attribute to the bodily object "a real existence."
>
> -Albert Einstein, 1936

Over the past several decades, meaning has been studied across many disciplines, including psychology (e.g., Grier, 1999), sociology (e.g., Szalay and Deese, 1978), and various areas within the field of marketing including: consumer behavior (e.g., Hirschman, 1980; Escalas and Bettman, 2005; Keller 2003) and advertising theory (e.g., Friedmann and Zimmer, 1988; Brown et al, 2003). In similar studies, McCracken (1986) and Mick (1986, 1992) examined semiotics, which is closely related though not the same as the work on psychological meanings.

Meaning has remained such a relevant topic over time because it is not only interesting, but also very complex issue comprised of many facets.

Meaning is all around us each and every day, yet the intricacies that determine these meanings for each individual are dependent upon many external components. Meanings are not only a part of the activities in which we participate and the products and services that we purchase, but meanings may even be contained in the objects and services around us that we did not purchase, or in the activities in which we do not participate. "We cannot hope to understand consumer behavior without first gaining some understanding of the meanings that consumers attach to possessions" (Belk, 1988, p. 1)

Noting the importance of meanings in consumer behavior, Csikszentmihalyi and Rochberg-Halton (1981, p.1) state:

> To understand what people are and what they might become, one must understand what goes on between people and things. What things are cherished, and why, should become part of our knowledge as human beings. Yet it is surprising how little we know about what things mean to people. By and large social scientists have neglected a full investigation to the relationship between people and objects.

For decades, the psychological meaning that consumers derive and ascribe to products and brands has been known to play a key role in how consumers make purchasing decisions. Psychological meaning has been studied in many specific area of Marketing including, consumer

behavior (Hirschman, 1980) and advertising theory (Friedmann and Zimmer, 1988). Prior to this more directed look at advertising theory, Friedmann and Lessig (1987) proposed a framework that examined the role of the psychological meaning of products as used in product positioning. This same framework was then extended for use in international marketing (Friedmann 1986a), general marketing applications (Friedmann 1986b), and advertising (Friedmann and Zimmer 1988). This same framework was then carried over into strategy development (Golden, Alpert, and Betak 1989).

Even though the framework has many uses in the marketing literature and has been referenced by many scholars since its introduction, this framework has had little, if any, empirical validation. This dissertation plans to build upon the original framework, while also providing empirical testing on several aspects of the elements, specifically the context variables.

It is also important to note here that this work expands on the previous literature in another meaningful way. Previous works have focused meanings as related to consumption and the extended self (Belk, 1988), the social-identity perspective of consumption (Kliene et al., 1993), and brand communities (Muniz and O'Guinn, 2001). Each of these topics is extremely interesting and relevant to the discipline because they help marketers better understand how consumers reflect their own identities through the meanings they ascribe to their products and brands. However, there is not yet any literature that examines the meanings independent of the reflection on self. Therefore, this a priori look at meanings (prior to self-reflection) will provide marketers with an important baseline as to the meaning of products and brands as they stand independently in consumers' minds.

In the following chapter, we review the different types of meaning, with particular emphasis on psychological meaning.

# CHAPTER 2

# LITERATURE REVIEW

This chapter addresses the various types of meaning as found throughout the literature, and as suggested above, it is done with an emphasis on psychological meaning.

Interest in meaning is multidisciplinary. Philosophers, psychologists, linguists and others have explored the topic of meaning, trying to determine what it is, identify when it occurs, and determine the impact that the individual has on meaning (Golden et al., 1989). Researchers across a variety of fields such as sociology (Szalay and Deese, 1978), consumer behavior (Hirschman, 1980), and advertising research (Friedmann and Jugenheimer, 1985) have all advocated the classification of meaning into three main types: lexical, philosophical, and psychological meaning.

Lexical (or semantic) meaning addresses the relation between words and referents, with the basis for determination being convention. In other words, it is a collective and generally-accepted code of labeling (Bloomfield, 1933), or a form of labeling based on the conventional use of the language by numerous individuals (Szalay and Deese, 1978). The principle advantage of lexical meaning is that it is standardized and therefore generally understood (Szalay and Deese, 1978; Castetter and Heisler, 1984). However, since lexical meaning is based on the status quo and does not fully encompass the meanings assigned by all individuals, it does not lend itself well to investigations into product and brand meaning.

Philosophical meaning is concerned more with how words acquire their meaning, and how this meaning is then used to transfer knowledge (Luckett, 1995). Philosophical meaning looks at the concept-referent relationship, and here the meaning becomes synonymous with rational knowledge (Katz, 1972). Because of philosophical meaning's rational basis, it may not be as overtly useful to marketers as other forms of meaning (Golden et al., 1989).

Because of the issues with lexical and philosophical meaning, marketers have emphasized the importance of psychological meaning for the understanding of consumers' perceptions (Friedmann, 1986b; Freidmann and Lessig, 1986; Hirschman, 1980). With this in mind, and for the purpose of this dissertation, we will focus on psychological meaning.

## PSYCHOLOGICAL MEANING

According to Szalay and Deese (1978), the original work regarding the theory of psychological meaning began with the work of Osgood (1952), who conceptualized meaning as, "that process or state in the behavior of a sign-using organism which is assumed to be a necessary antecedent for the production of sign responses" (Osgood, Succi, and Tannenbaum, 1957). One of the main contributions of Osgood's work concerning meaning is the conceptualization of psychological meaning as a bundle of components, thereby allowing us to visualize these components as the basic structural elements of the construct, and will prove to be key in its measurement.

This work therefore adopts Szalay and Deese's (1978, p. 2) definition of psychological meaning as "a person's subjective perception and affective reactions" to stimuli, arguing that, as such, psychological meaning "characterizes those things that are most salient in an individual's reaction while describing the degree and direction of its affectivity."

Psychological meaning focuses on the factors which underlie the meaning that an individual derives from and ascribes to a particular product (Friedmann and Lessig, 1987). From a marketing perspective, psychological meaning appears the most appropriate interpretation to be measured. This is due to the nature of consumer behavior, which is neither fully conventional nor rational – the core aspects of lexical and logical meaning (Friedmann, 1986b; Friedmann and Zimmer, 1988).

Due to its very nature, and explained later in greater detail, psychological meaning is less "stable" than some other forms of meaning, such as lexical meaning. Psychological meaning can be affected by moods, needs, and experiences, and it can vary at different points in time. Yet, this variability makes this form of meaning more useful in monitoring changes in perception over time (Golden et al., 1989). Therefore, psychological meaning is considered the most powerful construct for applications regarding consumer behavior (Hirschman, 1980; Friedmann and Zimmer, 1988).

Because each consumer's perceptions, experiences, understanding, and references will play an active role in determining meaning, psychological meaning may be unique to the individual and can differ from another individual's interpretation of the same word (Golden et al., 1989). This is because the basic components of psychological meaning represent a person's understanding and evaluation of a particular stimulus, images, feelings, experiences (both direct and vicarious), and associated behavioral experiences that have been accumulated over time. Using a generic product category such as *car* for illustration purposes, these components may consist of *price, style, fun, prestige,* and *performance*. Obviously, each of these components themselves encompasses, or clusters, a potentially wide array of more specific meanings, including some that could be unique to a given individual.

Having now referenced Friedmann's (1986b) framework, we should recall that the purpose of this dissertation is to empirically validate it. Given the little empirical evidence that has ever been provided, the following chapter will now present a detailed explanation of this framework. We begin with the theoretical background, followed by an overview of the three main components of the framework: the attribute bundle, the perceptual mode, and the context. This chapter then concludes with an overview of the original framework followed by a revised proposed framework along with relevant explanations and justifications for the suggested revisions.

# CHAPTER 3

# THE FRAMEWORK

The theory behind the psychological meaning of products is principally derived from existential-phenomenological psychology, which states that there is an indissoluble unit or interrelationship between the individual and his environment; they co-constitute with one another (Friedmann and Lessig, 1987). Colaizzi, Valle, and King (1978) explained this viewpoint when stating, "It is via the world that the very meaning of a person's existence emerges both for himself and for others. The converse is equally true" (p. 5). The direct implication of this position is that the meaning of a product is indeed a function of the interaction between the perceiver and the product stimulus (Friedmann, 1986b; Friedmann and Lessig, 1986).

Product meaning is not developed randomly. It is actually derived from the interaction between perceiver and product or brand stimulus. The way that the perceiver reacts to such stimuli is believed to be a function of (a) the product's attribute bundle (viewed as tangible or intangible), (b) the modes through which people tend to perceive (be it data-driven or concept-driven), and (c) a trichotomy of context variables in which the perceptual experience is taking place (Friedmann and Lessig, 1987).

The goal of this chapter is to present the conceptual framework on which much research into psychological meaning is based. Recall that, as explained earlier, psychological meaning can be depicted as a bundle of components. It is important to note that the components of psychological meaning have three important characteristics: salience, commonality, and degree

of tangibility (Friedmann, 1986b). Salience refers to the relative importance that each component of psychological meaning may have in comparison with the other components (Friedmann, 1986b). For example, if using *car* for the stimuli, we may address how strong or relatively important the *style* component is with respect to other components such as *cost, performance, and prestige.* Commonality refers to the degree to which components of psychological meaning are shared by a specified group (Friedmann, 1986b). This would mean that in our previous example, we would want to verify whether two distinct groups of respondents would share in the belief that *style* is indeed a component of psychological meaning of *car*. The degree of tangibility refers to the degree of similarity between the components of psychological meaning and the objective and verifiable attributes of the product stimulus (e.g., *car*) being considered (Friedmann, 1986b).

Friedmann (1986b) used this foundation to propose a framework as to how consumers derive and ascribe meaning to products and brands. This framework of the psychological meaning of products is presented in Figure 1 at the end of this chapter (Friedmann, 1986b; Friedmann and Lessig, 1986).

Now that we have introduced the overview of psychological meaning and the basic framework, we will next take a closer look at the attribute bundles, perceptual modes, and contextual variables that comprise this framework.

## ATTRIBUTE BUNDLE

Products and brands contain both tangible and intangible attributes. The tangible attributes of a product or brand are defined as those features of a product stimulus that are both objective and verifiable (Friedmann, 1986b). For example, if we continue with our stimulus

example of *car*, some of the tangible attributes may include color, number of doors, horsepower, price, and miles per gallon - or even service features that are objective and verifiable, such as length of vehicle warranty. In other words, the tangible attributes include anything that is quantifiable and able to be measured/determined without debate. On the other hand, there are intangible attributes which are subjective impressions of the product stimulus that would include attributes such as stylish, sexy, fun, and sporty for a car (Friedmann, 1986b; Friedmann and Lessig, 1987). These attributes are not quantifiable or objectively verifiable, and are therefore much more open to individual interpretation and/or debate. These intangible attributes are ascribed on to the product or brand stimulus by consumers as the result of their cognitive associations and abstractions.

## PERCEPTUAL MODE

In describing how consumers derive and ascribe meaning, evidence has shown that the recognition and identification of a stimulus by an individual is both *data-driven* and *concept-driven* (Hirschman, 1980). The objective and verifiable characteristics that an individual perceives using their five senses comprise the data-driven perceptual process that plays a role in the derivation of meaning. This is how tangible attributes are recognized. The resulting images, ideas, impressions, and opinions that result from the individual's cognitive associations and abstractions are the concept-driven attributes, which are then ascribed onto the product or brand stimulus and comprise the intangible attributes.

## CONTEXUAL VARIABLES

At this point, we take a closer look at the role that context plays in meaning. We begin by first looking at contextual meaning and provide more detailed examinations as well as theoretical justification for the contextual variables that are specifically studied. This section also provides specific hypotheses for each of the contextual constructs chosen for this research.

*Contextual Meaning.* Meaning is always meaning in a given context. A turkey on Thanksgiving Day has a completely different meaning than a turkey on July 1st. A bottle of wine that you purchase to take to dinner at your boss' house may have a totally different meaning than a bottle of wine you purchase to consume as you watch a movie at your house. These are just two examples of contextual meaning, but they show very clearly that context cannot be overlooked when discussing psychological meaning.

It has been suggested by many researchers that meaning is always context dependent (Erk and Pad, 2008; Christiansen and Dahl, 2005; Kleine and Kernan, 1991; Golden, Alpert, and Betak 1989; Friedmann and Zimmer, 1988; Klien and Kernan 1988). Friedmann (1986b) was one of the first to call attention to the importance of context in meaning, emphasizing that the context in which perceptual processing takes place is of primary importance to the model.

Kleine and Kernan (1988) also support the contextualization of meaning as they state, "… Perceptual dimensions vary in salience among objects and individuals and according to the context in which the object is perceived" (p. 499). Most of this research supports a very strong relationship between context and meaning formation. The issue for marketers is that, ultimately, this context and meaning formation will play a very salient role in consumers' behaviors and will thus greatly affect the impact and effectiveness of their marketing efforts.

*Contextual Variables.* This dissertation utilizes Friedmann's (1986b) original framework, however the contextual variable groupings have been slightly modified. The revised framework with the new categories of contextual variables is shown in Figure 2 at the end of this chapter.

Recall that in the original framework, the contextual variables were grouped into individual, social, and situational characteristics (Friedmann, 1986b). We believe that in Friedmann's (1986b) framework, some blurred distinctions occurred between the individual and social groups, requiring further clarification. For example, in the original framework, Friedmann (1986b) classifies sex as a social characteristic. However, it could be argued that gender is an inherent individual characteristic. Similarly, the original framework classified occupation as a social characteristic. While one's occupation may certain play a role in their social identity, it could also be argued that one's occupation is large part of one's individual identity as well. Because of these potential discrepancies or alternate interpretations, the contextual variables have now been relabeled and more clearly categorized into psychosocial characteristics, demographic characteristics, and situational characteristics. It is thought that this revision helps to more clearly draw the distinction between the various categories of context as it affects meaning formation and is one of the contributions of this dissertation.

As in the original framework (Friedmann, 1985), these broadly labeled categories represent a diverse group of constructs and variables that are not only interesting, but also equally relevant in consumers' behavior. It is important to note that these broadly defined categories, and the specific variables we examine from each are by no means inclusive of the wide range of all context variables that could be studied. They are simply a representation of the wide number of relevant questions that may originate from this dissertation. The specific

contextual variables that are empirically addressed should provide both a strong starting point for the empirical verification of this framework, and highlight the merits for additional context variables to be examined and empirically addressed in follow-up research.

This chapter has provided a detailed explanation of both the original and revised frameworks. The following chapter will build upon this theoretical background by providing an examination of the specific contextual variables studied and proposed hypotheses for each.

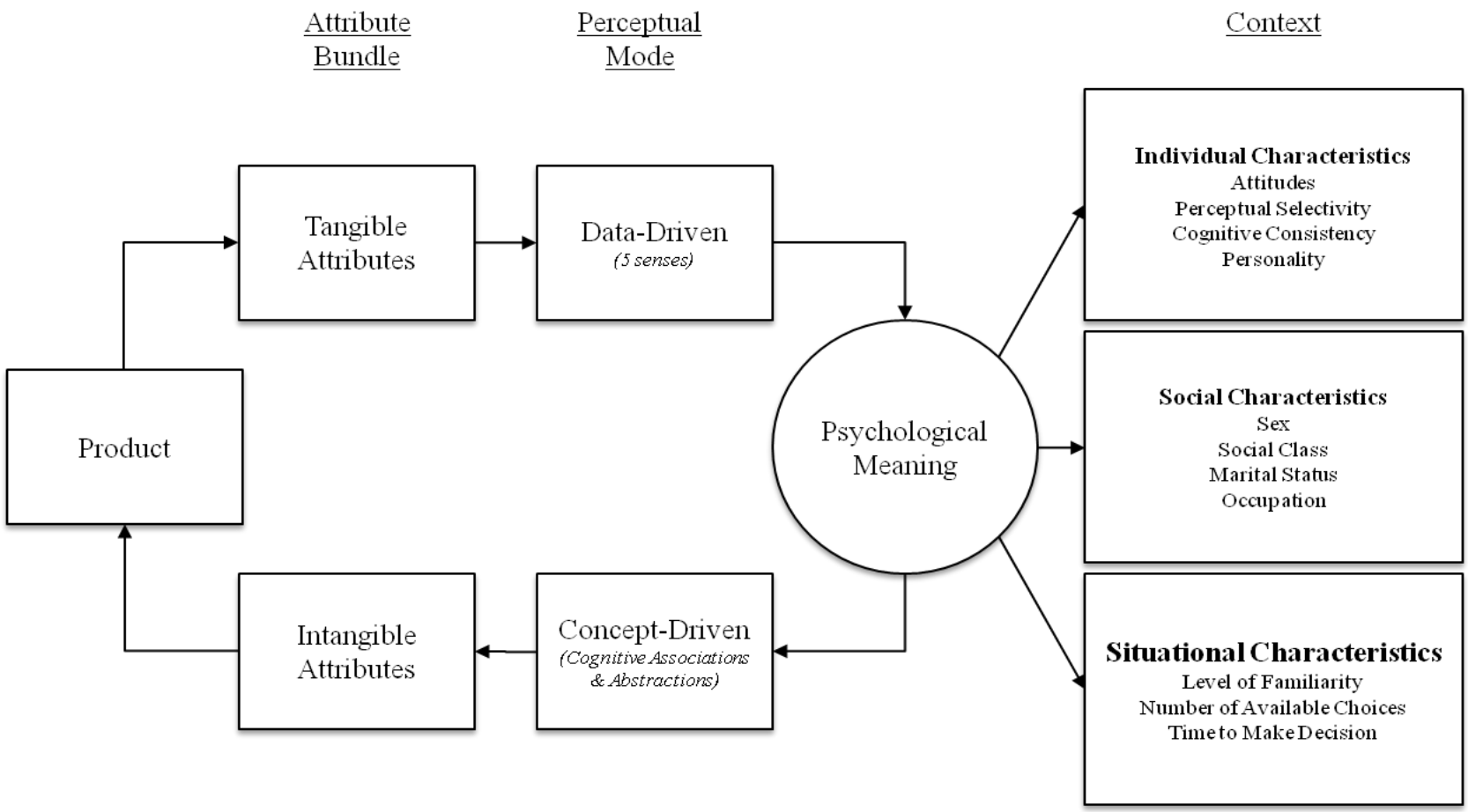


Figure 1: Original Framework for the Derivation of the Psychological Meaning of Products

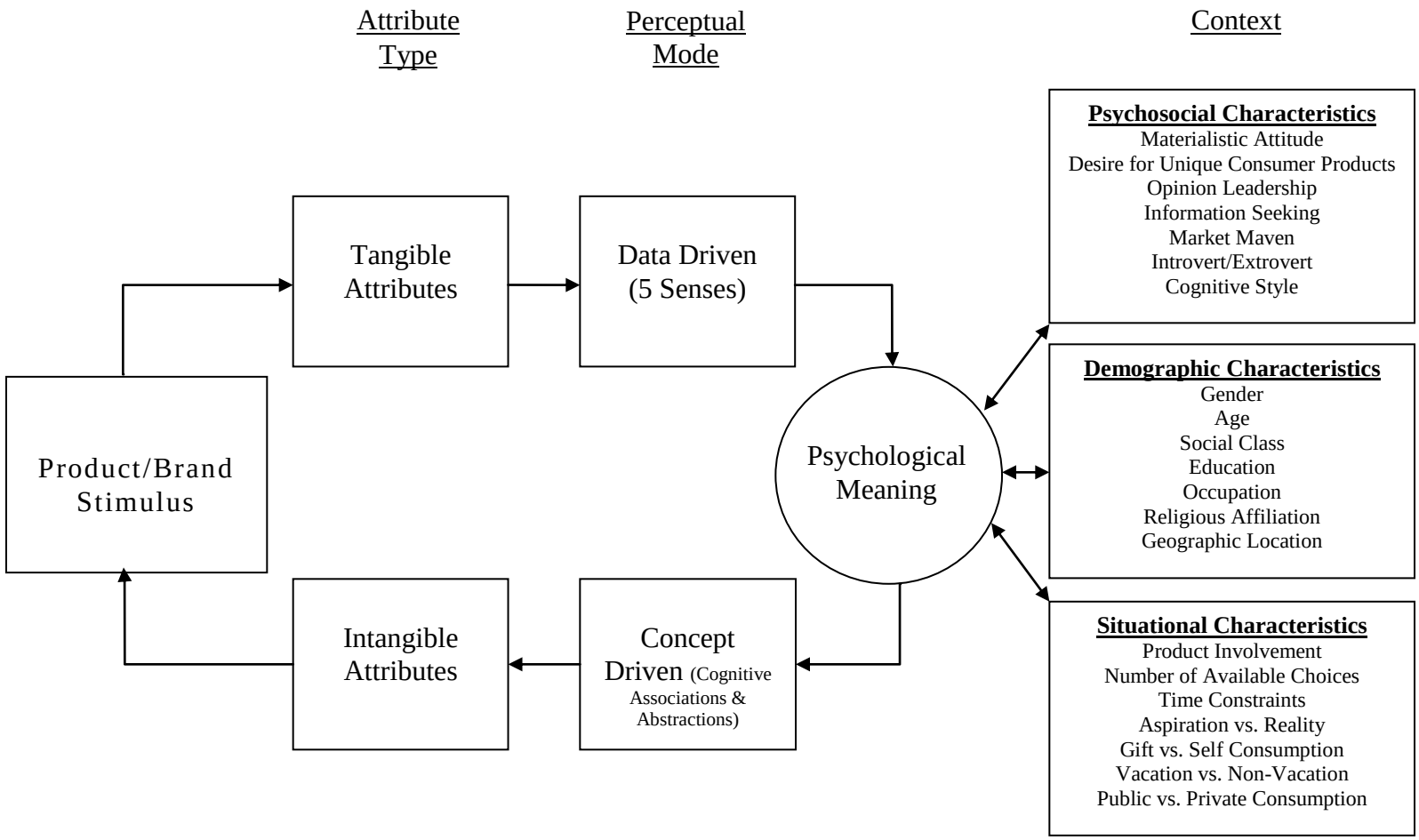


Figure 2: Revised Framework for the Derivation of the Psychological Meaning of Products

# CHAPTER 4

# CONTEXTUAL VARIABLES AND HYPOTHESES

Having proposed the framework for measuring psychological meaning in the previous chapter, this chapter now takes a detailed look at the contextual variables of the framework: psychosocial, demographic, and situational. We also describe each of the specific contextual variables addressed in this dissertation: materialism, gender, and product involvement and propose specific hypotheses regarding each. After proposing the hypotheses here, the following chapter will then provide details into the operationalization of these constructs.

## PSYCHOSOCIAL CHARACTERISTICS

Psychosocial characteristics pertain to an individual's psychological development within a social environment. These characteristics play a role in each individual's personality and psychological make-up. However, the more important aspect of these characteristics from a marketing perspective is their effect on their consumption behaviors. Some examples of psychosocial characteristics would be: materialistic attitude (e.g., Belk, 1984,1985; Richins, 1992; Clark et al., 2001; Griffin et al., 2004; Rose and DeJesus, 2007), desire for unique consumer products (e.g., Lynn and Harris, 1997; Tian et al., 2001), opinion leadership (e.g., Reynolds and Darden, 1971; Corey, 1971; Richins and Root-Shaffer, 1988; Chan and Misra, 1990; Grewal et al., 2000), information seeking (e.g., Reynolds and Darden, 1971; Kiel and Layton, 1981; Case, 2007), market-maven (e.g., Feick and Price, 1987, Walsh et al,

2004; Clark and Goldsmith, 2005), introvert/extrovert (e.g., Hong and Zinkhan, 1995; Furnham and Allass, 1999; Chang, 2002; Wheeler et al., 2005), and cognitive style (e.g., Schaninger and Sciglimpaglia, 1981; Joseph, 1984; White et al, 2003). Each of these psychosocial variables has been shown to play a role in consumers' decisions and actions. Recalling that these variables represent but a fraction of the psychosocial characteristics that may affect consumer behavior, this study takes a detailed look at materialism.

Materialism has been defined as a "devotion to material needs and desires, to the neglect of spiritual matters; a way of life, opinion or tendency based entirely upon material interests" (Clarendon, 1989, p.733). One of the more recent versions of materialism as defined by Merriam-Webster dictionary is, "a preoccupation with or stress upon material rather than intellectual or spiritual things" (2010). Researchers have proposed similar definitions, such as the work of Belk (1984, p. 291) defining materialism as: "the importance a consumer attaches to worldly possessions." Dittmar (1992) views possessions as material symbols of identity and as expressive symbols of identity. The materialist comes to focus on their possessions, which then give that person a great source of satisfaction and/or dissatisfaction (Luckett, 1996). It is clear from all of these descriptions that material possessions play a key role in the lives of more materialistic consumers. It is for this reason that we have deemed it worthy to investigate empirically how materialism affects the meanings people attach to products and brands.

Throughout the literature, possessions are shown to play a key role in the lives of highly materialistic consumers. It is expected that as levels of materialism vary from one consumer to the next, so will the meanings they attach to brands and products. This overall assumption leads to the belief that psychological meaning will differ between individuals with a higher level of materialism from those individuals with lower levels of materialism.

If, as the literature suggests, materialists actually place higher importance on their possessions, then it is expected that the overall distribution of word associations will differ as well. When looking into the existing literature regarding materialism, it has been shown that when asked to list their most valuable possessions, materialists provided a significantly higher number of responses than non-materialists (Belk, 1985; Richins, 1994a). When considering the high value placed on possessions by materialists, these results are not surprising. Using this same line of logic, one may expect that materialists may also ascribe more meanings to their products and brands than non-materialists (Luckett, 1996). Therefore, it would be reasonable to expect more materialistic respondents to elicit more word associations, and therefore a greater salience of meaning, for each stimulus than those less materialist respondents. These expectations lead to the following hypothesis:

$H_{1A}$: Individuals with higher levels of materialism will express greater salience of meaning, as expressed by greater frequency counts of word associations, than those individuals with lower levels of materialism.

This hypothesis propose a possible interesting finding, in that it may violate previous schools of thought regarding highly materialistic consumers. Often, materialism is a trait that is regarded by researchers as negative and misguided (e.g., Fournier and Guiry, 1993). Belk (2001) points out that materialists should not simply be condemned as elitists on grounds that they are assumed shallow or crude. Our hypothesis agrees with this statement. If the preceding hypothesis is supported, it would actually indicate that materialists are indeed not shallow, even though that is how they may be perceived. In fact, they may hold more complex meanings in regards to their products and brands.

Furthermore, the differences between more materialistic respondents and those rating lower on materialism is expected to reveal key differences in the types of meanings mentioned. Certain goods and services have been known to possess emotional value in excess of their functional utility (Holbrook and Hirschman 1982; Sheth, Newman, and Gross 1991). These findings indicate that materialists may focus more on the hedonic pleasures associated with products and brands rather than the utilitarian functions. This may lead to differences between individuals with higher levels of materialism and those with lower levels in regards to the types of tangible and intangible associations given.

Studies of luxury consumption have shown that luxury products are likely to provide subjective intangible benefits (Dubois and Laurent, 1994). In staying with the *car* example, the subjective intangible benefits of a luxury car are exemplified by the long-running slogan of BMW, "Sheer Driving Pleasure." It is this type of hedonic association that is believed to illicit more intangible components of meaning from the more materialistic respondents. This expectation leads to the following hypothesis:

$H_{1B}$: Individuals scoring higher on materialism will provide more intangible attributes as components of meaning, as expressed by greater frequency counts of intangible word associations, than those scoring lower on materialism.

It is further believed that the level of materialism will play a role in the types of associations given by individuals. Richins (1994) found that more materialistic persons tended to value items that are publically consumed and possess public meaning rather than personal or subjective meaning. Other aspects regarding materialists were the appearance of financial worth and the ability to convey status, success and prestige. Therefore, it is expected that individuals

who rank higher in materialism will place more emphasis on associations regarding specific brand names as a way to convey these public images of status, success and prestige.

$H_{1C}$: Individuals scoring higher on materialism will provide more specific brand mentions as components of meaning, as expressed by greater frequency counts of specific brand name associations, than those scoring lower on materialism.

DEMOGRAPHIC CHARACTERISTICS

Research has shown strong support for the relationship between demographic characteristics and consumption patterns. Demographic characteristics play a part in not only who an individual is, but how they will behave as a consumer. These demographic characteristics may include variables such as gender (e.g., Fischer and Arnold, 1994; Kacen 2000), age (e.g., Phillips and Sternthal, 1977; Cole and Balasubramanian, 1993), ethnicity (e.g., Tse et al, 1988; Halter 2002), social class (e.g., Coleman, 1983; Hugstad, 1993), education (e.g., Merritt, 1991), occupation (e.g., Barksdale and Darden, 1972), religious affiliation (e.g., Delener, 1993, 1994) , and geographic location (e.g., Kahie, 1986; Lesser and Hughes, 1986).

Csikszentmihalyi and Rochberg-Halton (1981) found that the meaning of products will differ according to a variety of factors including age, social class, and gender. Furthermore, Herche (1992) showed that demographic characteristics, such as geographic location, may act as strong predictors in consumption. Donthu and Cherian (1992) have shown that ethnicity plays an important role in consumer behavior, with ethnic consumers responding to marketing in manners consistent with their parents' culture.

In this dissertation, the primary demographic characteristic that is examined is gender. Just as we examine materialism, gender may also be seen as a playing a key role in how consumers derive and ascribe meaning to products and brands.

Gender has been shown to play an important role in consumer behavior research (Meyers-Levy and Maheswaran, 1991; Meyers-Levy, 1989) as well as other disciplines such as sociology, cognitive psychology (Gilligan, 1982; Krugman, 1966), and social psychology. Each of these fields has provided powerful evidence that men and women engage in different consumption patterns and behaviors. These differences between male and female consumers have always been of particular interest to marketers. As noted by Kacen (2000), "Marketing has always been gendered" (p. 347). It is expected that because of these differences in consumption patterns and behaviors, males and females will vary in the meanings they attach to brands and products. This assumption leads to the belief that overall, psychological meaning will differ between males and females.

It has been suggested in consumer behavior gender studies, that men and women process message claims in different manners (e and Maheswaran, 1991; Myers-Levy 1989). It has also been proposed that the perceptions of products as well as the reasons for purchasing products may differ across the genders (Luckett, 1996). Typically, male processing of information is more likely to be driven by overall message themes or schemas. It appears that when compared to their male counterparts, female consumers often engage in more detailed elaboration of specific message content (Gilligan, 1982; Krugman, 1966).

In all, the existing literature supports the idea that there are indeed various differences in the behaviors and processes used by both male and female consumers. These differences in how men and women process messages is expected to reveal key differences in the meanings they

attach to products and brands. Therefore, it is expected that, overall, men and women will differ in the psychological meanings they ascribe to products and brands, with women expressing product and brand meaning through more salient associations. This suggestion is expressed in the following hypothesis:

$H_{2A}$: Females will express greater salience of meaning, as expressed by greater frequency counts of word associations, than their male counterparts.

How males and females will value their consumer goods is also an important topic in the gender literature. Csikszentmihalyi and Rochberg-Halton (1981) found responses to be different between men and women when they were asked to discuss their special possessions. In their studies, Csikszentmihalyi and Rochberg-Halton (1981) found men were significantly more likely than women to name TV's, stereos, sports equipment, vehicles and trophies as their special possessions. Conversely, women were significantly more likely than men to mention photographs, sculptures, plants, plates, glass and textiles. Additionally, they found that the reasons given as to why these items were considered to be special between the two genders were different because of the differences in meaning. Men and women "pay attention to different things in the same environment and even value the same things for quite different reasons" (Csikszentmihalyi and Rochberg-Halton, 1981, p. 106). Their investigations revealed that females valued their special possessions for their expressive qualities while men valued their special possessions for their instrumental value. Several other findings in the gender literature have also shown that women respond to nonverbal stimuli by evoking more associative,

imagery-laced interpretations and more elaborate descriptions than males do (Wood, 1966, Nowaczyk, 1982).

Following these arguments, it is further believed that females will provide more intangible attributes and components of meaning than their male counterparts. These expectations lead to the following hypothesis:

$H_{2B}$: Females will provide more intangible attributes as components of meaning, as expressed by greater frequency counts of intangible word associations, than their male counterparts.

## SITUATIONAL CHARACTERISTICS

Support for the exploration of situational variables can be found throughout the marketing literature. Belk (1974) was one of the first to study situational variables and consumer behavior. More recently, Stoltman, Gentry, Anglin and Burns (1990) examined situational influences on the consumer decision sequence and determined that consumers' decision sequences differ not only across individuals, but also across and within products.

Friedmann (1985, p.29) defines situational characteristics as the general situations that the consumer is "confronted by and acting within." Although there are countless numbers of situational characteristics which could be considered, some examples may include product involvement (Bloch, 1981), purchase decision involvement (Mittal, 1989), number of available choices (Bruner, 1957), and time constraints (Szali, 1973; Belk, 1975). Other situational factors could include aspirational vs. realistic evaluations (Hughes and Guerrero, 1971; Escalas and Bettman, 2003), RPB exposure (Friedmann, 2011), purchases for one's self or for a gift (Andrus

et al, 1986; Laroche et al, 2000), purchases made in everyday life vs. those made while on vacation (Kim, 2001), and products that will be consumed publically or in private (Graeff, 1996; Ratner and Kahn, 2002).

In this dissertation, product involvement is examined as the situational characteristic of study. More specifically, we examine the involvement with a specific class of products: Automobiles. The concept of involvement has received a good deal of attention across the marketing field over the last forty years, particularly in the area of consumer behavior. Product involvement is described by Bloch (1981) as a long-term interest in a product which is based on the centrality of the product to important values, need, or the self-concept, and is primarily a function of individual differences. He further views product involvement as a construct affecting consumer behavior on an ongoing basis, varying across individuals (Bloch, 1981).

As consumers, we make dozens of mundane decisions each day. For these decisions of low importance, it may be inappropriate to assume an active information processor (Kassarjian, 1981). This idea indicated to marketing researchers that consumer behavior may be viewed in terms of a two-fold dichotomy: low involvement consumer behavior and high involvement consumer behavior (Engel and Blackwell, 1982).

It is believed that high-involvement consumers are more motivated to search for and actively process product-related information (Warrington and Shim, 2000). Higher levels of involvement in consumer purchase decisions may heighten consumer awareness regarding a particular product or brand. These higher levels of awareness are further expected to increase not only knowledge regarding the product or brand, but also the cognitive structure surrounding the given stimuli. Furthermore, product involvement has been hypothesized to lead to greater

perception of attribute differences, perception of greater product importance, and greater commitment to brand choice (Howard and Sheth, 1969).

Therefore, it is expected that the level of product involvement will play a key role in the psychological meanings of products and brands. This suggestion leads to the belief that, overall, psychological meaning will differ between individuals who show higher levels of product involvement with a given stimulus, than those respondents who show lower levels of involvement.

Product involvement is also believed to be similar to situational involvement presented by Houston and Rothschild (1977). Purchase decision involvement has the purchase decision task as its goal object and is considered a mind-set and not a responsive behavior (Mittal, 1989). Zaichkowsky (1985) incorporated aspects of several previous definitions of involvement (Engel and Blackwell, 1982; Krugman, 1966, Mitchell, 1979) to devise her own definition of involvement: "a person's perceived relevance of the object based on inherent needs, values, and interests." Following these same arguments, it is further believed that individuals with higher levels of product involvement will also hold stronger associations of meanings than those ranking lower on product involvement for the same stimuli. Therefore, it is expected that respondents with higher levels of product involvement will express product and brand meaning through more salient associations. This expectation is expressed in the following hypothesis:

$H_{3A}$: Individuals with higher levels of product involvement will express greater salience of meaning, as expressed by greater frequency counts of word associations, than those individuals with lower levels of product involvement regarding a given stimuli.

It is further believed that if an individual has a lower degree of product involvement, they may use brands as a shortcut to overall associations of meanings. In one example, O'Shaughnessy (2000) looked at nations as brands and noted, "Constraints on time and resources oblige buyers to use information shortcuts to buying action: brand image is one such shortcut." Therefore, it is believed that those individuals who rank lower on product involvement may express brand names as associations more often than their more highly involved counterparts, leading to the following hypothesis:

$H_{3B}$: Individuals with lower levels of product involvement will provide more specific brand mentions as components of meaning, as expressed by greater frequency counts of brand name associations, than those scoring higher on product involvement.

This chapter has provided a theoretical background for the overall framework as well as the contextual variables, including the particular contextual variables (psychosocial, demographic, and situational), and also presents the particular contextual variables that are addressed in this dissertation: materialism, gender, and product involvement. Within the descriptions of each contextual variable, we have also proposed specific hypotheses regarding each. The following chapter will provide details into the operationalization of the various constructs.

# CHAPTER 5

# MEASURES

This chapter will explain how psychological meaning is measured, review each of the contextual variables studied, and then describe the scales used to measure each of these variables. This will set the stage for the following chapter, which will address the specific methodology and data analysis methods used in this research.

## MEASURES OF MEANING

As previously mentioned, this dissertation adopts Szalay and Deese's (1978, p. 2) definition of psychological meaning as "a person's subjective perception and affective reactions" to stimuli, arguing that psychological meaning "…characterizes those things that are most salient in an individual's reaction while describing the degree and direction of its affectivity."

Psychological meaning focuses on the factors which underlie the meaning that an individual ascribes to a particular product (Friedmann and Lessig, 1987), and can be affected by moods, needs, and experiences. It can vary at different points in time, making this form of meaning more useful in monitoring changes in perception over time (Golden et al., 1989). Therefore, psychological meaning is considered the most powerful construct for applications regarding consumer behavior (Hirschman, 1980; Friedmann and Zimmer, 1988).

The basic components of psychological meaning represent a person's understanding and evaluation of a particular stimulus, images, feelings, experiences (both direct and vicarious), and

associated behavioral experiences that have been accumulated over time. Because each consumer's perceptions, experiences, understanding, and references will play an active role in determining meaning, psychological meaning may be unique to the individual and can differ from another individual's interpretation of the same word (Golden et al., 1989).

To measure psychological meaning, we evaluate the construct across two main dimensions: salience and tangibility. The salience of meaning among a particular group is measured by the strength (the frequency count) associated with any given component. Tangibility is measured by comparing the number of tangible associations for components of meaning given vs. the intangible associations.

Furthermore, the differences in types of meanings can also be compared across groups. As previously mentioned, it is expected that there will be differences in the tangible vs. intangible components mentioned by various groups. These groups will be determined based on differences in materialism, gender, and product involvement.

We have described how psychological meaning, its salience, and its tangibility are measured in the studies. The next sections will explain the roles of each of the contextual variables in psychological meaning and the specific hypotheses associated with each.

## MEASURES OF PSYCHOSOCIAL CHARACTERISTICS

As previously mentioned, psychosocial characteristics could include factors such as desire for unique consumer products, opinion leadership, information seeking, market maven, introvert/extrovert, and cognitive style, and materialism. This dissertation focuses on varying levels of materialism among respondents.

Measuring materialism as a consumer value has been proposed frequently in the marketing literature (e.g., Belk, 1984; Fournier and Richins, 1991; Richins and Dawson, 1992; Richins, 1994). Materialism is an important aspect of consumer behavior, and is expected to play a large part in how consumers derive and ascribe meaning to products and brands.

The scale used in this research was presented and validated by Moschis and Churchill (1978), who state the operational definition of materialism to be, "Orientation emphasizing possessions and money for personal happiness and social progress" (p. 607). The overall scale used by Moschis and Churchill (1978) to measure materialism contains 6 Likert-type questions scored on a 5-point disagree-agree basis, and the coefficient alpha reliability of the scale was reported to be .60. This scale was largely adopted from measures used in earlier research that looked at racial differences in response to advertising to adolescents (Wackman, Reale, and Ward, 1972).

## MEASURES OF DEMOGRAPHIC CHARACTERISTICS

In order to address the demographic characteristics in regards to psychological meaning, this research examines gender. In the demographics section of the survey, respondents were asked to self-report their gender as either male or female.

## MEASURES OF SITUATIONAL CHARACTERISTICS

Recall that situational characteristics may include countless factors including number of available choices, time constraints, aspirational vs. realistic evaluations, purchases for one's self or for a gift, purchases made in everyday life vs. those made while on vacation, and products that

will be consumed publically or in private. In this dissertation, product involvement with Automobiles (IPCA) is examined as the situational characteristic of study.

The scale used in this research was presented and validated by Bloch (1981). This scale is comprised of 17 Likert-type items scored on a 6 point format ranging from Strongly Agree to Strongly Disagree. This scale has been found to encompass six factors: (1) enjoyment of driving and usage of cars, (2) readiness to talk to others about cars, (3) interest in car racing activities, (4) self-expression through one's car, (5) attachment to one's car, and (6) interest in cars (Bloch, 1981). The item scores are summed for each respondent to form an overall score. In two reliability tests, the coefficient alpha's for this scale were reported to be .83 in the first test and .78 in the second test.

This chapter has explained how psychological meaning is measured, briefly reviewed each of the contextual variables studied, and discussed the scales used to measure each of these variables. In the following chapter, we address the specific methodology and data analysis methods used in this research.

# CHAPTER 6

# METHODS

Having covered the measurement of psychological meaning and the contextual variables studied here, in this chapter we will present a discussion of the overall data analysis methodology.

## THE ASSOCIATIVE METHOD

In order to measure the psychological meaning of products and brands, this research utilizes the associative method as the primary data gathering mechanism. Simply explained, associations are words given in response to some given stimulus. One of the most famous applications of the associative method came from the works of Sigmund Freud and the development of the Psychoanalytical Method. Principally used for analysis of dreams, Freud would ask his patients to present free associations and specifically instruct them not to withhold any responses. Freud (1924) called this procedure a "search after meaning" or "latent content" and produced many examples of associations, which elicited insights that could not be obtained using direct questioning.

In an effort to continue the quest for a universal measurement tool, free from any pre-conceived notions of the researcher, Szalay and Deese (1978) further examined the use of one word, free associations. In an effort to explain the value of this associative method when constructing meaning, Szalay and Deese (1978, p. 9) state:

> Associations are simply a remarkably easy and efficient way of determining the contents of human minds without having those contents expressed in the full discursive structure of language. In fact, there is good reason for believing, as Galton (1980) pointed out at the very beginning of empirical investigations of associations, and as Freud (1924) realized early, that the association method reveals the content of minds in a way that propositional language does not. We can and do reveal ourselves in associations in ways that we might find difficult to do if we were required to spell out the full propositions behind our associations.

Klein and Kernan (1991) provide additional support for the use of associative meanings when they state, "we identify our perceptions of the object with a label (usually a word name) and use this shorthand to represent our cognitions to other people" (p. 315). Associative data can be quite strong because we are free to pursue word relationships without the baggage created by greater elicitation of formation (Szalay and Deese, 1978); however, associations are not complete and only represent a small portion of what may be meant.

Here, we assess the psychological meanings of brands and products using the same associative methods technique utilized in a number of previous studies (Friedmann, 1986b; Friedmann and Zimmer, 1988; Klein and Kernan, 1991; Luckett 1996). Respondents are asked to provide as many, free, stimulus-bound, one-word associations as come to mind in a one-minute time period for a particular stimulus object. The term "free" means that the associations could be any idea, issue, or feature that comes to the respondent's mind. They are not directed to give any particular type of associations, as could be the case if they were asked to provide only positive or only negative associations. The responses are considered to be stimulus-bound, in

that the given stimulus is repeated on each line before the response field. This method "forces" the respondent to see, and thus hopefully remain focused on, the original stimulus in an attempt to prevent chain-format associations where the previous association given becomes the dominant stimulus cue for the next response. The instructions further explain that there are no right or wrong answers for any of the stimuli so they are not to withhold any responses. Respondents are also asked not to repeat any of their associations for any one given stimulus. A time limit of sixty seconds per stimulus is given, so as to prevent obtaining responses that are significantly distant from the respondents' top of mind.

## STIMULI

Respondents are shown a one-word stimulus, which in these studies is *car*. This particular stimulus is used because *car* may be considered a neutral stimulus. It is seen as a "middle of the road" fit with an extremely balanced mix of both tangible and intangible attributes (Friedmann, 1986b). Using similar logic, Kossar (1983) also selected automobiles as the primary object of study for its ability to achieve continuity with prior research in psychological meaning and its relevance as a product category for post-modern consumers in America.

When thinking of the tangible attributes that may be mentioned for car, we could expect to see: 2-door, 4-door, convertible, horsepower, etc. Some of the intangible attributes that could be mentioned using this stimulus would be: cool, fun, sporty, etc. This range of possible associated attributes across the various stimuli help to highlight the key role that both tangible and intangible attributes play in how we derive and ascribe meaning to the products around us each day.

Cars were also chosen as the brand stimulus because they are typically universally familiar to the group of respondents in this study. Although the undergraduate students who make up the response sample may not have direct experience with these specific brands of cars, they should still be capable of assigning meaning to these well-known brands. In general, cars are very familiar objects to most American consumers, and as pointed out by Kleine and Kernan (1991), "the more familiar an object is to a perceiver, the greater will be his/her reliance on past experience (i.e., on psychological context) to recognize, interpret, and label it" (p. 315). It is important to note that even without direct experience with the brands, the meanings are still very important to marketers. Undoubtedly, marketers are concerned with the meanings being assigned to the products and brands by their current consumers, but they also have an important need to understand the meanings assigned by current non-users, who could potentially become customers in the future.

## DATA COLLECTION

The data was gathered from surveys completed by undergraduate students at the University of Georgia. Surveys were administered in the Principles of Marketing and Consumer Behavior courses. A sample of the stimulus used in the survey can be found in the Appendix. The students were closely monitored and timed to ensure that each subject spent exactly 60 seconds on each of the given stimuli. A total of 517 completed surveys were collected for these studies.

As previously described, the respondents are allowed 60 seconds on the stimulus to give as many free, stimulus bound, one-word associations that they can in the given time period. The respondents were supervised in their participation to ensure that they did not jump ahead to

future sections during the time allocated for each given for the stimulus. The respondents also answered a series of questions regarding their purchase involvement with automobiles, their own level of materialism, and basic demographic questions including gender.

## THE CLUSTERING OF COMPONENTS

The data is sorted using a clustering technique proposed by Szalay and Deese (1978). The word associations given are clustered using semantic similarity, based on lexical and philosophical meaning. It is important to note, as argued by Szalay and Deese (1978), that psychological meaning is being emphasized in these studies, but that logical and lexical meaning cannot be ignored, as there is certain to be some overlap among these conceptualizations of meaning.

Because this research is focused on shared meaning, idiosyncratic responses are eliminated from the analysis of clustered components in this particular study. Idiosyncratic responses are defined here as the word associations that appear with a frequency of one. In other words, this means that only one respondent mentioned this word association for a given stimuli. The elimination of idiosyncratic responses is supported by Golden et al. (1989), and the focus on shared meaning in particular is consistent with previous studies conducted by Hirschman (1980) and Friedmann (1986b). The remaining, shared, one-word associations are clustered (semantically and logically) by two independent judges briefed for this task. Any disagreements between the two judges are settled through a third referee. It is important to note here that the idiosyncratic associations were only eliminated for the clustering exercises. When measuring salience of meaning by counting total word associations, all words were counted in the analysis.

## DATA ANALYSIS

This research is aimed at comparing variances in psychological meaning across various groups of respondents. Psychological meaning is comprised for each group based on the shared components of meaning given by the associations provided by members of each of the different groups. These components consist of a conglomeration of similar associations that are clustered using semantic similarity, based on lexical and philosophical meanings.

To determine the components of meanings and the variations among groups, the data analysis occurs in three stages. In the first stage of analysis, the responses are clustered into similar components. As previously described, the data is sorted and grouped into components of meaning. This task is completed by independent judges who systematically and logically cluster the associations into components of meaning. Once the components are determined, we then move to the next stage of analysis, the determination of frequency counts for each component.

In this second stage of analysis, the total number of components mentioned is counted to assess the complexity of meanings given by each group. Furthermore, the total number of associations within each component is tallied to determine an overall frequency count for each component. The frequency counts for each component measure the level of salience for each of the components of meaning. This salience indicates the strength of the meaning, as described in the previous chapter. The number of components mentioned and their frequency counts are then used for comparisons in the next stage of the data analysis process.

In the third stage of analysis, the number of components mentioned and their relative frequency counts are compared for variations between the different groups. The groups are determined using a regression analysis based on responses regarding product involvement with automobiles and levels of materialism. Gender is divided simply between males and females

based on self-reported answers in the demographics section of the surveys. It is at this stage in the analysis that we expect to find differences in the salience of meaning between respondents who are high or low in product involvement, between those who are high or low in level of materialism, and between males and females. Figure 4 at the end of this chapter demonstrates how the frequency counts for each of the determined components may be compared across groups.

This chapter has presented the methodology used in this research. The following chapter will look at the results and discuss the findings.

| **Group 1** | | | **Group 2** | |
|---|---|---|---|---|
| **Component** | **Freq. Count** | | **Component** | **Freq. Count** |
| . | . | | . | . |
| . | . | | . | . |
| . | . | | . | . |
| . | . | | . | . |
| $C_n$ | FC | | $C_n$ | FC |

Figure 3: Sample Component Grouping and Frequency Counts

# CHAPTER 7

# RESULTS AND DISCUSSION

The primary focus of this chapter is to present the components of meaning, the results of the hypotheses testing, and provide potential explanations of these findings. We begin by providing the basic synopsis of the survey respondents and then transition to the components of meaning that were derived from the data. Next, we look at correlations between the variables and the reliability of each of the scales used, and finally we present further details on the analysis of each of the contextual variables and the actual findings for each hypothesis.

## RESPONDENTS

The data was gathered from surveys completed by undergraduate students in the Principles of Marketing and Consumer Behavior courses at the University of Georgia. A total of 517 completed surveys were collected. Of the 517 respondents, 228 (44%) were female, and 288 (56%) were male. The respondents ranged in age from 18-49, with a mean age of 20.79 and a median age of 20.

## COMPONENTS

From 517 surveys, there were 1,014 different word associations mentioned in the initial responses. As previously mentioned, associations that were only mentioned one time were considered idiosyncratic responses and were removed from the data. After these idiosyncratic

responses were removed, 455 valid, unique word associations remained, with a total of 5242 total word associations mentioned. Each of these remaining, shared, one-word associations was clustered (semantically and logically) by two independent judges briefed for this task. There was slightly over 85% agreement between the two judges on the grouping of these words, and the discrepancies were settled through a third referee.

Once all words were appropriately grouped into components, the data revealed 10 main components of meaning associated with the stimulus of *car*. They were determined to be: Makes, Models, Economic, Features, Styles, Types/Alternatives, Hedonic, Utilitarian, Disadvantages, and Operational Aids/Requirements. Table 1 at the end of this chapter provides a partial list of words for each component of meaning. The words given in the table represent an example of the top five word associations given for each component, as providing an entire list of each word association would be impractical.

Each of these components was then assigned an overall frequency count based on the number of total mentions of each word association contained within that particular component. See Table 2 at the end of this chapter for a breakdown of the total frequency counts per component of meaning.

After the initial clustering of components, all initial word associations were also assigned to one of two groups: tangible or intangible. Brand mentions, labeled as makes in the data analysis, were determined to be intangible associations due to the deep underlying intangible associations that consumers hold for brands. There was over 99.6% agreement between the two judges on the groupings of these word associations, and the remaining discrepancies were once again settled by a third judge. These two groups of tangible and intangible associations were used to test Hypothesis 1B regarding materialism and tangibility and Hypothesis 2B regarding

gender and tangibility. Once grouped, the word associations were split almost evenly with 2733 tangible associations and 2668 intangible associations. These findings support our initial proposal that *car* serves well as stimulus that contains an evenly balanced blend of both tangible and intangible attributes.

## CORRELATIONS

A bivariate correlation (see Table 4 at the end of this chapter) was run on the continuous independent variables (level of materialism and level of product involvement with automobiles), the dependent variables (number of total word associations given, number of specific brands mentioned, and number of intangible associations mention), as well as all of the other components of meaning that were determined from the clustering exercise.

Many of the variables are shown to be correlated with one another. For example, the brand of cars (makes) component is highly correlated with the intangible component. This correlation is easily explained in that the brands of cars were all determined to be intangible associations because there are so many underlying associations that go along with a brand name. It should also be noted that there is a significant correlation between materialism and automobile involvement, but it is not enough to cause multicollinearity in the regression equations.

## SCALE VALIDATION

*Materialism.* The scale used in this research to measure materialism among respondents was presented and validated by Moschis and Churchill (1978). Moschis and Churchill (1978) give the operational definition of materialism to be, "Orientation emphasizing possessions and money for personal happiness and social progress" (p. 607). The overall scale contains 6 Likert-

type questions scored on a 5-point disagree-agree basis, and the coefficient alpha reliability of the scale was reported to be .60. In scale reliability tests based on our data, the Cronbach's alpha was determined to be .71. Therefore, this scale has been determined to meet the revised minimum reliability of .70 set forth by Nunnally (1978). For more details, please see Table 5 at the end of this chapter.

*Automobile Involvement: IPCA.* The scale used in this research was presented and validated by Bloch (1981). Bloch (1981) views product involvement as a construct that affects consumer behavior on an ongoing basis, varying across individuals. Based on this view, he created this scale to measure involvement with automobiles. This scale is comprised of 17 Likert-type items scored on a 6-point format ranging from strongly agree to strongly disagree. This scale has been found to encompass six factors: (1) enjoyment of driving and usage of cars, (2) readiness to talk to others about cars, (3) interest in car racing activities, (4) self-expression through one's car, (5) attachment to one's car, and (6) interest in cars (Bloch, 1981). The item scores are summed for each respondent to form an overall score.

Two reliability tests were performed and reported with the validation of this scale. In the first reliability tests, the coefficient alpha was reported to be .83. In the second test, the coefficient alpha was reported to be .79. In scale reliability tests based on our data, the original Cronbach's alpha was determined to be even higher at .87. For more details, please see Table 6 at the end of this chapter.

RESULTS FOR CONTEXTUAL VARIABLES

*Materialism.* It has been shown in prior studies (Belk, 1985; Richins, 1994a) that when asked to name their valuable possessions, those more materialistic individuals provided a significantly higher number of responses than their less materialistic counterparts. Using this line of logic, we hypothesized that there would be a significant difference in the number of word associations provided by respondents with varying levels of materialism. In Hypothesis 1A, we looked at salience of meaning in relation to the varying levels of materialism of the respondents, proposing that individuals with higher levels of materialism would provide more word associations than those scoring lower on materialism.

Using linear regression with materialism, gender, and automobile involvement as the independent variables and number of word associations (CARCOUNT) given as the dependent variable (see Table 7 at the end of this chapter), we do not find any significant differences (t-value (1, 489) = .132, $p > .05$). These results imply that simply comparing the number of word associations across varying levels of materialism does not reveal significant differences in salience of meaning among the groups.

Similarly, no significant differences were revealed in the tangible vs. intangible associations given across respondents of different levels of materialism. In Hypothesis 1B, it was proposed that individuals with higher levels of materialism would provide more intangible attribute word associations than those individuals scoring lower on materialism

Using linear regression with materialism, gender, and automobile involvement as the independent variables and number of intangible word associations given as the dependent variable (see Table 8 at the end of this chapter), we once again do not find any significant differences (t-value (1, 489) = -.110, $p > .05$). These results imply that simply comparing the

number of intangible word associations across varying levels of materialism does not reveal significant differences in the tangibility of word associations among the groups.

When looking at Hypothesis 1C regarding materialism, we take a look at specific brand mentions. It was predicted that individuals with higher levels of materialism would provide more specific brand mentions than those individuals scoring lower on materialism. We do find significant results between respondents of varying levels of materialism in regards to the number of brand mentions. Using linear regression with materialism, gender, and automobile involvement as the independent variables and number of word associations specifically mentioning a particular brand of car given as the dependent variable (see Table 9 at the end of this chapter), we do not find any significant differences (t-value (1, 489) = -.299, $p > .05$).

*Gender*. In Hypothesis 2A, we looked at salience of meaning across gender, proposing that females would provide more word associations than males.

Using a one-way ANOVA with gender as the factor and number of word associations given, number of intangible word associations given, and number of specific brand names mentioned as the dependent variables (see Table 10 at the end of this chapter), we do not find any significant differences ($F (1, 510) = 1.069$, $p > .05$) for the relationship between gender and the number of word associations provided. These results imply that simply comparing the number of word associations across the genders does not reveal significant differences in salience of meaning between men and women.

Similarly, no significant differences were revealed in the tangible vs. intangible associations given across gender. In Hypothesis 1B, it was proposed that females would provide more intangible attribute word associations than their male counterparts.

Using linear regression with materialism, gender, and automobile involvement as the independent variables and number of intangible word associations given as the dependent variable (see Table 10), we once again do not find any significant differences ($F (1, 510) = 1.469$, $p > .05$) between male and female respondents for tangible or intangible associations. These results imply that simply comparing the number of intangible word associations across gender does not reveal significant differences in the tangibility of word associations between males and females.

It is interesting to note here that we did not propose a hypothesis for gender regarding brand associations because there was no existing literature to support this proposition. However, as can been seen in Table 10, the relationship between gender and specific brand mentions was the only significant relationship that was revealed ($F (1, 510) = 7.263$, $p < .05$) between male and female respondents. This finding indicates that this may be an area for future research.

*Product Involvement with Automobiles.* In Hypothesis 3A, we looked at salience of meaning in relation to the varying levels of product involvement with automobiles across respondents, proposing that individuals with higher levels of product involvement would provide more word associations than those scoring lower on involvement.

Using linear regression with materialism, gender, and automobile involvement as the independent variables and number of word associations given as the dependent variable (see Table 7), we see significant differences (t-value $(1, 489) = 2.576$, $p < .05$). These results imply that those individuals with higher levels of involvement with automobiles do indeed provide more word associations, implying a greater salience of meaning.

Significant differences were also revealed in the tangible vs. intangible associations given across respondents of different levels of involvement. In Hypothesis 1B, it was proposed that individuals with higher levels of involvement would provide more intangible attribute word associations than those individuals scoring lower on involvement.

Using linear regression with materialism, gender, and automobile involvement as the independent variables and number of intangible word associations given as the dependent variable (see Table 8), do find significant differences (t-value (1, 489) = 2.879, $p < .05$). These results imply that those individuals who are more involved with automobiles do indeed provide more intangible word associations than those less involved with the product.

## SUMMARY OF RESULTS

Although not all hypotheses were supported, some differences in psychological meanings were found in two of the three contextual scenarios presented. Gender was found to show significant differences in the number of specific brands mentioned, even though this was not one of our predictions. Also, as predicted in Hypotheses 3A and 3B, product involvement with automobiles was shown to have significant differences across salience of meaning, as well as intangible mentions. Materialism was not shown to have any effect on any of the three dependent variables.

In this chapter, we have presented the components of meaning derived from the data, the tests of our measurements, and the results of the hypotheses testing. In the following chapter we will summarize the findings, discuss the contributions to the field of marketing, examine the limitations of these studies, provide managerial implications, and talk about future directions for research.

Table 1: Examples of Top Words from Components for Stimulus "Car"

| **Economics** | **Frequency Count** | **Features** | **Frequency Count** |
|---|---|---|---|
| Gas | 160 | Wheels | 125 |
| Expensive | 77 | Tires | 65 |
| Oil | 26 | Engine | 57 |
| Money | 20 | Radio | 52 |
| Ticket | 16 | Seatbelt | 44 |
| **Styles** | **Frequency Count** | **Types/Alternatives** | **Frequency Count** |
| Luxury | 39 | Truck | 119 |
| Sporty | 23 | SUV | 69 |
| Sports | 15 | Sedan | 57 |
| Shiny | 13 | Convertible | 33 |
| Cool | 10 | Van | 32 |
| **Makes** | **Frequency Count** | **Models** | **Frequency Count** |
| Ford | 139 | Mustang | 24 |
| Toyota | 135 | Camry | 17 |
| Honda | 134 | Accord | 15 |
| BMW | 107 | Civic | 12 |
| Lexus | 77 | Tahoe | 8 |
| **Hedonic** | **Frequency Count** | **Utilitarian** | **Frequency Count** |
| Fast | 152 | Drive | 82 |
| Speed | 52 | Transportation | 75 |
| Travel | 51 | Driving | 32 |
| Music | 44 | Safety | 26 |
| Fun | 28 | Ride | 22 |
| **Disadvantages** | **Frequency Count** | **Operational Aids/Requirements** | **Frequency Count** |
| Accident | 29 | Road | 71 |
| Traffic | 27 | Highway | 27 |
| Crash | 26 | Parking | 14 |
| Wreck | 18 | Street | 13 |
| Pollution | 9 | Police | 12 |

Table 2: Total Frequency Counts per Component of Meaning

| Component | Total People Mentioning | Percentage of People Mentioning | Total Frequency Count | Percentage of Overall Mentions |
|---|---|---|---|---|
| Makes | 334 | 64.6% | 1249 | 23.8% |
| Models | 123 | 23.8% | 184 | 3.5% |
| Economic | 290 | 58.4% | 505 | 10% |
| Features | 322 | 62.3% | 974 | 18.6% |
| Styles | 112 | 21.7% | 148 | 2.8% |
| Types/Alternatives | 345 | 66.7% | 785 | 15% |
| Hedonic | 344 | 66.5% | 722 | 13.8% |
| Utilitarian | 285 | 55.1% | 450 | 8.6% |
| Disadvantages | 124 | 24.0% | 161 | 3.1% |
| Operational Aids/Requirements | 168 | 32.5% | 241 | 4.6% |

Table 3: Examples of Top Words from Tangibility Grouping

| TANGIBLE | Frequency Count | INTANGIBLE | Frequency Counts |
|---|---|---|---|
| gas | 160 | fast | 152 |
| truck | 119 | Ford | 139 |
| expensive | 77 | Toyota | 135 |
| wheels | 73 | Honda | 134 |
| road | 71 | BMW | 107 |
| SUV | 69 | drive | 82 |
| tires | 65 | Lexus | 77 |
| engine | 57 | transportation | 75 |
| sedan | 57 | Mercedes | 71 |
| radio | 52 | Chevy | 59 |
| wheel | 52 | speed | 52 |
| red | 47 | travel | 51 |
| seatbelt | 44 | Nissan | 45 |
| seat | 42 | music | 44 |
| leather | 38 | Jeep | 40 |
| black | 34 | luxury | 39 |
| convertible | 33 | Ferrari | 38 |
| van | 32 | driving | 32 |
| accident | 29 | Audi | 31 |

Table 4: Correlation Matrix for All Variables (Continued on next page)

**Correlations**

| | | MATERIALISM | CARINVOLVE | CARCOUNT | makes | intangible | tangible | models | aids | disadvantages | utilitarian | hedonic | types | styles | features | economics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MATERIALISM | Pearson Correlation | 1 | .163** | .025 | -.020 | -.005 | .029 | -.023 | .098* | .028 | .004 | .031 | -.036 | .079 | .000 | .027 |
| | Sig. (2-tailed) | | .000 | .566 | .657 | .906 | .507 | .604 | .026 | .531 | .923 | .488 | .411 | .073 | .998 | .543 |
| | N | 514 | 498 | 514 | 514 | 514 | 514 | 514 | 514 | 514 | 514 | 514 | 514 | 514 | 514 | 514 |
| CARINVOLVE | Pearson Correlation | .163** | 1 | .103* | .089* | .137** | -.036 | .068 | -.034 | .017 | -.106* | .145** | -.086 | .095* | .021 | -.059 |
| | Sig. (2-tailed) | .000 | | .021 | .045 | .002 | .424 | .131 | .452 | .700 | .018 | .001 | .054 | .034 | .638 | .184 |
| | N | 498 | 501 | 501 | 501 | 501 | 501 | 501 | 501 | 501 | 501 | 501 | 501 | 501 | 501 | 501 |
| CARCOUNT | Pearson Correlation | .025 | .103* | 1 | .365** | .464** | .581** | .230** | .086 | .153** | .080 | .145** | .365** | .078 | .398** | .202** |
| | Sig. (2-tailed) | .566 | .021 | | .000 | .000 | .000 | .000 | .052 | .000 | .069 | .001 | .000 | .077 | .000 | .000 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |
| makes | Pearson Correlation | -.020 | .089* | .365** | 1 | .801** | -.301** | .324** | -.219** | -.139** | -.255** | -.332** | .040 | -.100* | -.219** | -.184** |
| | Sig. (2-tailed) | .657 | .045 | .000 | | .000 | .000 | .000 | .000 | .002 | .000 | .000 | .361 | .023 | .000 | .000 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |
| intangible | Pearson Correlation | -.005 | .137** | .464** | .801** | 1 | -.337** | .447** | -.220** | -.173** | .017 | .121** | .028 | .245** | -.306** | -.085 |
| | Sig. (2-tailed) | .906 | .002 | .000 | .000 | | .000 | .000 | .000 | .000 | .692 | .006 | .524 | .000 | .000 | .053 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |
| tangible | Pearson Correlation | .029 | -.036 | .581** | -.301** | -.337** | 1 | -.154** | .349** | .275** | .143** | .054 | .409** | -.055 | .752** | .310** |
| | Sig. (2-tailed) | .507 | .424 | .000 | .000 | .000 | | .000 | .000 | .000 | .001 | .224 | .000 | .213 | .000 | .000 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |
| models | Pearson Correlation | -.023 | .068 | .230** | .324** | .447** | -.154** | 1 | -.102* | -.145** | -.130** | -.140** | .039 | -.039 | -.140** | -.047 |
| | Sig. (2-tailed) | .604 | .131 | .000 | .000 | .000 | .000 | | .020 | .001 | .003 | .001 | .379 | .377 | .001 | .290 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |
| aids | Pearson Correlation | .098* | -.034 | .086 | -.219** | -.220** | .349** | -.102* | 1 | .177** | .166** | .046 | -.120** | -.130** | .118** | .066 |
| | Sig. (2-tailed) | .026 | .452 | .052 | .000 | .000 | .000 | .020 | | .000 | .000 | .292 | .006 | .003 | .007 | .134 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| disadvantages | Pearson Correlation | .028 | .017 | .153** | -.139** | -.173** | .275** | -.145** | .177** | 1 | -.055 | .014 | -.030 | -.071 | .088* | .037 |
| | Sig. (2-tailed) | .531 | .700 | .000 | .002 | .000 | .000 | .001 | .000 | | .209 | .747 | .491 | .108 | .046 | .403 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |
| utilitarian | Pearson Correlation | .004 | -.106* | .080 | -.255** | .017 | .143** | -.130** | .166** | -.055 | 1 | .089* | -.028 | .007 | .058 | .045 |
| | Sig. (2-tailed) | .923 | .018 | .069 | .000 | .692 | .001 | .003 | .000 | .209 | | .043 | .525 | .879 | .185 | .306 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |
| hedonic | Pearson Correlation | .031 | .145** | .145** | -.332** | .121** | .054 | -.140** | .046 | .014 | .089* | 1 | -.104* | .323** | -.012 | .091* |
| | Sig. (2-tailed) | .488 | .001 | .001 | .000 | .006 | .224 | .001 | .292 | .747 | .043 | | .018 | .000 | .786 | .038 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |
| types | Pearson Correlation | -.036 | -.086 | .365** | .040 | .028 | .409** | .039 | -.120** | -.030 | -.028 | -.104* | 1 | .058 | -.010 | .036 |
| | Sig. (2-tailed) | .411 | .054 | .000 | .361 | .524 | .000 | .379 | .006 | .491 | .525 | .018 | | .188 | .823 | .420 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |
| styles | Pearson Correlation | .079 | .095* | .078 | -.100* | .245** | -.055 | -.039 | -.130** | -.071 | .007 | .323** | .058 | 1 | -.089* | .089* |
| | Sig. (2-tailed) | .073 | .034 | .077 | .023 | .000 | .213 | .377 | .003 | .108 | .879 | .000 | .188 | | .043 | .043 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |
| features | Pearson Correlation | .000 | .021 | .398** | -.219** | -.306** | .752** | -.140** | .118** | .088* | .058 | -.012 | -.010 | -.089* | 1 | -.030 |
| | Sig. (2-tailed) | .998 | .638 | .000 | .000 | .000 | .000 | .001 | .007 | .046 | .185 | .786 | .823 | .043 | | .499 |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |
| economics | Pearson Correlation | .027 | -.059 | .202** | -.184** | -.085 | .310** | -.047 | .066 | .037 | .045 | .091* | .036 | .089* | -.030 | 1 |
| | Sig. (2-tailed) | .543 | .184 | .000 | .000 | .053 | .000 | .290 | .134 | .403 | .306 | .038 | .420 | .043 | .499 | |
| | N | 514 | 501 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 | 517 |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 5: Reliability Statistics for Materialism Scale

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .709 | 6 |

**Item-Total Statistics**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| Money can buy happiness | 15.92 | 11.982 | .477 | .658 |
| Dream to own expensive things | 15.76 | 11.662 | .567 | .626 |
| Judge others | 14.64 | 14.780 | .271 | .714 |
| Buy things secretly | 15.43 | 13.033 | .440 | .669 |
| Money most important in job | 16.13 | 12.840 | .486 | .656 |
| Other judge me | 15.61 | 13.256 | .399 | .682 |

Table 6: Reliability Statistics for Automobile Involvement Scale

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .872 | 17 |

**Item-Total Statistics**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| Car Attitude 1 | 54.54 | 173.825 | .368 | .870 |
| Car Attitude 2 | 54.44 | 170.762 | .488 | .866 |
| Car Attitude 3 | 55.49 | 163.272 | .454 | .869 |
| Car Attitude 4 | 54.63 | 162.944 | .596 | .861 |
| Car Attitude 5 | 55.96 | 165.197 | .591 | .862 |
| Car Attitude 6 | 53.71 | 171.422 | .441 | .868 |
| Car Attitude 7 | 54.15 | 169.174 | .468 | .867 |
| Car Attitude 8 | 54.94 | 164.168 | .528 | .864 |
| Car Attitude 9 | 54.37 | 170.682 | .400 | .870 |
| Car Attitude 10 | 54.68 | 167.150 | .488 | .866 |
| Car Attitude 11 | 55.27 | 165.457 | .426 | .870 |
| Car Attitude 12 | 54.58 | 166.537 | .486 | .866 |
| Car Attitude 13 | 54.29 | 175.340 | .368 | .870 |
| Car Attitude 14 | 56.54 | 168.485 | .612 | .862 |
| Car Attitude 15 | 54.99 | 165.500 | .550 | .863 |
| Car Attitude 16 | 55.50 | 162.724 | .637 | .860 |
| Car Attitude 17 | 56.00 | 162.942 | .672 | .859 |

Table 7: Regression Analysis for Salience of Meaning

**Variables Entered/Removed[b]**

| Model | Variables Entered | Variables Removed | Method |
|---|---|---|---|
| 1 | CARINVOLVE, MATERIALISM, Gender[a] | . | Enter |

a. All requested variables entered.

b. Dependent Variable: CARCOUNT

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .128[a] | .016 | .010 | 3.85916 |

a. Predictors: (Constant), CARINVOLVE, MATERIALISM, Gender

**ANOVA[b]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 121.189 | 3 | 40.396 | 2.712 | .044[a] |
| | Residual | 7282.742 | 489 | 14.893 | | |
| | Total | 7403.931 | 492 | | | |

a. Predictors: (Constant), CARINVOLVE, MATERIALISM, Gender

b. Dependent Variable: CARCOUNT

**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 8.619 | 1.150 | | 7.492 | .000 |
| | MATERIALISM | .006 | .043 | .006 | .132 | .895 |
| | Gender | .523 | .359 | .067 | 1.455 | .146 |
| | CARINVOLVE | .034 | .013 | .119 | 2.576 | .010 |

a. Dependent Variable: CARCOUNT

Table 8: Regression Analysis for Tangibility

**Variables Entered/Removed[b]**

| Model | Variables Entered | Variables Removed | Method |
|---|---|---|---|
| 1 | CARINVOLVE, MATERIALISM, Gender[a] | . | Enter |

a. All requested variables entered.

b. Dependent Variable: intangible

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .136[a] | .018 | .012 | 3.15035 |

a. Predictors: (Constant), CARINVOLVE, MATERIALISM, Gender

**ANOVA[b]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 91.095 | 3 | 30.365 | 3.060 | .028[a] |
| | Residual | 4853.173 | 489 | 9.925 | | |
| | Total | 4944.268 | 492 | | | |

a. Predictors: (Constant), CARINVOLVE, MATERIALISM, Gender

b. Dependent Variable: intangible

**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 3.449 | .939 | | 3.673 | .000 |
| | MATERIALISM | -.004 | .035 | -.005 | -.110 | .913 |
| | Gender | -.095 | .293 | -.015 | -.323 | .747 |
| | CARINVOLVE | .031 | .011 | .133 | 2.879 | .004 |

a. Dependent Variable: intangible

Table 9: Regression Analysis for Brand Mentions

**Variables Entered/Removed[b]**

| Model | Variables Entered | Variables Removed | Method |
|---|---|---|---|
| 1 | CARINVOLVE, MATERIALISM, Gender[a] | . | Enter |

a. All requested variables entered.

b. Dependent Variable: makes

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .129[a] | .017 | .011 | 2.97782 |

a. Predictors: (Constant), CARINVOLVE, MATERIALISM, Gender

**ANOVA[b]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 73.427 | 3 | 24.476 | 2.760 | .042[a] |
| | Residual | 4336.159 | 489 | 8.867 | | |
| | Total | 4409.586 | 492 | | | |

a. Predictors: (Constant), CARINVOLVE, MATERIALISM, Gender

b. Dependent Variable: makes

**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.534 | .888 | | 2.854 | .004 |
| | MATERIALISM | -.010 | .033 | -.014 | -.299 | .765 |
| | Gender | -.578 | .277 | -.096 | -2.083 | .038 |
| | CARINVOLVE | .015 | .010 | .070 | 1.521 | .129 |

a. Dependent Variable: makes

Table 10: One-Way ANOVA for Gender

**ANOVA**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| CARCOUNT | Between Groups | 16.422 | 1 | 16.422 | 1.069 | .302 |
| | Within Groups | 7837.453 | 510 | 15.368 | | |
| | Total | 7853.875 | 511 | | | |
| makes | Between Groups | 64.989 | 1 | 64.989 | 7.263 | .007 |
| | Within Groups | 4563.229 | 510 | 8.948 | | |
| | Total | 4628.219 | 511 | | | |
| intangible | Between Groups | 15.197 | 1 | 15.197 | 1.469 | .226 |
| | Within Groups | 5276.160 | 510 | 10.345 | | |
| | Total | 5291.357 | 511 | | | |

# CHAPTER 8

# CONCLUSION

This chapter will summarize the overall findings of this research, take a look at the contributions to the field of marketing, discuss managerial implications, examine the limitations of this current research, and provide options for future directions in this area of work.

## SUMMARY OF FINDINGS

The goal of this dissertation was to build on Friedmann's (1985) original framework of the psychological meaning of products and brands, while also providing empirical support for this framework. Further, we aimed to validate the role of context on the psychological meaning of products and brands. The three contextual variables studied here included psychosocial, demographic, and situational characteristics. We chose one contextual variable from each of these groupings to study: level of materialism (psychosocial), gender (demographic), and level of product involvement with automobiles (situational).

To measure psychological meaning among the respondents using the stimulus of *car*, the associative method was used to elicit one-word associations, which were then clustered into ten main components of meaning. A frequency count of all included word associations was calculated for each of the components to determine the salience of that particular component. Word associations were also grouped into tangible and intangible associations.

The first contextual variable tested was the psychosocial characteristic of materialism and its impact on psychological meaning. In looking at the three dependent variables of salience of meaning, tangibility of word associations, and specific brand mentions, we do not find any significant differences among individuals of varying levels of materialism.

The next contextual variable tested was the demographic characteristic of gender and its impact on psychological meaning. We hypothesized that women would have a greater number of overall word associations as well as a greater number of intangible mentions than males. Neither of these hypotheses was supported in the data. However, we did find significant results between men and women on the number of specific brand mentions. This was not one of our original hypotheses, because this proposition was not supported in the previous literature. However, this has now been identified as an area for further study.

The final contextual variable tested was the situational characteristic of product involvement, specifically with automobiles, and its impact on psychological meaning. We found product involvement to play a significant role in both the number of overall word associations mentioned, as well the number of intangible associations given. These findings support both of our hypotheses in the situational contextual variables.

Overall, though not all hypotheses were supported, we did find some evidence that contextual variables do play a role in the psychological meaning of products and brands, supporting the framework (see Figure 2) we have proposed as an updated revision to Friedmann's (1985) original framework (see Figure 1) of psychological meaning. Empirical evidence from these studies does show that psychological meaning of products and brands is affected by contextual variables of demographic and situational characteristics. Further studies are required to validate the role of psychosocial characteristics on psychological meaning.

## CONTRIBUTIONS TO THE MARKETING FIELD

As previously mentioned, this work is very important to the field of marketing because it contributes not only to the works regarding psychological meaning, but also to the areas of work regarding the contextual variables studied here: materialism, gender, and product involvement.

First, and perhaps most importantly, this work empirically validates the revised framework (see Figure 2) regarding psychological meaning of products and brands. This empirical validation contributes to the original works of Friedmann (1985), where the base framework (see Figure 1) for these studies was originally introduced. Having only looked at one example variable from each of the three contextual groupings, this work is by no means exhaustive in this area. However, it does lay an important foundation for further studies in this area. We have shown here, through a series of statistical tests, that context does indeed affect the psychological meaning of products and brands.

Furthermore, by showing empirical evidence that these contextual variables do play a role in psychological meaning, we have further contributed to the literature regarding these areas, as well. By doing so, we have contributed not only to the literature on psychological meaning, but also to multiple areas of marketing and consumer behavior by examining these variables from the perspective of how we derive and ascribe meaning to products and brands.

Finally, this work provides support for the use of the associative method as a valid measurement tool for psychological meaning. This method has been used for decades, and provides a simple method to quantify qualitative data.

## LIMITATIONS OF THIS RESEARCH

As with all research, there are inevitably limitations to these studies. First, we were only able to examine a small sample of contextual variables in these studies. We chose only one representative contextual variable from each grouping based on prior theory, support, and relevance. However, it should be noted that the possible variables which could be studied in these areas is almost infinite (Friedmann, 1988).

Furthermore, this study also has limitations in its sample respondents. For these studies, a convenience sample was drawn exclusively from undergraduate students at the University of Georgia. This limited sample pool of only undergraduate students form one university limits the generalizability of these studies. Lynch (1982) even went so far as to say that this type of convenience sample cannot be generalized to the population at large and is therefore not appropriate for theoretical research. However, other researchers have argued that student samples are appropriate when the goal is theory application (Calder, Phillips, and Tybout; 1981, 1982). Calder, Phillips, and Tybout (1982) further argue that, "As long as a sample is relative to the universe of the theory, it constitutes that of a theory." (p. 241). Since our main concern in this dissertation is theoretical development, it can be argued that the student subjects are an appropriate sample for these studies.

Another limitation is in the methodology itself. Although the associative method provides many benefits in this type of research, it could be argued that it also provides some limitations as well. One limitation with this methodology could be that the subjects were each only given 60 seconds to provide their word associations for the given stimulus of *car*. If given more time, the word associations provided could have been more numerous and different components of meaning could have possibly emerged. However, previous studies using this

technique have argued that the time constraints provide consistency through the respondents (Szalay and Deese, 1978; Friedmann, 1985).

Another drawback to this method is the imposed limitation of a one-word response. This limits the respondent in the associations that they can provide and the words provided may not paint the full picture of the intended meaning. For example, if the word association *wheels* was given, it could mean the physical wheels on which the automobile rides, or the intended meaning could be "wheels" as in the slang reference to the overall car. Without elaboration, we cannot be sure of the exact intended meaning of some of the associations provided.

Furthermore, the overall design of the study leaves a margin of error. One of the main emphases of these studies is that the components of meaning would fall out from the data and would not be specified a priori. While this design allows for a deeper understanding of the actual components of meaning, it imposed limits on the known variables to be studied. The hypotheses were not designed to address the components of meaning, because they did not yet exist at that stage in the research process. The elimination of some of these variables from the studies may have impacted the final results. Linear regression is well known to be extremely sensitive to variable omission bias.

## MANAGERIAL IMPLICATIONS

While the idea of psychological meaning as a theoretical construct may be quite obscure, the applications of this type of research are quite practical. This type of research could be quite valuable for marketing managers in the areas of strategy, advertising, and international marketing.

From a strategy standpoint, the components of meaning that are determined from the data can provide insight into target markets, product and brand positioning, as well as product development. Marketers can examine the components of meaning given by various groups to better understand the market segments. They can also use the components of meaning given to determine where the product or brand is currently positioned in the consumers' mind, and may use these components as anchors for positions. They could further use this same positioning strategy to examine the components of meaning given for their competitors to help identify potential strengths and weaknesses of their own position. To take this a step further, marketers could also manipulate the stimuli to see how meaning changes in order to help in product development.

These types of psychological meaning studies can also make a substantial contribution to advertising. The identification of the components of meaning for a particular brand or product may provide valuable insight into areas that a marketer may want to stress in their advertising campaigns. More specifically, this type of study of psychological meaning has shown to be useful in copy testing (Friedmann and Jugenheimer, 1985). Friedmann and Jugenheimer's (1985) findings reveal that psychological meaning studies may aid in the development and evaluation of advertising copy, pictures, slogans, etc. and may help in ensuring that there is indeed congruence between the intended message and the actual meaning that is ultimately derived from the advertisement. If there are discrepancies, then the advertisement can be manipulated to ensure that the intended message is being clearly conveyed.

And finally, in today's global marketplace, these studies of psychological meaning may play in important role in international business decisions. One of the key business decisions that must be made in regards to international expansion is that of standardization vs. adaptation.

Friedmann (1986a) argues that with this type of study, these decisions may become less intricate. He states that if the components of psychological meaning surrounding a particular product or brand are significantly different in two different markets, then adaptation may be necessary. While, if the components of meaning are found to be similar across varying markets, then standardization may be more appropriate.

## FUTURE DIRECTIONS FOR RESEACH

To overcome some of the previously mentioned limitations, these studies should be replicated across multiple samples. These would include non-student samples, as well as respondents from different geographical locations, possibly even internationally. Another possible extension would be to conduct these studies longitudinally, over a greater period of time. Changes in psychological meaning with the same stimuli could provide interesting insight into consumers' perceptions of changes both internal (e.g., product packaging or advertising campaigns) and external changes (e.g., economic upturns or downturns or changes in the competitive environment) over time. Also, these studies may be greatly enhanced by testing across different product categories and brands, perhaps including psychological meanings of service providers.

These are just a few examples of areas for possible expansion on the research of psychological meaning. The study of how consumers derive and ascribe meaning to various products and brands is an extremely flexible and dynamic area for research. Psychological meaning lies at the heart of our behavior as consumers, and any additional contributions in this area will prove beneficial to the field.

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APPENDIX A

SAMPLE STIMULUS

Enter as many **one-word associations** as you can for **CAR** in one minute.
*Please remember not to repeat the same word twice on this page.*

| | |
|---|---|
| CAR _____ | CAR _____ |
| CAR _____ | CAR _____ |
| CAR _____ | CAR _____ |
| CAR _____ | CAR _____ |
| CAR _____ | CAR _____ |
| CAR _____ | CAR _____ |
| CAR _____ | CAR _____ |
| CAR _____ | CAR _____ |
| CAR _____ | CAR _____ |

*Please write until the one minute time limit is up.*

*Do not turn the page until asked to do so, and do not return to prior pages*

## APPENDIX B

## MEASUREMENT SCALE (MATERIALISTIC ATTITUDES:MMA)

1. It really is true that money can buy happiness
2. My dream in life is to be able to own expensive things
3. People judge others by the things they own.
4. I buy some things that I secretly hope will impress other people.
5. Money is the most important thing to consider in choosing a job.
6. I think others judge me as a person by the kinds of products and brands I use.

## APPENDIX C

## MEASUREMENT SCALE (AUTOMOBILE INVOLVEMENT: IPCA)

1. It is worth the extra cost to drive an attractive and attention-getting car.
2. I prefer to drive a car with a strong personality of its own.
3. I have sometimes imagined being a race driver.
4. Cars offer me relaxation and fun when life's pressures build up.
5. Sometimes I get too wrapped up in my car.
6. Cars are nothing more than appliances.*
7. I generally feel a sentimental attachment to the cars I own.
8. Driving my car is one way I often use to relive daily pressure.
9. I do not pay much attention to car advertisements in magazines or on TV.*
10. I get bored when other people talk to me about their cars.*
11. I have little or no interest in car races.*
12. Driving along an open stretch of road seems to "recharge" me in body, mind and spirit.
13. It is natural that young people become interested in cars.
14. When I'm with a friend, we often end up talking about cars.
15. I don't like to think of my car as being ordinary.
16. Driving my car is one of the most satisfying and enjoyable things I do.
17. I enjoy discussing cars with my friends.

*Denotes items that are reverse coded.