THE CONSUMER RESOURCE MANAGEMENT MODEL OF MOTIVATION: THEORETICAL AND SCALE DEVELOPMENT

By

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Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
December, 1995

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AND SCALE DEVELOPMENT

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ACKNOWLEDGEMENTS

It is my wish to say thank you to the people who played instrumental roles in this dissertation and in my studies at Oklahoma State University. First, I wish to express my profound appreciation to Dr. John C. Mowen, my program and dissertation committee chairperson, for his guidance, support, and encouragement. Over the past few years Dr. Mowen has played many roles, including demanding task master, confidant, mentor, and finally, true friend. The lessons learned from Dr. Mowen extend well beyond the classroom and the arena of consumer behavior to self understanding and development.

I would also like to extend my sincere appreciation to the other members of my dissertation committee. My thanks to Dr. Terry Bristol for his candid and forthright suggestions and recommendations; to Dr. Maureen Nemecek for her objective and contemplative observations and insights; and to Dr. Gary L. Frankwick, many thanks for his patience, understanding, counsel, and friendship.

Finally, I say thank you to my wife, Marissa, for her love and understanding, her encouragement, and her timely suggestions throughout the doctoral process. Through it all she has remained my dearest friend and trusted comrade.

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CHAPTER I

INTRODUCTION

It has been argued that understanding consumer needs is the very essence of marketing and the marketing concept (Kotler 1994). The importance of consumer needs is further exemplified by Hutt and Speh (1992), who assert that a core element in a firm's capability to achieve and maintain a competitive advantage is its ability to satisfy the needs of consumers more fully and more rapidly than competitors in the marketplace.

While the importance of consumer needs has been widely recognized, researchers have struggled for several decades to define, categorize, and develop adequate models and theories of needs (Alderfer 1969, Cohen 1967, McClelland 1953, Maslow 1943, Murray 1938). Those difficulties are due in part to the complexity of the construct. For example, it has been argued that some needs evolve from a person's physical well-being and survival (Maslow 1943), while other needs involve one's self-perception and interactions with others (Alderfer 1969).

Furthermore, writers in a variety of disciplines have defined needs in terms of primary (physiological) and secondary (psychological) needs (Beck 1978, Kalat 1993, Steers and Porter 1987). Further complexity is added to the study of human needs when one considers McClelland's (1951) and Alderfer's (1969) contentions that people may seek to enhance and/or protect the resources that are used to fulfill needs.

Despite acute interest in and the wide application of the many diverse theories and models, they have received serious criticism from many researchers (e.g., Noerager

1979; Rauschenberger, Schmitt, and Hunter 1980) who have called for additional work in the area of human needs and the motivation process.

Research Questions

This dissertation is designed to address the earlier calls for the further examination of the relationship between human needs and human behavior. The focal point of this work is the development of a new model of consumer motivation and a pencil-and-paper measure of individual differences in consumer needs.

Accordingly, two primary research questions are examined in the dissertation.

1) Given the limitations of extant models of motivation, can a new and comprehensive, theoretically founded, resource-based model of consumer motivation be developed?

2) Can a reliable measure of individual difference variables related to the dimensions of the new model be developed?

Two studies were conducted in order to investigate these and related questions.

Purposes of the Dissertation

The dissertation has four main purposes: 1) a comprehensive review of the literature on human needs and the motivational process, 2) the development of a theoretical framework for a resource-based model of consumer motivation, 3) the development of an individual difference assessment instrument based on the new model, and 4) the empirical investigation of the construct validity of the newly developed assessment instrument. The following sections discuss each of these purposes in more detail.

Literature Review of Theories of Human Needs and Motivation

The literature review reported in this dissertation is included for two primary reasons. First, the author believes that an examination of the roots of existing models of human needs and theories of motivation is imperative in order to fully understand the underpinnings of current thoughts in relevant arenas.

A second reason for conducting a thorough review of the literature is to gain additional insights into the complexity and the limitations of the extant models and theories and their lack of applicability to marketing and consumer behavior.

Theoretical Framework

A second purpose of this research is to build upon the previous work of motivation and needs researchers to develop a comprehensive theory of consumer motivation. A review of the current models and theories reveals a fragmented literature replete with redundancy, a lack of parsimony, and limited consumer behavior applicability.

In addition, although the importance of continued work in the area of human needs has been championed by a variety of marketing writers (e.g., Engel, Blackwell, and Miniard 1995; Kotler 1994), the review indicates that little work has been done in this research stream in the last decade.

It is important that the reader understand that despite limitations and shortcomings, the work of previous researchers is not to be discarded or ignored. Rather, various elements from the works of Alderfer (1969), Cohen (1967), Maslow (1943, 1954), McClelland (1967), and others serve as the infrastructure for a new resource-based theory of consumer motivation.

The reader should also be aware that this review does not encompass all motivational theories and models in the literature. Instead, this dissertation reviews those psychologically based theories and models deemed relevant to the central issues of this work.

Scale Development

The third purpose for the dissertation is the development of a general measure of consumer needs that is directly related to the dimensions of the resource-based theory of motivation. This portion of the research followed the widely recognized scale development paradigm developed by Churchill et al. (1979). As such, the development followed an iterative process featuring domain specification, item generation, measure purification, and the assessment of reliability and validity.

Construct Validity

The fourth and final purpose of the dissertation is to examine the properties of convergent, discriminant, and predictive validity of the newly developed assessment instrument. A rich literature exists stressing the importance of investigating the construct validity of marketing measures. One widely acclaimed method for accomplishing this task is the multitrait-multimethod (MTMM) matrix developed by Campbell and Fiske (1959). However, as noted by Bagozzi (1991), use of the MTMM approach is noticeably absent in the marketing literature.

Heading a list of several reasons that have been suggested for this dearth of applications are complexity, vagueness, and the difficulty of obtaining multiple measures of the construct of interest via multiple methods heading. In an attempt to overcome these obstacles yet maintain the benefits to be derived from the use of the MTMM, an adaptation of the approach has been developed and implemented in this dissertation. More specifically, a multitrait-multiscale (MTMS) matrix similar to that employed by Cronin and Taylor (1992) is employed to examine the convergent and discriminant validity of the scale developed in this dissertation. The MTMS approach is explained more fully in the Chapter IV of this dissertation.

Organization of the Dissertation

This dissertation consists of six chapters. Chapter I provides an introduction to the purpose of the study and delineates the research questions addressed in the study. Chapter II presents a review of the human needs and motivation literature with a specific focus on work directly related to the psychologically based theories of motivation (e.g., Alderfer 1969, McClelland et al. 1953, Maslow 1943).

As noted earlier, this review is not intended to serve as a meta-analysis, but to provide a theoretical framework for a resource-based model of consumer motivation, which is described in Chapter III. The chapter presents a detailed examination of the relationship between previous models and theories and the new model.

Chapter IV presents a detailed description of the methodology employed in the research. The chapter includes specifics of the design, subjects, procedure, instruments, and data analysis techniques for a pilot study and the main study in the dissertation. Also included in Chapter IV are the results and subsequent discussion of the findings of the pilot study.

Chapter V consists of the results of the data analysis of the main study. Finally, Chapter VI includes a discussion of the research findings, limitations, and implications for future research and managerial applications.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The principal objective of this chapter is to illustrate that although there exists a rich and diverse body of literature regarding human motivation, several shortcomings and controversies in the domain remain unresolved. An extensive review of the literature is presented in order to demonstrate how the work of previous motivation researchers serves as a foundation upon which a new theory of consumer motivation has been developed, as well as to emphasize the contribution this study makes to the literature. The theories of motivation that are reviewed in this study are presented in Figure 1.

Figure 1

Theories of Motivation Reviewed

Murray's Manifest Needs Theory (Murray 1938)
Maslow's Hierarchy of Needs (Maslow 1943)
Alderfer's ERG Theory (Alderfer 1969)
McClelland's Achievement Motivation Theory (McClelland et al. 1953)
Cohen's CAD Model (Cohen 1967)
SRI Values and Lifestyles Inventories (Mitchell 1983)
List of Values (Kahle et al. 1986)

Researchers have proposed a diverse range of theories and models designed to explain the origins and effects of the needs and motivations of people. As seen in Figure 2, several early motivation researchers in the field of psychology developed extensive lists of psychogenic needs (McDougall 1932, Young 1936, Murray 1938, Madsen 1959).

Figure 2

Lists of Human Needs

<u>W. McDougall</u>	<u>P.T. Young</u>	<u>H. Murray</u>	<u>K.B. Madsen</u>
(1932)	(1936)	(1938)	(1959)
Food Seeking	Hunger	Abasement	Hunger
Disgust	Nausea	Achievement	Thirst
Sex	Thirst	Affiliation	Sex
Fear	Sex	Aggression	Nursing
Curiosity	Nursing	Autonomy	Temperature
Protective/parental	Urinating	Counteraction	Pain Avoidance
Gregarious	Defecating	Defendance	Excretion
Self-assertive	Avoiding Heat	Deference	Oxygen
Submissive	Avoiding Cold	Dominance	Rest/sleep
Anger	Avoiding Pain	Exhibition	Activity
Appeal	Air	Harm	Security
Constructive	Fear/anger	Avoidance	Aggression
Acquisitive	Fatigue	Infavoidance	
Laughter	Sleep	Nurturance	
Comfort	Curiosity	Order	
	Social Instinct	Play	
	Tickle	Rejection	
		Sentience	
		Sex	
		Succorance	
		Understanding	

One of the most widely recognized of such lists is Murray's Manifest Needs theory (1938) in which he identified what he referred to as 20 basic needs inherent to all individuals. Murray proposed that people could be classified according to the various strengths of those "basic" needs, which ranged from the more commonly recognized needs for achievement and affiliation to the rather unusual needs of succorance (relief), sentience (feeling), and infavoidance (avoidance of harmful or unpleasant stimuli). He argued that such needs were the central motivating force for people and were activated (or were manifested) by cues from the individual's external environment.

In general, empirical research has not been supportive of Manifest Needs theory nor other similar works (e.g., Kalat 1994). A careful review aptly demonstrates the limitations and the major shortcomings of the lists of needs presented in Figure 2. For example, each list includes several "unique" needs that seem questionable at best. Further, such lists offer little or no organization and suggest that each need or motivation is equally important to all people. Yet another notable limitation of the early lists of human needs is the implication that each need is independent of the other (Kalat 1994).

Given the limitations presented above, perhaps the greatest contribution of the early lists of human motivations is that they have inspired a great deal of additional work in the area of human needs. More precisely, many researchers believed that extensive lists of unique and sometimes peculiar human needs were of limited applied value (Alderfer 1969, 1972; McClelland 1953, 1961; Maslow 1943). In response to such beliefs, Abraham Maslow developed one of the earliest and most widely cited comprehensive theories of motivation in the mid-1940s.

Maslow's Hierarchy of Needs

Like the earlier lists of needs, Maslow's (1943) Needs Hierarchy was derived from his clinical psychological experience and training. The original Needs Hierarchy framework features six fundamental needs that, according to Maslow, are experienced by all people: physiological, safety, love, esteem, self-actualization, and being needs.

In later writings, Maslow discussed additional needs, including the needs for cognitive understanding and aesthetics (1954). Cognitive needs were defined as the need to know and understand and included one's curiosity and desire to learn. Aesthetic needs included the desire to move toward beauty and away from unpleasantness or ugliness. However, the core of Maslow's Needs Hierarchy consists of the six needs presented in Figure 3.

Accordingly, this portion of the review focuses on the original six needs identified by Maslow. It is important to note, however, that cognitive and aesthetic needs are reflected in a new model of consumer motivation presented later in this manuscript.

Figure 3

Maslow's Needs Hierarchy

Being-Needs: the need to expand one's knowledge of self and others; to operationalize one's personality
Self-Actualization Needs: the need to achieve one's full potential
Esteem Needs: the need for prestige, fame, feelings of accomplishment
Love Needs: the need for social relationships and interactions with others
Safety Needs: the need for security and protection
Physiological Needs: the need for food, drink, oxygen, temperature

As conceptualized in the Needs Hierarchy, physiological needs were the most basic of human needs and as such were the most predominant of all needs. That is, if an individual was lacking food, safety, love, and esteem, she/he would generally be motivated to satisfy the primary need for food before satisfying other secondary needs.

In essence, Maslow (1943) stated that after physiological needs had been gratified, an individual would be motivated by the subsequent, less basic needs in the hierarchy. He maintained that as one fulfilled lower-order needs (such as physiological needs), higher-order needs (such as love, esteem, or self-actualization needs) would begin to emerge. For example, after hunger and security needs have been satisfied, an individual might be motivated by the need for love or socialization. Finally, after the first four need levels in the hierarchy have been satisfied, Maslow proposed that individuals are motivated to satisfy self-actualization and being needs.

While Maslow conceptualized human needs in a hierarchical manner, he warned about related misconceptions of his theory. Specifically, he recognized that due to its hierarchical structure, Needs Hierarchy theory might be interpreted as though human needs were arranged in an all-or-nothing stepwise relationship and that lower-order needs must be completely satisfied before another need could emerge. In response to such misinterpretations and resulting criticism, Maslow wrote:

> . . . *it is as if the average citizen is satisfied perhaps 85 percent in his physiological needs, 70 percent in his safety needs, 50 percent in his love needs, 40 percent in his self-esteem needs, and 10 percent in his actualization needs* (1943).

An important implication of Maslow's illustrative example is that while human needs are arranged by level of importance, needs are also interdependent and exist in an inter-related system. More specifically, Maslow's assertions indicate that as with any system or network of interrelated components, changes in any one human need have a reverberating effect on all other needs. (This aspect of the Needs Hierarchy, as will be seen later, plays a key role in the development of the resource-based model of motivation developed in this manuscript.)

The far-reaching impact of Maslow's Needs Hierarchy is well illustrated by its inclusion in textbooks in an array of disciplines from psychology, to marketing, to work motivation and organizational behavior. However, despite such widespread academic acknowledgment, it has been argued that the Needs Hierarchy suffers from a lack of empirical support and redundancy (Payne 1970).

Such criticisms not withstanding, Maslow's model has generally served the purpose for which it was intended – as a framework for future research. Indeed, in a manner similar to the earlier all-inclusive lists of needs, the Needs Hierarchy has served as a springboard from which an impressive array of subsequent research has emerged as researchers have modified, adapted, and extended Maslow's original model. One such alternative to the Needs Hierarchy, the ERG Theory of Motivation, was proposed by a student of Maslow's, Clayton Alderfer (1969).

ERG (Existence, Relatedness, Growth) Theory

ERG Theory was developed as a result of Alderfer's sense that a "more adequate understanding could be achieved for the kinds of phenomena to which Maslow's theory was addressed" (Alderfer 1969). As will be discussed more fully later in this chapter, of specific concern to Alderfer was the overlapping of need categories as proposed in the Needs Hierarchy.

In the ERG Theory of motivation, Alderfer suggested that people are motivated by three core needs: to obtain material ***existence*** needs, to maintain interpersonal ***relatedness*** needs, and to seek opportunities for personal development and ***growth***.

As operationalized by Alderfer, existence needs include all forms of material and physiological desires and can be divided among people in a manner in which one individual's gain is another's loss when resources are limited. Relatedness needs, which include all needs that entail relationships between an individual and other people considered important to the individual, are satisfied through a process of sharing or exchange. The satisfaction of one's growth needs is dependent upon an individual successfully engaging in problems that offer the opportunity to reach one's full potential.

While the Needs Hierarchy and ERG Theory were both developed in an attempt to categorize human needs; and while both have a hierarchical foundation, the two theories differ in several fundamental ways. For instance, Alderfer (1969, 1972, 1989) emphasized the distinction between the gain and/or loss of resources necessary to satisfy existence needs and the exchange process necessary to satisfy relatedness needs.

As stated earlier, Alderfer was further troubled by the overlap between the need categories in the Needs Hierarchy. He argued that Maslow's safety needs tended to overlap with both physiological and love needs. As such, as indicated in Figure 4, Alderfer contended that safety needs could be effectively combined under the ERG category of existence needs. He further stipulated that safety needs involving social interaction should be combined with love needs and would thereby fit in ERG's relatedness category.

Figure 4

A Comparison of Theories of Motivation

<table>
<tr><th>Maslow's Hierarchy</th><th>Alderfer's ERG</th><th>McClelland's nAch</th><th>Cohen's CAD Model</th></tr>
<tr><td>Physiological
Safety/Material</td><td>Existence
Needs</td><td></td><td></td></tr>
<tr><td>Safety/
Interpersonal</td><td rowspan="3">Relatedness
Needs</td><td rowspan="3">Affiliation
Needs</td><td rowspan="3">Compliant
Orientation</td></tr>
<tr><td>Love/
Belongingness</td></tr>
<tr><td>Esteem/
Interpersonal</td></tr>
<tr><td>Esteem/
Self-confirmed</td><td rowspan="3">Growth
Needs</td><td rowspan="2">Power
Needs</td><td rowspan="2">Aggressive
Orientation</td></tr>
<tr><td>Self Actualization</td></tr>
<tr><td>Being Needs</td><td>Achievement Needs</td><td></td></tr>
</table>

Alderfer (1969) made a similar argument concerning Maslow's esteem need category. Alderfer noted that Maslow had referred to esteem needs in two different ways: 1) esteem needs that include the regard one receives from others, and 2) esteem needs that depend upon the internal cues from achievement and a person's feelings of independence (1943).

As seen in Figure 4, as conceptualized by Alderfer, the first component of Maslow's esteem needs is similar to love needs, and the second component is similar to self-actualization needs. Accordingly, he proposed that esteem needs based on interactions with others belonged in the ERG category of relatedness needs, while esteem needs based upon achievement fit the ERG growth needs.

Alderfer was also troubled by Maslow's contention that until basic, lower-order needs (physiological and safety needs) were satisfied, an individual was unlikely to be concerned with higher-order needs (love, esteem, self-actualization). That is, Alderfer considered Maslow's model to be rigid and inflexible and stated that, unlike the Needs Hierarchy, ERG Theory recognized that while lower-level needs might be unsatisfied, individuals were simultaneously capable of recognizing and responding to higher-order needs.

As noted earlier in this paper, a careful reading of the literature reveals that Alderfer may have seriously misinterpreted Maslow's theory and strongly suggests substantial consistency between the two theories on this point (Alderfer 1969, 1989; Maslow 1943, 1970). As indicated by the following passages taken from the writings of Maslow and Alderfer, both researchers seem to have been arguing that only in extreme situations (i.e., life and death situations) are human needs strictly ordered:

> *If all the needs are unsatisfied, and the organism is then dominated by the physiological needs, all other needs may become simply non-existent or be pushed into the background. For the man who is extremely and dangerously hungry, no other interests exist but food* (Maslow 1943, pp. 374-375).

> *ERG Theory would say that a chronically hungry man can recognize whether he feels connected to primary groups and to society and whether he is able to engage in activities which enable him to use his skills and talents* (Alderfer 1969, p. 27).

Such writings clearly indicate that at least one of Alderfer's main criticisms of the Needs Hierarchy was generally without merit and are illustrative of the controversies surrounding the early motivation theories. More importantly, from the author's research perspective, these passages reiterate the interdependent, systems-oriented nature of human needs.

Alderfer (1972) further criticized Maslow's theory for a lack of empirical support regarding middle-level interpersonal needs. Alderfer cited the work of a variety of researchers to substantiate his claim of no empirical support for the Needs Hierarchy's predictions bearing on safety, belongingness, and esteem needs and only limited support for self-actualization needs.

Although ERG Theory was developed in response to perceived short-comings of Maslow's theory, it is important to note that Alderfer's theory has been subjected to similar criticisms. For example, research by Wanous and Zwany (1977) and Rauschenberger, Schmitt, and Hunter (1980) indicated that while people may categorize their needs in the three-dimensional framework suggested by Alderfer, the theory tends to be of limited value in practice. These same studies indicated that there was no evidence of change in the three need levels over time. Thus, while Alderfer made valuable contributions by pin-pointing weaknesses in Maslow's work, his ERG Theory suffers from similar problems.

One aspect of Alderfer's theory, however, shares a common thread with one of the most widely recognized and often cited models of human motivation – McClelland's Achievement Motivation theory. Alderfer (1972) contended that the need for achievement, as conceptualized earlier by McClelland, Atkinson, Clark, and Lowell (1953), was similar to an individual's growth needs as operationalized in ERG Theory.

Further, Alderfer postulated that the needs for affiliation and power as conceptualized by McClelland and his colleagues were comparable to relatedness needs. With these similarities in mind, this review now turns to a discussion of McClelland's Achievement Motivation theory.

McClelland's Achievement Motivation Theory

In 1938, Murray defined a person's need for achievement as a "desire or tendency to overcome obstacles, to exercise power, to strive to do something difficult as well and as quickly as possible" (pp. 80-81). David McClelland and his colleagues (1953) incorporated this basic premise into Achievement Motivation Theory, which proposes that people have three primary needs: the need for achievement, the need for affiliation, and the need for power. Each of the needs is defined more fully below and is presented in comparison to other theories of motivation in Figure 4.

> ***Need For Achievement:*** An acquired or learned need (not innate). Such individuals are likely to strive to do a good job; the focus is on personal improvement.
>
> ***Need For Affiliation:*** Social relations are more important than accomplishment.
>
> ***Need For Power:*** The primary concern is the need to control and influence people. This need takes precedence over the need for affiliation.

Achievement Motivation Theory holds that individuals are motivated according to their desire to perform in terms of a standard of excellence or to succeed in competitive situations. McClelland et al. (1961) argued that while virtually all people have a need to achieve, the strength of that need varies between individuals. Further, a person's level of achievement motivation is dependent upon their childhood, personal and occupational experiences, and upon situational factors.

A basic premise of McClelland's theory is that human motives exist in the preconscious mind and operate just below the level of full awareness (1976). That is, McClelland asserts that human motives or needs are stored between the conscious and the unconscious in an individual's daydreams.

Accordingly, Achievement Motivation Theory proposes that a person's needs can be measured via the Thematic Apperception Test (TAT) developed by Murray (1938). When using the TAT, the researcher is primarily interested in the individual's own perception of stimuli, the meaning given to the stimuli by each individual, and the way in which the individual organizes the stimuli. Such an individualistic focus of the TAT has led to one of the major criticism of Achievement Motivation Theory – that the TAT is a projective (rather than an objective) test. Consequently, some have argued that research findings related to McClelland's theory suffer from a lack of consistent reliability and validity (Cassidy and Lynn 1989).

Additional criticisms have been leveled at McClelland's theory. For example, Klinger (1966) examined the need for achievement literature and discovered that nearly half of the experiments reported nonsignificant findings. Further, Jackson, Ahmed, and Heapy (1976) argued that need for achievement was not a unitary variable. Rather, they postulated that achievement motivation consisted of six dimensions and suggested that an extensive profile of the individual was necessary to pinpoint his/her location on each of the six dimensions.

In short, much like the previous needs theories, McClelland's Achievement Motivation Theory has received limited empirical support. However, Achievement Motivation Theory, as well as the works of Alderfer and Maslow, have had a major impact on motivational researchers in organizational behavior and work motivation (i.e., Argyris 1964; Porter 1962, 1963; McGregor 1960) and marketing (i.e., Engel, Blackwell, and Miniard 1993; Kotler 1994). Further, despite the criticisms and shortcomings, the theories continue to serve as valuable frameworks on which additional research is based. Examples of such research include the CAD model, the Stanford Research Institute's Values and Lifestyles Inventories, and the List of Values scale. Each of these approaches to the study of human needs is discussed in the following sections.

The CAD (Compliance, Aggression, Detachment) Model

Beginning in the 1960s, marketing researchers began to adapt need theories from the psychological and organizational behavior literatures and to use them in an attempt to further their understanding of consumer behavior. One such effort, Joel Cohen's CAD scale, was designed as a tool that marketers could employ to measure consumer needs and thereby tailor their advertising and promotional messages to appeal to those needs (Cohen 1967).

The CAD has its roots in socio-psychological theory and recognizes that need satisfaction is a function of the relationship between the individual and the society in which she/he functions. That is, people endeavor to meet the needs of society while society assists the individual in the attainment of personal needs.

Building upon this foundation, the CAD model suggests that consumer behavior is the result of three predominant interpersonal orientations: compliant, aggressive, and detached (Cohen 1967). Each of the orientations is more fully defined below and compared to other need theories in Figure 4.

Compliant Orientation. Individuals with a compliant orientation are characterized by a desire to be involved in the activities of those around them. Such people have a strong need to be loved, wanted, appreciated, and needed. Compliant individuals tend to disapprove of egotism, aggression, assertiveness, and power-seeking. Furthermore, such individuals are likely to seek acceptance in society by conforming with accepted forms of behavior (Cohen 1967).

Aggressive Orientation. Individuals with an aggressive orientation are characterized as being motivated by the need for power, the need to excel, and the need to achieve success, prestige, and admiration. These individuals need others to confirm their own self-image and to strengthen and substantiate their confidence in their own competitive abilities. It is important to aggressive individuals that they are noticed and admired by others (Cohen 1967).

Detached Orientation. Individuals with a detached orientation tend to be independent and to move away from others. Such individuals need emotional distance between themselves and other people. Detached people are likely to consider themselves as unique, possessing certain qualities and abilities that they feel should be obvious to others. Those people with a detached orientation seek freedom from obligations and do not want to be influenced or to share experiences (Cohen 1967).

As outlined by Noerager (1979), the design of the CAD scale has been said to offer marketers several advantages. For example, proponents of the model assert that the Likert-like scale, which consists of 35 questions, is uncomplicated and easily interpreted.

Further, compared to such personality measures as psychographic inventories (e.g., VALS), CAD has been said to offer marketers an inexpensive and relatively simple means of primary data collection. A third advantage proffered by the CAD scale is that people who score highly in one dimension are unlikely to do so in the other dimensions. Finally, as reported by Kernan (1971), empirical evidence suggests that CAD scores are related to consumer behavior.

Ironically, the CAD model shares a somewhat common fate with the very models it was designed to replace. For example, Noerager (1979) noted that in a manner similar to that of the Needs Hierarchy and ERG Theory, the CAD scale had received little support in the marketing literature. In addition, he found evidence that the reliability, validity, and internal structure of the scale required further development and refinement.

Accordingly, Noerager (1979) called on marketing researchers to continue to develop, test, analyze, and improve measuring instruments designed specifically for the marketing discipline. The Stanford Research Institute's Values and Lifestyles Inventories are examples of such research efforts.

The Values and Lifestyles Inventory (VALS1 and VALS2)

The Values and Lifestyles Inventory, a psychographic technique developed by Arnold Mitchell of the Stanford Research Institute (SRI) in 1978, also has its theoretical roots in Maslow's Needs Hierarchy. The VALS system was designed to divide the consumer population into various segments, which are organized according to a rather complex hierarchy of needs.

Based on the hierarchy, consumers are viewed as fitting into one of four broad categories: 1) need driven, 2) outer-directed, 3) inner-directed, and 4) integrated. Each of the categories is more fully described below.

> ***Need Driven-Consumers.*** Such consumers display spending patterns driven by needs rather than by preferences. These consumers tend to buy products that will help them "fit in" with people they respect.
>
> ***Outer-Directed Consumers.*** The spending patterns of this group of consumers is driven by the awareness that other people will make attributions based upon their purchases.
>
> ***Inner-Directed Consumers.*** Such buyers are characteristically driven in their purchase behavior by their own individual needs.
>
> ***Integrated Consumers.*** This group of consumers exhibits an effective combination of outer-directed and inner-directed characteristics.

Based on those four broad categories, the VALS system uses a series of some 30 questions to further classify buyers into one of nine consumer segments. The VALS segments and their relationship to the need categories are presented in Figure 5.

Figure 5

VALS Segmentation Categories

Type of Consumer	VALS Segment
Need Driven	Survivors Sustainers
Outer-Directed	Belongers Emulators Achievers
Inner-Directed	I-Am-Me Experiential

The VALS system has been utilized by a variety of marketing organizations. Kahle, Beatty, and Homer (1986) reported that VALS has been used by AT&T, *The New York Times*, *Penthouse*, Atlantic Richfield, Boeing Commercial Airplane Co., American Motors, and Rainier National Bank. Relatedly, Rebecca Holman stated that VALS has "gained rapid acceptance and widespread usage in marketing" (1984).

However, as noted by several marketing academicians (Engel, Blackwell, and Miniard 1993; Mowen 1993), the VALS system does have limitations. For instance, the inventory is a proprietary instrument; as such, reliability and validity are difficult to assess. In addition, many companies have found it difficult to predict buying behavior or to target consumers using the VALS system (Farnsworth 1989). Such criticisms may have, in part, led to the development of the revised VALS2.

The VALS2 system is built upon two dimensions: 1) self-orientation and 2) resources. The first dimension relates to an individual's patterns of attitudes and activities that help to sustain or change their social self-image (Riche 1989). Included in this dimension are consumers who may be principle-oriented (P-O), status-oriented (S-O), or action-oriented (A-O). P-O consumers are said to be motivated by their beliefs or principles as opposed to their feelings or desire for approval. S-O consumers are generally strongly influenced by the approval and opinions of others, while A-O consumers tend to be guided by their preference for social or physical activity, variety, and risk taking (Riche 1989).

As illustrated in Figure 6, in a manner that is reminiscent of the CAD model, VALS2 further divides the three consumer orientations into eight distinctive consumer segments (Piirto 1991).

Figure 6

VALS2 Classification System

Self-Orientation	Segment
Principle Oriented	Fulfilleds Believers
Status Oriented	Actualizers Achievers Strivers Strugglers
Action Oriented	Experiencers Makers

The second dimension of the VALS2 system involves a continuum of resources similar to those defined by Foa and Foa (1974). Further, the resource concept is consistent with Social Exchange Theory, which proposes that social interactions are based on the exchange of valued commodities ranging from love to power (Homans 1961). The resources proposed in VALS2 range from minimal to abundant and are defined as the capacities and the means - including education, income, health, self-confidence, eagerness to buy, intelligence, and energy level - that enable people to act on their desires (Riche 1989). That is, the resources that people possess are integral to the fulfillment of human needs.

The VALS2 system is fundamentally different from the earlier version (Piirto 1991). While the original system used values and lifestyles as the basis for psychographic segmentation, VALS2 is based on enduring psychological stances (Farnsworth 1989). In addition, demographics are less important in the VALS2 system than in the original program, and as stated by Gates (1989), the updated system is said to take into account changes in the economy and society while defining market segments more narrowly than does VALS1.

While the VALS2 system was developed in response to criticisms of the original VALS program, it too has been subjected to critical review. For example, business managers have argued that the system is of limited usefulness to firms that appeal to a narrow segment of the market, while others have expressed concern with the system due to its lack of empirical support in the field (Gates 1989). In addition, like the VALS1 system, VALS2 is the property of the Stanford Research Institute, making it difficult to assess the validity and reliability of the instrument (Mowen 1993).

The limitations and criticisms of the Values and Lifestyles Inventories have led researchers to examine alternative methods and models for classifying human values and needs. One such alternative, the List of Values, is discussed more fully in the following section.

List of Values (LOV)

Like the VALS instruments, the List of Values (LOV) has its roots in Maslow's Needs Hierarchy. The scale was designed to measure an individual's adaption to various roles through value fulfillment (Kahle, Beatty, and Homer 1986) and to categorize people according to Maslow's hierarchy. Such assessments are conducted by asking respondents to examine a list of nine values that were developed from Rokeach's list of eighteen terminal values (1973). A more detailed description of the nine LOV values is presented in Figure 7.

Figure 7

The LOV Classification System

Value Type*	Description
Self-Respect	All-American value; selected by largest number of people; least distinctive endorsers
Security	A deficit value; such people lack economic, psychological security
Warm Relationships With Others	An excess value; endorsed by people who have friends and are friendly
Sense of Accomplishment	Tend to be successful middle-aged men; good jobs, well-educated
Self-Fulfillment	Well fulfilled economically, educationally, emotionally; healthy and self-confident
Being Well-Respected by Others	Selected by the "Rodney Dangerfields" of the world; little occupational prestige
Sense of Belonging	Endorsers tend to be housewives and clerical workers
Fun and Enjoyment	Young people who appreciate life; work in sales or labor; Optimistic and well adjusted

*Note: Kahle's original work included nine values; however since the ninth value (excitement) was selected only rarely as a most important value, this value is usually collapsed into Fun and Enjoyment.

After examining the nine values listed in the scale, respondents are asked to identify their two most important values or to rank the values from least important to most important. The responses are used to categorize people according to Maslow's

Hierarchy of Needs. In essence, then, the LOV uses values as indicators of human needs. Such a conceptualization is consistent with the earlier works of Maslow (1943) and Murray (1938), who argued that values were the equivalent of needs.

Kahle and her colleagues (1986) noted that there are significant dissimilarities between VALS and LOV. For example, in VALS individuals are said to move from a less desirable category (i.e., sustainers) to a more desirable category (i.e., integrated). LOV makes no such claim. Further, Kahle, Beatty, and Homer (1986) argue that while VALS combines demographic and psychographic information, LOV obtains demographic predictions separately. The researchers hold that such demographic information more specifically identifies the source of influence in an individual's behavior. In addition, it has been noted that compared to VALS, the LOV is relatively simple to administer and lessens the potential for communication errors as research traverses the marketing system (Kahle, Beatty, and Homer 1986).

Although research suggests that LOV is a promising marketing tool, and while some researchers contend that it offers certain advantages over the VALS systems, some authors disagree. For example, Novak and MacEvoy (1990) concluded that our extensions provide evidence that . . . VALS may be preferred over LOV as a segmentation basis (p. 109). Such contradictions indicate that additional work in the area of consumer values is needed. Such concerns are echoed by Kahle et al. (1986), who noted that while the LOV system did display some utility, its predictive ability was limited. Accordingly, the researchers called for further work in the area of consumer values and needs.

Synthesis

It is evident from this brief review of the motivation literature that the field is complex and controversial. While many need theories and models have been developed, virtually all of them suffer from a variety of weaknesses and shortcomings, including a lack of parsimony, limited empirical support, redundancy and category overlap, and a deficiency of applicability. Despite these limitations, the works of earlier researchers is not to be discarded or ignored. Rather, various elements from the works of Alderfer, Cohen, Maslow, McClelland, and others serve as building blocks for a new approach to the examination of consumer motivations – the Resource Management Model of Motivation.

CHAPTER III

THEORETICAL DEVELOPMENT AND SYNTHESIS

The review of the motivation and needs literature presented in Chapter II reveals a complex and controversial field. While many need theories and models have been developed, expanded, and revised during the past several decades, virtually all such models suffer from a variety of shortcomings and weaknesses – such as undue complexity, limited empirical support, redundancy and/or category overlap, and a deficiency of marketing and consumer behavior applicability.

Despite the drawbacks, the works of earlier researchers serve as valuable tools for additional exploration of human needs in the consumer behavior arena. Indeed, various components from the works of Alderfer (1969, 1972), Cohen (1967), Foa and Foa (1974), Maslow (1943, 1954), McClelland (1953, 1976), and others serve as the underpinning for a new and dynamic approach to the examination of consumer needs.

This chapter provides a background and the theoretical framework of a new model of motivation – the Consumer Resource Management Model. The chapter includes the major assumptions of the model and advances several subsequent hypotheses.

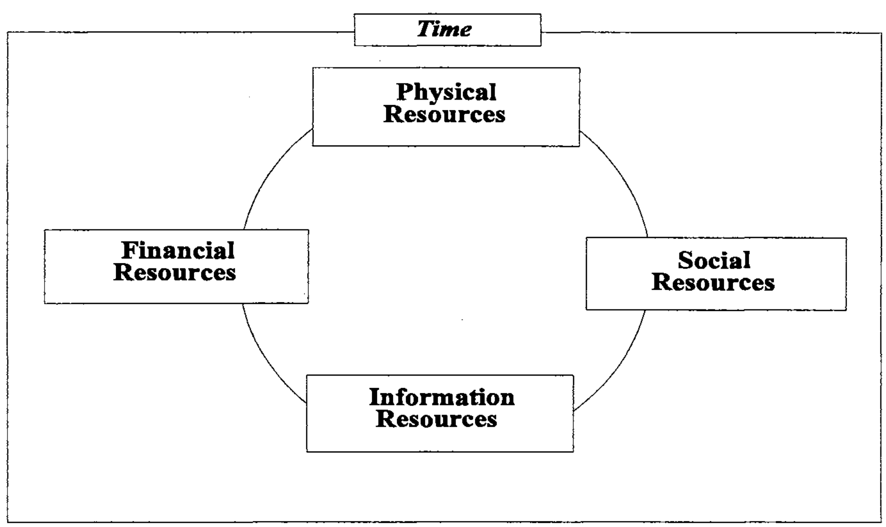
A Resource Management Model of Motivation

The underlying goal in the development of the Consumer Resource Management Model of Motivation (CRMM) was to create a parsimonious theory that integrates previous research efforts on motivation. In addition, the goal was to develop a model that applies specifically to consumer behavior and marketing. Finally, the CRMM was conceptualized so as to incorporate work from Prospect Theory (Kahneman and Tversky 1979), and the Time and Outcome Valuation model (Mowen and Mowen 1991) on the valuation of gains and losses of resources.

The CRMM, which is graphically depicted in Figure 8, is founded upon the premise that in order to function properly, humans engage in exchange activities to protect and enhance certain fundamental assets (resources). Broadly defined, resources can be operationalized as available, accumulative assets that one can use to achieve one's goals. Such assets must be transmittable or exchangeable between individuals.

Figure 8

The Consumer Resource Management Model of Motivation



Using earlier motivation theories and the work of Foa and Foa (1974) as a foundation, four such resources have been identified in the CRMM. These resources have been more concisely defined as the physical, social, informational, and financial assets that allow an individual to function effectively in the world. Specific definitions of each of the four resource needs and their theoretical roots are provided below.

Before moving on, however, it is important that the reader understand that the author is not suggesting that the four resource types identified in the new model are all-inclusive. Indeed, it is suggested that additional resources – such as spiritual resources – may exist. However, the objectives of this dissertation are not to provide an updated list of needs as presented in Manifest Needs Theory nor any other list of human needs. Rather, this dissertation examines four specific consumer resources identified via the literature and empirically tests the validity of a model based on those resources.

CRMM Consumer Resources Defined

> ***Physical Needs.*** One's need to sustain life, obtain sensory pleasures, and maintain or enhance his or her physical characteristics (e.g., muscle tone and physical beauty).

As defined by Maslow (1943, p. 372) and Alderfer (1969), physical needs are composed of two types of needs. First, physiological needs are one's desires for substances/materials necessary to sustain life (i.e., food, water, oxygen).

A second type of physical need identified by earlier motivation researchers involves an individual's desire to experience sensory pleasures (i.e., taste, smell, touch). Thus, not only are people concerned with having sufficient food to facilitate bodily functions, they may also desire an aesthetically attractive body or to experience the gentle caress of a loved one's hand.

> *Social Needs.* An individual's need for relations and interactions with other people; one's desire for inclusion in one's group.

As conceptualized in the CRMM, an individual's social needs consist of a combination of love/belongingness needs and esteem needs as defined in the Needs Hierarchy. More specifically, Maslow (1943, p. 381) stated that people will "hunger" for affectionate relations with friends, spouses, and "people in general." Such a definition aptly illustrates the importance of one's desires for a wide range of social interactions and relationships.

In addition, Maslow contended that people in our society desire a high evaluation of themselves, for self-respect (self-esteem), and for the esteem of others (1943, p. 381). That is, Maslow viewed two types of esteem needs – esteem derived from one's self-perceived adequacy and confidence and esteem derived from recognition, attention, or appreciation from other people. As such, this second type of esteem need satisfaction is directly tied to social interactions with other people. Based upon these conceptualizations, love/belongingness needs and esteem needs are collapsed into one need category – social needs – in the CRMM model.

> *Financial Needs.* One's need to obtain money, goods, property, and other assets with monetary value that are transmittable between two or more people.

Although Foa and Foa (1974) identified money, goods, and services as resources, other general theories of human motivation have not specifically addressed the need for wealth. This is somewhat surprising when one considers the central importance of financial resources in order for a person to survive and prosper. Financial resources are required to enhance physical needs (e.g., people purchase clothing to protect and to enhance their bodies).

In addition, however, financial resources can be used to obtain information (e.g., purchasing textbooks with money) and to facilitate social relations (e.g., giving another person a rose to express liking). As noted by Belk, Wallendorf, and Sherry (1989, p. 539), virtually any object can have value to the right person. The researchers found that people considered collections of such things as spoons, ceramic watermelons, and old food item packages to be treasured possessions. Such items are valuable to the degree that the owners would not consider selling them. The fact that other consumers are willing to purchase such items provides evidence that a wide variety of objects, from the common to the unique, do indeed qualify as financial resources as operationalized in the CRMM. In sum, the author considers the inclusion of financial resource needs to be an integral addition to the further study of human needs.

> ***Information Needs.*** One's need to gain knowledge, to investigate, explore, study, and/or understand phenomenon; one's need to satisfy intellectual curiosity, to engage in cognitive activities.

Just as there are individual differences in peoples' needs for financial resources, social relations, and physical prowess or appeal, so too are there differences in peoples' need to learn, to further their intelligence, or to explore and understand their world. For example, some consumers with a high need for cognition have a strong desire to engage in high levels of cognitive activities (Cacioppo and Petty 1982). Other consumers with a low need for cognition may have very limited desires for cognitive stimulation.

In a buyer behavior setting, some consumers have a strong need to understand how and why the products they purchase work, while others have no such cognitive curiosity or need to comprehend those aspects of their purchases. Other consumers may buy products for the purpose of gaining additional knowledge that may provide a competitive advantage in their careers.

It is further posited in the CRMM that the four consumer resources exist in an interdependent system. As such, it is argued that as resource levels or amounts change, imbalances in the system may occur. For example, if an individual is strongly motivated to accumulate financial resources (e.g., stocks and bonds, large sums of money, fine art collections, etc.) and engages in activities to that end, activities directed at developing or maintaining social resources (e.g., friendships, intimate relationships, etc.) may necessarily decrease. In essence, the four resources in the CRMM exist in a dynamic and interrelated system.

A second key premise of the CRMM concerns the construct of time. A brief excursion into familiar adages aptly illustrates the popular perception that time is an accumulative resource. For example, it is not uncommon to hear someone talk of "saving time" or "buying time." Such perceptions are also reflected in the mass media – a magazine advertisement for a leading computer manufacturer urges the consumer to "make the most of their most valuable asset – time."

In this dissertation, time is clearly not viewed as a resource. Rather, in the CRMM it is proposed that time is a finite temporal space in which activities are performed. Such a conceptualization is consistent with the way in which the construct is defined in the *Webster's Collegiate Dictionary*:

> **Time:** *a measurable period during which an action, process, or condition exists or continues; the point or period at which something occurs* (p. 1235).

Earlier in this dissertation a resource was defined as ***available, accumulative assets that one can use to achieve one's goals. Such assets must be transmittable or exchangeable between individuals***. When viewed from this perspective, it is readily apparent that time is not a resource because time can neither be purchased nor accumulated.

Further, time in and of itself cannot be transmitted from one person to another. That is, all individuals, regardless of their wealth or position, no matter their physical prowess or their informational resources, have sixty minutes in an hour, twenty-four hours in a day, and 365 days in a year. No one can "give" another person more minutes in an hour or hours in a day.

In essence, time is not an article that can be accumulated, stored, or exchanged directly between two or more people. Hence, in the CRMM it is argued that since consumers cannot accumulate or buy time, they seek to manage their time so as to maximize their ability to perform specific activities during a given temporal period. For example, in order to pursue a more preferred activity such as socializing with friends or playing a round of golf, an individual might take his/her laundry to a commercial laundry service. Such a consumer decision would allow the individual to devote the time required to perform the activity of laundering his/her clothing to the pursuit of more pleasurable activities.

The basic premise of the CRMM is consistent with a general model of the motivation process as proposed by Dunnette and Kirchener (1965). Such a model proposes that individuals possess differing levels of various needs, desires, and expectations – called activators. Those activators consist of two phenomena. First, the emergence of a need, desire, or expectation creates a state of cognitive disequilibrium within an individual. In general, people are motivated to reduce such imbalances. Second, one's needs, desires, or expectations are associated with the conviction that specific actions or behaviors will result in the desired reduction of disequilibrium.

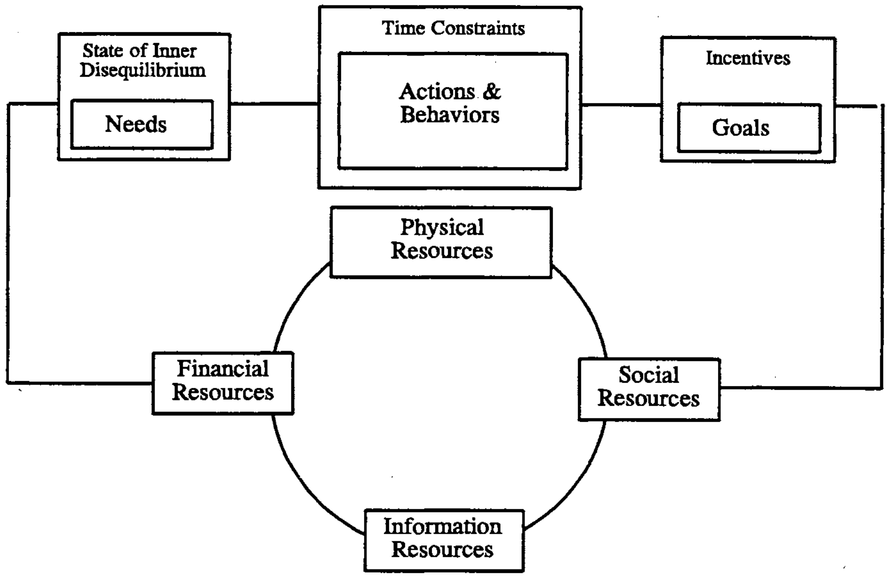
An example from the writings of Steers and Porter (1987) provides a clear illustration of the motivational process and the relationship between resources and goals as suggested by Dunnette and Kirchner (1965):

> *Individuals who have a strong desire to be with others may attempt to increase their interactions with those around them in the hope of gaining their friendship and support . . . they may eventually reach a point where they feel they have enough friends and may then direct their energies towards other goals.*

This example is also illustrative of the relationship between the Consumer Resource Management Model of motivation and Dunnette and Kirchener's model. Figure 9 presents a graphic depiction of the relationship between the CRMM and activities, needs, and goals as suggested in the general motivational model.

Figure 9

The Consumer Resource Management Model and a General Model of Motivation



Assumptions of the Consumer Resource Management Model

In order to systematically develop the Consumer Resource Management Model of Motivation, a set of six assumptions has been developed. The following section presents each of the assumptions and provides the theoretical justification for each. These justifications reflect the critical importance of the individual resource definitions outlined earlier in this paper. In addition, several hypotheses, which have been developed from the assumptions, are presented.

> *Assumption 1.* Consumers seek to manage resources that enable them to function more effectively in their world. Those resources include the following resources: physical, social, informational, and financial.

If, as suggested by the revised Values and Lifestyles Inventory and other previous works, consumers have certain fundamental needs that can be satisfied by the acquisition of resources, what are they? As a beginning point, the work of Foa and Foa (1974) was consulted. These researchers suggested that in an exchange process, people seek six types of resources: love, status, information, money, goods, and services. Foa and Foa defined each of the resources as follows:

Love: an expression of affectionate regard, warmth, or comfort;

Status: an evaluative judgment conveying high or low prestige, regard, or esteem;

Information: any advice, opinions, or instructions;

Money: any coin or token that has some standard of exchange value;

Goods: any products or objects;

Services: activities on the body or belonging to the individual.

In the analysis of these six resources, however, it was concluded that the concepts of love and status are too abstract and subjective to represent resources as operationalized in the Consumer Resource Management Model of motivation. Love appears to be more of a feeling state that results from a connection or relation with another person. Status is generally viewed as an interpretation of a state in which a person is recognized to have a higher level of value placed upon his or her position by other members of society.

If status and love are eliminated from the Foa and Foa (1974) conceptualization, the following exchange resources remain: goods, services, money, and information. The ability to obtain goods, services, and money appear to all fit within a category of "financial" resources. Financial resources are the material objects possessed by an individual (such as goods, property, and money) that have monetary value. People cannot survive without financial resources – which include highly fungible resources (e.g., money) and more durable resources (e.g., clothing, housing, autos, and diamond rings), as well as objects of art and collections of seemingly meaningless objects, such as beer cans and used food containers.

In the CRMM, information resources are also categorized as primary consumer resource needs. Without information on how to hunt, light fires, and choose appropriate plants to eat, early humans could not have survived.

Information is still vital today. Indeed, authors such as Toffler (1980) have argued that we live in an information society. Writing of the increasing importance of information in today's environment, he states ". . . the Third Wave does more than simply accelerate our information flows; it transforms the deep structure of information on which our daily actions depend" (Toffler 1980, p. 174). In the marketing arena, Stern, El-Ansary, and Brown (1989) argued that by gathering, interpreting, and transmitting valuable market information, an organization can enhance its power over other channel members (p. 332).

Accordingly, based upon the work of Foa and Foa (1974); Stern, El Ansary, and Brown (1989); and others, two primary consumer resource needs were identified – financial and information. However, the works of Maslow, Alderfer, and Cohen strongly suggest that physical and social needs may also exist. Common consumer behaviors add further credence to this idea. For instance, a visit to virtually any athletic club provides ample evidence that people are certainly highly motivated to maintain their physical bodies. Indeed, consumers will go to great lengths and will expend vast amounts of money and effort in an attempt to maintain or enhance their physical abilities and/or the appearance of their bodies.

The works of Maslow (1954) and Alderfer (1969) also suggest a second element of physical needs – the need to experience sensory pleasure, to stimulate our senses. For example, Maslow defined aesthetic needs as the motivation to seek pleasing sensations and experiences and to avoid ugly or unpleasant phenomenon.

An excursion to a department store, an art exhibit, or the symphony orchestra clearly demonstrates that consumers actively seek to fulfill their sensual needs. As with physical exercise, individuals will go to great lengths to experience beauty, excitement, and other forms of sensual pleasure.

Similarly, the work of earlier researchers suggests that social needs are important elements of an individual's makeup. Indeed, social connections and relationships are critical for survival. People rely on others for safety and the procreation of the species.

Further, as viewed by Alderfer, the three core human needs include needs for relationships between oneself and others; Maslow identified the fundamental needs for love and esteem, both of which are derived from relations with other members of society. The works of McClelland and his colleagues emphasize a need for affiliation and interactions with others. Furthermore, as discussed at the beginning of this section of the dissertation, if one "extends" the love resource identified by Foa and Foa (1974), it could be fit within the social resource need category proposed in the CRMM.

The importance of social relationships to the fulfillment of human needs is further demonstrated in the CAD model. Cohen characterizes individuals with a compliant orientation as being highly motivated to be involved in the activities of those (people) around them. As such, the number of social connections and relationships that a person has can be viewed as a resource that has clear benefits.

In sum, based upon the work of earlier motivational researchers, the Consumer Resource Management Model of Motivation proposes that people are motivated to accumulate assets that help them function more effectively in their daily activities. Those assets include, but are not limited to, four fundamental resources - physical, social, financial, and informational. These resources help the consumer manage activities so as to achieve goals and, in essence, to satisfy needs.

Based upon this information, the following hypothesis is advanced and will be tested in the dissertation:

H1 Consumers possess fundamental resource needs which include: physical, social, financial, and informational resource needs.

The four resource categories proposed in the Consumer Resource Management Model are portrayed in Figure 10 and compared to four general theories of motivation. As can be seen, the CRMM shares some commonalities with previous efforts by motivational theorists. For example, the CRMM, the Maslow Hierarchy, and the ERG model propose that existence needs are present. Like Maslow and McClelland, the

CRMM proposes that social needs exist. The concept that informational and financial needs exist emerges from the work of Foa and Foa (1974) and the revised Values and Lifestyles Inventory.

Figure 10

A Comparison of the Consumer Resource Management Model and Four Previous Motivation Theories

<table>
<tr><th>Consumer Resource Management Model</th><th>Maslow's Hierarchy</th><th>ERG Theory</th><th>nAch Theory</th><th>CAD Model</th></tr>
<tr><td rowspan="2">Physical Resource Needs</td><td>Physiological</td><td rowspan="2">Existence Needs</td><td></td><td></td></tr>
<tr><td>Safety (Material)</td><td></td><td></td></tr>
<tr><td>Social Resource Needs</td><td>Safety (Interpersonal)</td><td rowspan="3">Relatedness Needs</td><td rowspan="3">Affiliation Needs</td><td rowspan="3">Compliant Orientation</td></tr>
<tr><td>Financial Resource Needs</td><td>Love (Belongingness)</td></tr>
<tr><td rowspan="4">Information Resource Needs</td><td>Esteem (Interpersonal)</td></tr>
<tr><td>Esteem (Self-confirmed)</td><td rowspan="3">Growth Needs</td><td rowspan="2">Power Needs</td><td rowspan="3">Aggressive Orientation</td></tr>
<tr><td>Self-actualization</td></tr>
<tr><td>Being-needs</td><td>Achievement Needs</td></tr>
</table>

Although the CRMM and previous theories of motivation share similarities, several key differences exist. For example, while the Needs Hierarchy and ERG Theory portray needs as being ordered by level of importance, the CRMM makes no such claim. Rather, the model proposes that the four resource needs exist in a dynamic, interrelated system.

Another important distinction between the CRMM and Maslow's Hierarchy concerns the role of safety needs. While Maslow suggested that separate and distinct safety needs exist, the CRMM proposes that individuals have the need to secure or to protect existing or expected levels of each of the four basic resource types. Thus a need for safety can be felt for physiological/sensory, social, financial, and/or informational resources.

In a similar manner, the CRMM proposes that individuals can also be motivated to enhance each of the four types of resources. This idea of enhancement bears strong similarity to Maslow's self-actualization, Alderfer's growth needs, and McClelland's achievement motivation concepts. These ideas are elaborated upon in Assumption 2.

> ***Assumption 2.*** Consumers use resources to facilitate the activities, which take place within time, undertaken to reach goals.

In a manner that is consistent with the general model of motivation (Dunnette and Kirchner 1965), the Consumer Resource Management Model views activities as the actions or behaviors that consumers undertake in their attempts to attain goals. Such activities occur within a specific time period.

As noted earlier in this paper, time in the CRMM is defined as a finite temporal space in which activities are performed. Accordingly, time is not a resource because time cannot be purchased nor accumulated and is not directly exchangeable between parties. The CRMM proposes that consumers utilize resources in order to maximize their ability to perform specific activities during a given temporal period.

Assumption 3. As teleological creatures, consumers seek to protect and/or enhance the four fundamental resource categories.

Assumption 3 and its two derivative assumptions are based in part upon Helson's (1964) theory of adaptation level and Kahneman and Tversky's (1979) development of prospect theory.

Helson defined a person's adaptation level as an individual's adjustment to the prevailing level of a stimulus. Further, he suggested that any change in the intensity of a stimulus would be judged relative to the normative level of that stimulus. That is, one's adaptation level, or the expected level of a stimulus, serves as an anchor point against which changes in the intensity of that stimulus are evaluated.

The following excerpt from J. Richard Eiser (1990) readily illustrates Helson's theory:

> *. . . if you put one hand in a bowl of very hot water, your other hand in a bowl of very cold water, and after a minute or so you move them and put them both in a bowl of tepid water, the hand that was in cold water will find the tepid water hot, whereas the hand that was in the hot water will find it cool* (p. 12).

In essence, any change in the intensity of a stimulus can be evaluated either positively or negatively depending on the previous levels of stimulation to which one has adapted or become accustomed.

This adaptation level perspective is consistent with the work of Kahneman and Tversky (1979) and is readily applicable to the CRMM. For instance, prospect theory's hypothetical value function delineates how changes in the level of a resource, say money, translates psychologically to a positive or negative affective state.

As posited in the Consumer Resource Management Model, just as a person forms an adaptation level for water temperature, so too can one develop an adaptation level for money, physical well-being, social networks, or information sources. From this perspective, then, pleasure occurs when the level of a resource moves above an adaptation level. Importantly, it is posited that people can achieve pleasure or feel displeasure through the gain or loss of any of the four basic resource types.

> ***Assumption 3a.*** Pleasure occurs through the enhancement of a resource above its adaptation level.

Assumption 3a suggests that people seek to achieve additional resources in order to obtain pleasure. As such, the CRMM identifies McClelland's idea of achievement motivation and Maslow's concept of self-actualization as derived needs. As conceptualized by those authors, one can view an individual's need for achievement/ self-actualization as the desire for self-fulfillment or to achieve one's potential.

Furthermore, as stated by Maslow (1943, p. 383), the form that such needs take will vary from person to person. For one person, achievement needs may take the form of the desire to be an ideal mother; in another, they may take the form of artistic expression; while others may seek career promotions or salary increases.

In sum, as conceptualized in the CRMM, achievement and self-actualization may result from seeking to enhance any one of the four resources through specific activities. That is, self-actualization may be achieved by engaging in activities designed to enhance financial, informational, social, or physical resources.

> *Assumption 3b.* Displeasure occurs when a resource falls below its adaptation level.

The CRMM proposes that when a resource falls below a psychological adaptation level, that is, below an accustomed level, people experience displeasure. This concept is consistent with Maslow's safety needs. However, rather than being categorized as a separate need type, the need to maintain or protect a resource applies to each of the four need categories. Thus the loss of physical, social, financial, or informational resources leads to displeasure, which people are generally motivated to avoid. In sum, it is proposed that people experience the need to prevent the level of each of the four resources from falling below existing or customary levels.

> *Assumption 4.* Resources exist as part of an interdependent system; each resource need type supports the other.

As written by Abraham Maslow, ". . . most members of our society who are normal, are partially satisfied in all their basic needs and partially unsatisfied in all their basic needs at the same time" (1943). This perspective is adopted in the CRMM, and as such, it is proposed that consumers simultaneously seek to satisfy multiple needs; that is, if a person is hungry yet not in danger of starving to death, he or she may, at the same time, seek informational, financial, or social resources.

This conceptualization is consistent with systems theory, as presented by Katz and Kahn (1978) and others, which suggests that a fundamental element of any system is that changes in one component of the system lead to changes in other components of the system. Such a conceptualization is adopted in the CRMM, which proposes that the four resource need types are highly interrelated.

In addition to being interrelated, it is proposed that the consumer resources in the CRMM are interdependent. That is, each of the four resources in the CRMM is connected and dependent one upon the other. Thus, without physical resources it would be difficult to maintain or enhance the financial, information, and social assets people tend to seek. Similarly, without a minimum of financial resources it would be difficult to maintain or enhance the other resources.

> ***Assumption 5***. People seek to <u>control</u> resources in order to protect what they currently possess or gain additional levels of a resource.

As a result of this "need for control," people seek to gain power over their ability to obtain resources. McClelland (1976) defined a person's need for power as "the need to have an impact on others, to establish, maintain, or restore his or her prestige or power." As such, like McClelland's Achievement Motivation theory, the CRMM recognizes that people have varying degrees of the need to control their ability to enhance or preserve each of the four resources proposed in the model. As a result of this need for control, people seek to exert power to obtain each type of resource – from physical, to informational, to financial, to social resources. Because each of the resources represents dimensions of needs, people can be viewed as having either a high or low need to protect and/or enhance each.

> ***Assumption 5a***. The need for freedom is a derived need based upon the desire of people to have freedom to enhance and protect their resources.

Work by Brehm (1969) and by Clee and Wicklund (1980) has provided evidence of a desire of people to protect their behavior. A lack of freedom results in the negative motivational state of reactance, according to the model. Within the CRMM, reactance is viewed as a state that results from the perception of the loss of control to maintain or enhance resources.

> *Assumption 6.* Individual differences will exist in the level of importance consumers attach to each of the four resource types.

Assumption 6 suggests that personality differences will exist among people concerning the level of importance each resource type holds for them. Depending upon their socialization and possibly upon their inherited tendencies, consumers will characteristically focus on one or more of the need types. Accordingly, the following hypothesis is advanced:

> **H2 Individual differences exist in the level of importance consumers attach to each of the four resource need types identified in the Consumer Resource Management Model.**

In summary, the resource-based model of motivation identifies four basic resources (physical, social, informational, and financial) that people seek. Further, it is proposed that those resources, while not all-inclusive, are necessary for the fulfillment of a range of human needs and that people seek to control their access to these resources.

It is also argued that the fulfillment of consumer needs can take the form of maintaining or enhancing accustomed levels of each of the identified four resource types. Finally, it is proposed that consumers will exhibit individual differences in the level of importance that they place on each of the resources identified in the Consumer Resource Management Model of motivation.

CHAPTER IV

PILOT STUDY

Introduction

This dissertation is conceived with two primary objectives in mind. First, the study is designed to investigate the validity and reliability of the newly developed Consumer Resource Needs scale. The second major objective is to empirically test several theory-based hypotheses regarding the Consumer Resource Management Model of motivation.

In order to attain these goals, two studies were conducted. The first, a two-phase pilot study involving student subjects, was a scale development endeavor, the results of which are reported in this chapter. The second, the main study, was designed to examine the convergent, discriminant, and predictive validity of the CRMM. The results of that study are reported in Chapter V.

This section of Chapter IV presents the details of the pilot study, which consist of initial efforts to develop a general measure of consumer resource needs and includes five main parts: 1) an overview of the study, 2) the subjects utilized, 3) the procedure employed, 4) the measurement instruments/materials and 5) the data analyses and results.

Pilot Study: Scale Development

Study Overview

The scale development procedure followed the widely recognized paradigm suggested by Churchill (1979), which features an iterative process including domain specification and item generation, data collection, measure purification, and the assessment of reliability and validity. The goal of the research, which was conducted in two phases, was to develop an internally reliable scale that assesses individual differences in consumers' needs for the four basic resource types proposed in the Consumer Resource Management Model.

Subjects

Participants for the first phase of the pilot study were 249 undergraduate students enrolled in management and/or marketing courses at a major midwestern university. Participants in the second phase of the pilot study were 233 undergraduate students enrolled in upper-division management courses at the same university. It should be emphasized that there was no overlap of subjects between the two phases of the pilot study.

Procedure

Construct Definition and Domain Specification. Based on the literature reviewed in this paper, the construct of consumer needs and the domain of the construct were specified and defined. The construct of consumer resource needs was defined as: "A consumer's perceived difference between a desired level and the actual level of a resource used to satisfy a need or to attain a goal." For the purposes of the dissertation, the domain of the construct was defined as consisting of four dimensions of resources: physical, social, information, and financial.

Two methods were employed in the attempt to determine the domain of the variables included in the Consumer Resource Needs (CRN) scale. First, consumer behavior academicians were consulted in order to identify appropriate scale items. Second, the extant motivation literature was reviewed and served as a primary source of information regarding the selection and phrasing of relevant items. The review of the literature and consultation with leaders in the fields of psychology and consumer behavior (i.e., Sirgy, Sachau, Foxall, Mowen) suggested several existing scales as a starting point in the development of the CRN scale.

Based upon those suggestions as well as on their theoretical underpinnings, items from the Consumer Susceptibility to Interpersonal Influence Scale (Bearden, Netemeyer, and Teel 1989), and the Need for Cognition Scale (Cacioppo and Petty 1982) were adapted to tap into the social and informational dimensions of consumer needs, respectively. For example, the wording of item number 14 from the Need for Cognition scale, "I like tasks that require little thought once I've learned them," was reworded as follows in the CRN scale: "I like products that require little thought to use."

The Richins' Materialism Measure (1987) was used as a foundation upon which items designed to assess the financial dimension of consumer needs were based. To illustrate the adaptation process, the first item in the Richins' scale, "It is important to me to have really nice things," was reworded as "It is important to me to buy really nice things" in the CRN.

The scale items designed to measure the physical dimensions of consumer needs required a different approach. That is, due to an absence of what the author considered to be appropriate existent scales, the physical items for the Consumer Resource Needs scale were developed in conjunction with academic researchers. That is, no existing scale items were adapted for the physical items of the CRN scale.

Using the sources outlined above, a pool of 97 items was generated in an attempt to represent the specified domain of consumer needs. After review by three academicians, which led to the removal of redundant and/or unclear items, the initial item pool was reduced to 43 items. Those items were written into a 5-point Likert format with response categories ranging from "agree strongly" to "disagree strongly."

To further examine the items for problems in wording, phrasing, and understandability, the items were presented to 25 undergraduate students. This procedure revealed no such problems. The 43 items were then used in the first phase of a pilot test involving 249 undergraduate marketing and/or management students at a large southwestern university. The instrument was accompanied by written and verbal instructions to the respondents.

Data Analysis

A common factors procedure with a varimax rotation was used to check the *a priori* component structure of the scale. As suggested by Hair, Anderson, Tatham, and

Black (1992), *a priori* theory is a primary means of extracting meaningful factors from an overall model.

The underlying theory of the CRMM suggests that there are four fundamental dimensions of consumer resources that were examined in this dissertation – physical, social, financial, and informational – each with a protection/enhancement facet. Based upon this theory, it was predicted that consumer resource needs consisted of eight distinct factors (physical/enhancement, physical/ protection, social/enhancement, social/protection, financial/enhancement, financial/protection, informational/enhancement, informational/protection).

Accordingly, a common factors procedure with a specified n-factor of eight was conducted. The results indicated no clear factor structure and showed that the majority of variables were loading on a single factor. Further, the results revealed no clear distinction between the proposed enhancement/protection facet of the *a priori* dimensions. Therefore, it was concluded that further refinement and scale development were necessary.

Phase Two of the Pilot Study

Based on the findings of the first phase of the pilot study, a revised set of 72 statements was developed to assess the respondents' need levels on each of the four dimensions of the construct. The revised pool included additional statements designed to more adequately measure the respondents' need to protect and/or enhance each of the four resources proposed in the model.

The revised item pool was again refined through a review process by three consumer behavior researchers. The reviewers examined the items for redundancy, overlap, and face validity. During this process, several items were eliminated or combined, and the wording of several statements was edited.

Based upon the recommendations of and consultation with the reviewers, the item pool was reduced to 55 statements pertaining to consumer purchase behavior. The 55 items were written in a 5-point Likert scale format, with response categories ranging from "agree strongly" to "disagree strongly." In an attempt to avoid response set bias, the order of the statements was determined by random selection. The scale instrument is presented in Appendix A.

Subjects

As stated earlier in this section, participants in the second phase of the pilot study were 233 undergraduate students enrolled in upper-division business courses at a major midwestern university. Of the respondents in this phase of the study, 127 were male and 100 were female, with a mean age of 22 years. (Six subjects did not respond to the gender question on the survey instrument.) A demographic profile of the subjects is presented in Table 1.

Materials

Packets of information were distributed to each of the participants in the study. Included in each packet was a computer scoring sheet designed to facilitate computer scanning/entry of the data and to reduce the potential of data entry errors. The cover page of the packet consisted of an instruction sheet and reiterated that the researchers were interested in the participants' individual perspectives and opinions regarding consumer purchasing behavior.

Table 1

Demographic Profile of Subjects in the Pilot Study

Demographic Information	Percentage of Participants
<u>Age</u>	
18 - 20 years	35.2%
21 - 23 years	46.7%
24 - 26 years	8.8%
27 - 29 years	4.8%
over 30 years	4.4%
<u>Gender</u>	
Female	43.6%
Male	56.4%
<u>Marital Status</u>	
Single	86.3%
Married	13.7%
<u>Income</u>	
Under $10,000	72.2%
$10 - $15,000	15.9%
$16 - $20,000	5.3%
$21 - $25,000	2.6%
over $25,000	4.0%

Pages two through five of the packet consisted of the 55 statements concerning consumer purchasing behavior. Five demographic questions (age, gender, income, marital status, and student nationality) were included on page six of the packet.

Procedure

The data were collected during regularly scheduled class sessions. Prior to beginning the study, subjects were informed that their participation was completely voluntary and that they were free to discontinue their participation at any time during the study if they so chose.

So as to encourage candidness on the part of the subjects, they were advised that their responses would remain strictly confidential and that there were no right or wrong responses to the materials they would complete. Subjects were told that the experimenter was interested in their individual opinions and perspectives and that, as such, their responses were the best responses.

Approximately 10 minutes were required for the subjects to complete the scale development materials. The materials used in the pilot study are presented in Appendix A.

Upon completion of the materials, the subjects were asked to verbally express any concerns or confusion they had experienced during the session. Subjects were also asked questions in an attempt to determine the likelihood of demand artifacts and/or hypothesis guessing. This procedure indicated no such problems during the data collection. Finally, subjects were debriefed and were informed that aggregate results of the study would be made available at a later date to those interested.

Results of Phase Two of the Pilot Study

In a manner consistent with that recommended by Churchill, Ford, and Walker (1974), the internal consistency of the items included in the Consumer Needs Scale was first evaluated. Coefficient alpha was calculated for the overall scale. The resultant alpha (.86) indicated that the sample of scale items does an adequate job of capturing a single construct (Churchill 1979). [Nunnally (1967) suggested that reliabilities of .50 to .60 are sufficient in exploratory research.]

As a subsequent step in the analysis of the reliability of the Consumer Resource Needs scale, as suggested by Churchill (1979), items with relatively low correlations with the total score were eliminated from the scale. More specifically, items with an item-to-total correlation of .20 or less were eliminated. As a result of this procedure, 17 scale items were eliminated. Based upon this revision of the scale items, the coefficient alpha for the overall scale was recalculated (.89). Again, this relatively strong correlation suggests that the scale items performed well in assessing a single construct.

As a second phase in the analysis of the consumer needs scale, common factor analysis was used to check the *a priori* specification of the component structure of the scale. As stipulated by Hair, Anderson, Tatham, and Black (1992), *a priori* theories or hypotheses are among several factor analysis criteria for extracting meaningful factors from an overall model.

Based upon the theories reviewed and the model proposed in this manuscript, it was expected that four fundamental dimensions of consumer resources constituted the CRMM – physical, financial, social, and informational. Further, it was hypothesized that each resource consisted of a protection/enhancement facet. In sum, as in the first phase of the pilot study, it was hypothesized that eight dimensions of consumer needs existed.

Accordingly, a common factors procedure with a varimax rotation and an n-factor of eight specified was used to further examine the structure of the scale. The procedure revealed that the scale performed relatively poorly in assessing the enhancement/protection facets of the four consumer resources. As such, the protection/enhancement statements for each of the four resources were subsequently collapsed into one overall category for each of the consumer resources. In short, in an attempt to further examine the basic four resource dimensions of the model, the enhancement/protection facets of the items were ignored in subsequent analyses. These analyses are discussed in detail below.

The common factors procedure specified above, with no n-factor set, was re-run on the collapsed data. This procedure resulted in the extraction of four meaningful factors, which were labeled as social, financial, physical, and information. The structure of the factors closely matched the factors specified *a priori* in the Consumer Resource Management Model.

The items in each factor were also examined for the significance level of the correlation between the original variable and its factor as well as for the possibility of cross-loadings on two or more factors. As outlined by Hair, Anderson, Tatham, and Black (1992), the definition of a significant correlation is dependent upon the sample size. More specifically, the authors stated that if the sample contains more than 200 respondents, a correlation of .14 is considered significant. However, in an attempt to use a more conservative measure, the recommendation of Churchill and his colleagues (1974) was followed. That is, those items with a loading of less than .35 on any factor were eliminated from the scale. Accordingly, three items were removed from the item pool.

Churchill et al. (1974) also suggested that items that loaded heavily on more than one factor should be eliminated from further scale development. Accordingly, any item with a difference between factor loadings of less than .25 was eliminated from further analysis. Based upon this criterion, five additional items were removed, resulting in a final scale of 30 statements. Table 2 presents the final scale structure and factor loadings after factor analysis based on data collected during phase two of the pilot study.

The four-factor solution accounted for 42% of the variance. More specifically, the "social" factor accounted for 16% of the variance, while the "financial" factor accounted for an additional 11% of the variance. The "physical" and "information" factors accounted for an additional 8% and 7% of the variance, respectively.

As recommended by Churchill (1979), the internal consistency of the reduced scale was further examined by calculating coefficient alphas for each factor of the scale. The social factor had Cronbach alpha of .869; the financial factor, .794; the physical factor, .741; and the information factor, .563. Correlations among the factors ranged from $r = .07$ to $r = .44$. All were significantly related ($p < .05$) except for that between informational and physical resources.

Table 2

Factor Analysis Loadings from Pilot Study 2

<u>Factor 1. Social Resource Needs Items</u>	
1. I am very concerned with whether my friends will like the products I buy	.77
2. It is important to me that my friends like the things I buy	.76
3. I try to buy products that are similar to those my friends buy	.72
4. It is important that other people buy things that are similar to what I buy	.65
5. My friends have a great deal of influence on my purchase decisions	.64
6. I try to purchase products that will make others want to be with me	.62
7. When I buy clothing I like to have my friends along so I don't make a purchase mistake	.53
8. I wouldn't buy a product, even if I really liked it, if my friends didn't like it	.51
9. It is important that the products I buy identify me with other groups of people	.51
Social Factor Cronbach: .87	
<u>Factor 2. Financial Resource Needs Items</u>	
1. My dream in life is to be able to buy expensive things	.67
2. I would like to be rich enough to buy any product I want	.63
3. I would be happier if I could afford to buy more things	.61
4. It is really true that buying things can make people happy	.55
5. I would prefer automobiles that are fast and exciting	.51
6. The most important thing about a job is that it pay enough so that I can buy the things I want	.50
7. It sometimes bothers me that I can't afford to buy all the things that I want	.42
8. I am willing to purchase products that will help me attain my financial goals	.40
9. It is important to me to buy really nice things	.38
Financial Factor Cronbach: .80	
<u>Factor 3. Physical Resource Needs Items</u>	
1. It is important that the products I buy make me physically attractive	.73
2. It is important that the products I buy make me look good	.70
3. I would buy a product that would improve how my body looks	.49
4. It is important that the products I buy make me feel good	.46
5. I would not buy a high quality product if it didn't make me feel good	.44
6. It is important that the things I buy convey a feeling of physical excitement	.39
7. It is important that the products I buy look like high quality products	.38
Physical Factor Cronbach: .74	
<u>Factor 4. Information Resource Needs Items</u>	
1. I find it satisfying to deliberate long and hard about a purchase decision	.50
2. Making a really dumb purchase decision is one of the worst things I an do	.48
3. I like to be responsible for a purchase decision that requires a lot of thinking	.48
4. I find it especially satisfying to use products that require a lot of mental effort	.37
5. Overall, I buy products that provide me with information rather than other benefits	.36
Information Factor Cronbach: .56	

Discussion of the Pilot Study

As stated earlier, two fundamental questions were asked at the beginning of the research process reported in the dissertation. First, the author asked whether, given the limitations of existing models of motivation, a new, comprehensive, theoretically founded, resource-based model of consumer motivation could be developed. A second question dealt with the development of a reliable measurement tool of individual difference variables related to the proposed model.

Accordingly, a main objective of the pilot study was to investigate the underlying properties of the proposed Consumer Resource Management Model. A second fundamental purpose of the dissertation was to develop a paper-and-pencil scale as a general measure of the level of importance consumers attach to the resources identified in the CRMM – the Consumer Resource Needs scale.

The results of the pilot study indicate that the CRN scale consists of four factors that closely approximate the factors specified *a priori* in the Consumer Resource Management Model of motivation. Further, the iterative development process indicates that the scale has relatively high internal reliability.

In addition to the findings discussed above, the pilot study revealed several promising avenues deserving additional research efforts. For instance, while the CRN scale demonstrated internal reliability, the construct validity of the instrument remained untested. As such, additional data collection and further investigation of the convergent and discriminant validity, as well as the predictive validity of the scale were of primary concern. In order to facilitate such investigation, an adaptation of the multitrait-multimethod (MTMM) matrix suggested by Campbell and Fiske (1959) was developed by the researcher. The details of this approach are discussed in the procedure section of the main study.

A second area of additional investigation suggested by the results of the pilot study involves the enhancement/protection facets of the Consumer Resource Needs scale. As noted earlier in this manuscript, the scale performed relatively poorly in assessing those two facets of the four resources in the model. A logical next step in the research process was to generate additional scale items and/or revise existing items to further explore those facets. These procedures were implemented in the main study of the dissertation.

The subject population employed in the pilot study suggests a related area of concern in further research. More specifically, the pilot involved upper-level undergraduate business students as the sample population. As suggested by Calder, Phillips, and Tybout (1981), such a sample may be desirable in exploratory consumer research as was conducted in the pilot study. In such a setting, a homogeneous sample offers the researcher optimal experimental control and reduces the potential for extraneous variables.

It is important to note, however, that such a sample limits the generalizability of the research. For instance, the subjects in the pilot study had a mean age of 22 years, and nearly 75% of the subjects had an income of less than $10,000. This striking similarity of subject demographic characteristics severely limits the generalizability of the findings to other, more heterogeneous samples.

The lack of heterogeneity among participants in the pilot study also provides insight into the lack of distinction between the protection/enhancement facets of the four resource types identified in the study. A plausible explanation is that consumers in this age group, sharing similar demographic backgrounds, have relatively little experience with the need to protect their resources – they simply have not acquired sufficient amounts of resources to experience the need to maintain an accustomed level. Accordingly, in order to further investigate this possibility, a more heterogeneous sample of consumers was employed in the main study of the dissertation.

CHAPTER V

MAIN STUDY

Introduction

The main study in the dissertation served several purposes. First, the study extended the iterative scale development process initiated in the pilot study. As such, it was designed to provide further empirical evidence of the internal reliability of the Consumer Resource Needs scale. Further, the main study examined the properties of the convergent, discriminant, and predictive validity of the scale and tested several related hypotheses. Finally, the hypotheses advanced in Chapter III were empirically tested.

This section of the dissertation consists of five main parts: 1) an overview of the study, 2) the subjects utilized, 3) the procedure employed, 4) the measurement instrument/materials, and 5) the methods used to analyze and interpret the data.

Study Overview

The main study followed Churchill's (1979) iterative scale development process as outlined in the pilot study. The construct definition and the domain specification steps of the process were generally completed in the pilot study and therefore were not further developed in the main study.

The scale items generated in the pilot served as a foundation for the development of additional items designed to further sample the domain of the construct and further examine the protection/enhancement facets of each of the four resources in the CRMM.

The remaining steps of the process – that is, data collection, measure purification, and the assessment of reliability and validity – were pursued in the main study. Indeed, the pilot and the main studies shared numerous procedural similarities. In order to avoid redundancy, only the relevant differences between the two studies are highlighted in this section of the paper.

Subjects

Participants in the main study in the dissertation were 350 individuals associated with one or more of eighteen commonly recognized service organizations (e.g., American Red Cross, YMCA) and/or business organizations (e.g., engineering firms, full-service banks) in a city in the southwestern United States.

A total of 500 surveys were distributed; 348 useable surveys were returned (two instruments were not useable due to incomplete responses) for a response rate of 70%. Of these participants, 235 were female and 113 were male; the average age range was 29 - 44 years. A complete demographic profile of the participants is presented in Table 3.

Procedure

As noted earlier, a key difference between the main study and the pilot study involved the use of a heterogeneous sample of consumers. In order to reach this diverse sample, the researcher worked with the director of the United Way in the city described above.

Table 3

Demographic Profile of Subjects in the Main Study

Demographic Information	Frequency	Percentage of Participants
Age		
< 21 years	14	4.0
21 - 28 years	68	19.5
29 - 36 years	78	22.4
37 - 44 years	78	22.4
45 - 52 years	52	14.9
53 - 60 years	32	9.2
61 - 68 years	9	2.6
Over 69 years	15	4.3
Gender		
Female	235	67.5
Male	112	32.2
Marital Status		
Single	112	32.2
Married	234	67.2
Ethnic Background		
Caucasian	311	89.4
Asian	3	.9
African American	8	2.3
Native American	17	4.9
Hispanic	3	.9
Other	4	1.1
Educational Level		
HS Diploma	112	32.2
Bachelor's Degree	109	31.3
Master's Degree	47	13.5
MBA	5	1.4
Doctoral Degree	33	9.5
Professional Degree	2	.6
Other	38	10.9
Household Members		
One	67	19.3
Two	122	35.1
Three	60	17.2
Four	63	18.1
Over Five	35	10.1
Dual Income Family		
Yes	200	57.5
No	145	41.7
Household Income		
Under $10,000	29	8.3
$10 - $20,000	45	12.9
$21 - $30,000	59	17.0
$31 - $40,000	40	11.5
$41 - $50,000	48	13.8
Over $50,000	121	34.8

With the cooperation of the director, a letter was drafted that explained the nature of the research and clearly indicated the director's support of the study. The letter was mailed to the directors of the various agencies and businesses described earlier and asked the recipients to encourage their employees and/or agency members to participate in the study. The letter also informed agency directors that the researcher would donate $500 to the United Way general fund if 400 or more completed surveys were returned.

Three days after the letter was mailed, the researcher contacted each agency director by telephone and scheduled personal appointments to distribute packets of research materials, answer questions, and to provide additional information as required.

A second important difference between the pilot and main studies involved the inclusion of additional items from existing scales in order to examine the convergent and discriminant validity of the Consumer Resource Needs scale. The following section addresses each of those issues in more detail.

Convergent and Discriminant Validity

In a discussion regarding the convergent validity of a measure, Churchill (1979) wrote: "A fundamental principle in science is that any particular construct or trait should be measurable by at least two . . . different methods" (p. 70). Similarly, Campbell and Fiske (1959), Churchill (1979), and Heeler and Ray (1972) affirm that evidence of convergent validity in a measurement instrument is provided by the extent to which that scale correlates highly with other methods that are designed to measure the same construct.

In a parallel fashion, discriminant validity has been defined as the extent to which a measure of interest is indeed novel and not simply a reflection of some other variable (Churchill 1979). The presence of discriminant validity is indicated by predictably low correlations between the measure of interest and other measures that are supposedly not measuring the same variable or construct (Heeler and Ray 1972).

A widely recognized yet rarely implemented method of investigating the construct validity of assessment instruments is the multitrait-multimethod (MTMM) matrix developed by Campbell and Fiske (1959). The MTMM involves the use of multiple measures and multiple methods in the measurement of the variables of interest.

As suggested by Bagozzi and Yi (1991), the researcher can use the resultant triangulation to examine findings in terms of three effects: 1) the phenomenon of interest, 2) method variance, and 3) random error. Indeed, Bagozzi and his co-author write: "Given multiple measures obtained with multiple methods, construct validity can be assessed with the multitrait-multimethod matrix" (p. 427).

Interestingly, despite the widely acknowledged benefits to be derived through the use of the MTMM, Bagozzi and Yi (1991) emphasize that the method has been conspicuously absent in the consumer behavior literature. The authors cite several reasons for such an absence, perhaps the most important of which is the "difficulty in obtaining multiple measures of each concept on one's theory and using different methods to do so" (Bagozzi and Yi 1991).

In addition, in their seminal article on MTMM, Campbell and Fiske (1959) are neither precise nor specific in describing the technicalities of the model. For example, in their discussion of the validity of a measure, Campbell and Fiske offer the following guidelines for the use of the MTMM, ". . . the entries in the validity diagonal should be significantly different from zero and sufficiently large to encourage further examination of validity" (p. 101). Unfortunately, despite the appeal and acknowledgement of the method, such terms are open to a variety of interpretations and have served as a perplexing problem to be faced by researchers contemplating the use of the MTMM.

Such arguments are further substantiated in the writings of Schmitt, Coyle, and Saari (1977). In an extensive review and critique of the MTMM, the authors contend that the "informal nature" of the technique, especially when the number of traits and methods is large, renders it inadequate in most attempts to examine construct validity (p. 472). Despite the aforementioned limitations, the MTMM offers researchers a tantalizing tool for scale development.

Indeed, as noted by several writers (e.g., Bagozzi and Yi 1991), the unwieldy nature of the MTMM has severely limited its application in consumer behavior research. In order to overcome such obstacles while retaining the primary benefits offered by the MTMM, an adaptation of the technique was employed in the main study reported in this dissertation. This adaptation, labeled the multitrait-multiscale method, replaces the multiple methods with multiple scales in order to more readily facilitate the examination of properties of convergent and discriminant validity of the Consumer Resource Needs scale. This methodology is more fully explained in the next section.

Multitrait-Multiscale Matrix

Using the writings of Campbell and Fiske (1959), Bagozzi and Yi (1991), Heeler and Ray (1972), and others as a guideline, both the convergent and discriminant validity of the Consumer Resource Needs scale was examined by adding elements from five existing scales to the pool of items generated in the pilot study.

Consistent with the procedure employed in the pilot study, the extant literature and experts in the marketing discipline were employed in the selection of items from extant scales. In essence, the intent was to include items from scales that tapped similar/ dissimilar constructs in order to examine the convergent/discriminant validity of the CRN scale.

More specifically, individual items from the Material Values Scale (Richins and Dawson 1992), the Weight Involvement Scale (Oliver and Bearden 1985), the Information Seeking Scale (Raju 1980), the Market Maven Scale (Feick and Price 1987) and the Conformity Motivation Scale (Bearden, Netemeyer, and Teel 1989) were included in the pool of items used in the main study. The specific items from each of the scales outlined above are presented in Figure 11.

In a manner similar to that suggested in the multitrait-multimethod matrix approach, subject responses on the additional scale items were used to create a correlation matrix between different traits (level of importance attached to each resource) measured by different scales. That is, items from the four resource needs categories in the Consumer Resource Management Model served as traits, and items from the existing scales served as the multiple methods suggested in the MTMM.

Figure 11

Convergent and Discriminant Validity Scale Items

Material Values Scale (Richins and Dawson 1992)

1. I admire people who own expensive homes, cars, and clothes
2. Buying things gives me a lot of pleasure
3. I like a lot of luxury in my life
4. I'd be happier if I could afford to buy more things

Information Seeker Scale (Raju 1980)

1. I often read the information on the package of products just out of curiosity
2. I generally read even my junk mail just to know what it is about
3. I enjoy sampling different brands of commonplace products for the sake of comparison
4. I like to browse through mail order catalogs even when I don't plan to buy anything

Involvement (Body Weight) (Oliver and Beardon 1985)

1. I never worry about my weight
2. Others seem more concerned about their weight than I am about mine
3. My weight is a concern in my life

Market Maven (Feick and Price 1987)

1. I like introducing new brands and products my friends
2. I like helping people by providing them with information about many kinds of products
3. People ask me for information about products, places to shop, or sales
4. My friends think of me as a good source of information when it comes to new products or sales

Social Desirability Scale (Crowne-Marlowe 1964)

1. I sometimes feel resentful if I don't get my way
2. I like gossip at times
3. I can remember playing sick to get out of something
4. It is sometimes hard for me to go on with my work if I am not encouraged

This approach is consistent with a 1992 *Journal of Marketing* article written by Cronin and Taylor. The researchers employed a correlation matrix in order to examine the convergent and discriminant validity of a newly developed scale related to service quality (p. 61).

Based on the writings of Churchill (1979) and Carmine and Zeller (1979), Cronin and Taylor examined the scale's convergent validity by investigating the extent to which items of interest in their scale correlated highly with scale items from related scales. Discriminant validity was assessed by determining whether the correlation between two different measures was less than the correlation between related instruments. Using the correlation matrix as a guide, the researchers concluded that their scale exhibited construct validity.

Utilizing the technique outlined by Churchill (1979) and Heeler and Ray (1972), and the subsequent adaptation employed by Cronin and Taylor (1992) as a foundation, the author reached fundamental conclusions regarding the convergent and discriminant validity of the CRN scale. More precisely, if indeed the new scale assesses the domain of the proposed construct, one would expect the correlations between CRN scale items and items from corresponding extant scales to be higher than correlations between non-corresponding scale items.

Accordingly, the following predictions regarding the construct validity of the Consumer Resource Needs scale are advanced:

H3 Subject responses on items from the financial factor of the CRN scale will be highly correlated with responses on items from the Material Values Scale (MVS).

H4 Subject responses on items from the social factor of the CRN scale will be highly correlated with responses on items from the Conformity Motivation Scale (CMS).

H5 Subject responses on items from the information factor of the CRN scale will be highly correlated with responses on items from the Information Seeking Scale (ISS) and the Market Maven Scale (MMS).

H6 Subject responses on items from the physical factor of the CRN scale will be highly correlated with responses on items from the Weight Involvement Scale (WIS).

H7 Correlations between subject responses on items from the financial factor of the CRN scale and responses on items from the CMS, the ISS/MMS, and the WIS will be significantly lower than the correlations found in H3 through H6.

H8 Correlations between subject responses on items from the social factor of the CRN scale and responses on items from the ISS/MMS, the WIS, and the MVS will be significantly lower than the correlations found in H3 through H6.

H9 Correlations between subject responses on items from the physical factor of the CRN scale and responses on items from the CMS, the ISS/MMS, and the MVS will be significantly lower than the correlations found in H3 through H6.

H10 Correlations between subject responses on items from the information factor of the CRN scale and responses on items from the CMS, the WIS, and the MVS will be significantly lower than the correlations found in H3 through H6.

In a manner consistent with the work of Cronin and Taylor (1992), it is argued that support of predictions H3 through H6 will provide preliminary evidence of the convergent validity of the Consumer Resource Needs scale. Similarly, support of predictions H7 through H10 will be interpreted as an indication of the discriminant validity of the scale.

Predictive Validity

A final important difference between the pilot study and the main study of the dissertation involved the addition of twenty scale items designed to test the predictive validity of the Consumer Resource Needs scale. More specifically, sixteen items were added to the assessment instrument, four for each of the resource need categories identified in the pilot study. On these items, respondents were asked to rate their preference for spending two hours engaged in activities such as getting a good physical workout, meeting new people, listening to a talk about new technology, or developing a budget for money management.

Four additional predictive validity items asked subjects to rate their preference for winning a free video cassette on one of four topics: maintaining good health, investing in the stock market, improving reading speed, or getting along with other people.

Several hypotheses were postulated regarding the relationship between these twenty predictive validity items and items from the Consumer Resource Needs scale. Each of those hypotheses is presented below.

H11 The CRN financial index and the financial predictive validity index will be more highly correlated than will be the same CRN index and the social, physical, and informational predictive validity indices.

H12 The CRN informational index and the informational predictive validity index will be more highly correlated than will be the same CRN index and the financial, social, and physical predictive validity indices.

H13 The CRN social index and the social predictive validity index will be more highly correlated than will be the same CRN index and the financial, physical, and informational predictive validity indices.

H14 The CRN physical index and the physical predictive validity index will be more highly correlated than will be the same CRN index and the social, financial, and informational predictive validity indices.

It is argued that support of Hypotheses 11 through 14 will be indicative of the predictive validity of the Consumer Resource Needs scale.

Social Desirability Bias

In addition to the inclusion of the scale items detailed above, items from the Social Desirability Scale (Crowne - Marlowe 1964) were also added to the survey instrument. High correlations between respondent scores on the social desirability scale and scores on another measure are generally accepted as an indication that the latter is measuring respondents' desire to answer in a socially preferred manner. Conversely, low correlations provide evidence that the scale of interest is relatively free of social desirability bias. Figure 11 presents the individual items from the Social Desirability Scale that were included in the survey instrument in the main study.

Research Materials

Subjects received a cover letter describing the nature of the study and providing simple completion instructions and telephone numbers to call if additional information was necessary. The cover letter was included in a packet of research materials the first page of which included detailed directions for completing the survey and a sample of the scales used in the survey. Pages two through five of the packet consisted of the scale items, while page six included items designed to assess the predictive validity of the scale. The final page of the packet included nine demographic questions.

Also included in the packet was a return envelope addressed to the local United Way agency. Due to changes in equipment and personnel available to the researcher, the computer scoring sheet used in the pilot study was omitted in the main study. The entire packet of materials for the main study is included in Appendix B.

CHAPTER VI

RESEARCH RESULTS

Introduction

The findings of the main study in the dissertation are presented in this chapter. Results of the study are presented in the following order: 1) issues of scale factor structure and internal reliability, 2) tests of hypotheses, and 3) tests of predictive validity.

Factor Structure of the Scale and Internal Reliability

Preliminary evidence of the four key factors of the Consumer Resource Needs (CRN) scale was demonstrated in the pilot study reported earlier in this dissertation. Therefore, a comparison can be made between the stability of the scale structure in the present and past research endeavors.

Item-to-Total Correlations

As recommended by Churchill (1979) and others, and as implemented in the pilot study, item-to-total correlations were calculated for the items included in the main study. As in the pilot study, items with item-to-total correlations of .20 or less were eliminated from further analyses. This resulted in the removal of three items from the scale. In general, item-to-total correlations were well within acceptable levels, with 55% of the reported correlations included in the four factors being greater than .50.

Overall coefficient alpha was also calculated based upon the reduced set of scale items. The resultant alpha (.83) indicated that the items did a satisfactory job of tapping into a single construct. Table 4 presents a summary of the item-to-total correlations for the reduced set of scale items.

Table 4

Final Factor Structure
Item-to-Total Correlations

Factor	Item	Item-to-Total
Social	S1	.651
	S5	.600
	S3	.583
	S2	.582
	S7	.430
	S4	.410
Financial	F7	.560
	F2	.512
	F6	.504
	F3	.403
	F9	.400
	F1	.357
	F5	.350
Physical	P8	.703
	P11	.673
	P7	.530
	P3	.512
Informational	I1	.440
	I3	.421
	I2	.350

Common Factors Procedure

A subsequent phase in the analysis of the underlying structure of the CRN scale consisted of a common factor analysis with a varimax (orthogonal) rotation. Based on the theoretical foundation of the CRMM and the findings of the pilot study, it was predicted that this procedure would result in the extraction of four meaningful factors –

that is, the four resource need types proposed in the CRMM. It was further proposed that each factor would consist of an enhancement/protection facet.

The common factors procedure with no n-factor set revealed no evidence of the enhancement/ protection facets of the resource types. This finding is consistent with the results of the pilot study and is discussed later in the dissertation.

While the enhancement/protection facets of the proposed model were not supported, the analysis did result in the extraction of four factors that closely approximated those found in the pilot study. Further, the factor structure closely matched the proposed structure specified *a priori* in the theoretical development of the CRMM, and the factors were accordingly labeled as social, financial, physical, and informational.

As a further step in the analysis of the reliability of the CRN scale, the recommendation of Churchill (1979) to examine factor items for significance and for cross loadings was followed. Each of these procedures is discussed below.

Factor Structure

Significance Level of Factor Loadings. As in the pilot study, factor items in the main study were examined for the significance level of the correlation between the original variable and its factor. Accordingly, any item with a factor loading of less than .35 was removed from further consideration in the scale development process. This procedure resulted in the removal of fourteen items (two items from the social factor, one item from the financial, and four and six items from the informational and physical factors, respectively) from the original item pool.

Investigation of Cross-Loadings. Regarding the possibility of cross-loadings, Churchill and his colleagues (1974) recommended that items that loaded heavily on more than one factor should be eliminated from further scale development. Following the procedures used in the pilot study, any item with a difference between factor loadings of less than .25 was not considered in subsequent analyses. Based on this criterion, three additional items were dropped from the scale development process in the main study, resulting in a final scale consisting of twenty items. Table 5 presents a summary of the final scale structure.

In summary, the final structure of the Consumer Resource Needs scale in both the pilot study and the main study were nearly identical. In addition, the coefficient alphas in both studies were very similar. More specifically, in the pilot study the coefficients for the factors were: social (.87), financial (.80), physical (.74), and informational (.56). In the main study, coefficient alphas for the individual factors were: social (.79), financial (.72), physical (.79), and informational (.56). Using the results of these analyses as a basis, it was determined that the Consumer Resource Needs scale demonstrated reasonably high internal reliability across the two studies.

Tests of Hypotheses

Hypotheses H1 and H2

The results presented above are interpreted in relation to the first two hypotheses outlined in Chapter 3. Those hypotheses are restated in the following pages.

H1 Consumers possess fundamental resource needs that include: physical, social, financial, and informational resource needs.

Table 5

Consumer Resource Needs Scale
Factor Analysis Loadings from Main Study

Factor 1. Social Resource Needs Items	
1. I am very concerned with whether my friends will like the products I buy	.74
2. I try to buy products that are similar to those my friends buy	.72
3. It is important that other people buy things that are similar to what I buy	.71
4. I try to purchase products that will make others want to be with me	.70
5. I wouldn't buy a product, even if I really like it, if other people didn't like it	.60
6. My friends have a great deal of influence on my purchase decisions	.47
Social Factor Cronbach:	**.79**
Factor 2. Financial Resource Needs Items	
1. I would like to be rich enough to buy any product I want	.71
2. My dream in life is to be able to buy expensive things	.64
3. The most important thing about a job is that it pay enough so that I can buy the things I want	.61
4. It is a very important advantage to me to achieve greater financial wealth than others	.58
5. The financial wealth that I have accumulated is critical in helping me get what I want out of life	.53
6. It sometimes bothers me that I can't afford to buy all the things I want	.51
7. It is really true that buying things can make people happy	.48
Financial Factor Cronbach:	**.72**
Factor 3. Physical Resource Needs Items	
1. It is important that the products I buy make me physically attractive	.80
2. It is important that the products I buy make me look good	.78
3. I would buy a product that would improve how my body looks	.71
4. My overall physical attractiveness is a very important asset for me	.71
Physical Factor Cronbach:	**.79**
Factor 4. Information Resource Needs Items	
1. I like to be responsible for a purchase decision that requires a lot of thinking	.78
2. I find it satisfying to deliberate long and hard about a purchase decision	.78
3. Making a really dumb purchase decision is one of the worst things I an do	.55
Information Factor Cronbach:	**.56**

As discussed above, the factor analysis procedure in both the second phase of the pilot study and the main study of the dissertation provided clear support for the existence of the four resource need types proposed in the CRMM. Further, the structure of the four factor solution provides strong evidence of the four specific resource need types proposed in the Consumer Resource Management Model of motivation. Accordingly, the author concluded that Hypothesis 1 was indeed supported.

H2 Individual differences exist in the level of importance consumers attach to each of the four resource need types identified in the Consumer Resource Management Model.

As predicted in Hypothesis 2, the research findings showed strong support for individual differences in the level of importance each of the resource need types held for consumers. Specifically, as indicated in Table 10, cross-tabulations revealed that individual participants' responses indicated a distinct preference for one or more of the resource need types and/or lesser preferences for other resources. In addition, respondent scores on indices created by summing scale items from each factor of the Consumer Resource Management Model provided further evidence of the different levels of importance attached to various factors by different individuals. Table 6 presents a frequency table demonstrating the various scores on each of the factor indices.

Hypotheses 3, 4, 5, 6, 7, 8, 9, and 10

As stated earlier in this dissertation, an adaptation of the multitrait-multimethod matrix technique – the multitrait-multiscale approach – was developed in order to assess the construct validity of the Consumer Resource Needs scale. This approach

Table 6

Frequency Table of Participant Composite Scores on Individual Factors of Consumer Resource Needs Scale

Social Score	Frequency
Low	106
Medium	104
High	137
Finance Score	**Frequency**
Low	93
Medium	119
High	134
Physical Score	**Frequency**
Low	94
Medium	127
High	127
Inform. Score	**Frequency**
Low	87
Medium	59
High	201

employs a correlation matrix to assess the correspondence between subject responses to items from the CRN scale and items from existing assessment instruments designed to tap similar/dissimilar constructs.

Using the earlier work of Cronin and Taylor (1992) as a precedent, several hypotheses were developed based on the theoretical foundations of the Consumer Resource Management Model. Each of the hypotheses and the results for each are presented below, while the details of the multitrait-multiscale matrix are presented in Table 7.

To further investigate these hypotheses in a more easily interpretable manner, a second MTMS matrix was created. As seen in Table 8, this matrix consists of the correlations between participants' sum scores on existing scales (e.g., conformity motivation, weight involvement) and composite scores on items from each of the four factors from the CRMM. In essence, this matrix allows the researcher to examine 15 correlations as opposed to 342.

In a manner consistent with the results found in Table 7, the results of this reduced scale/factor matrix provided support for Hypotheses 3, 4, and 5, and Hypotheses 7, 8, and 9. Indeed, Fisher's *r*-to-*z* Transformation showed that 12 of 15 correlations were in the predicted direction and the null hypothesis (that the noncorresponding scale correlations were not significantly different) was rejected in 10 of the 15 comparisons.

In essence, as indicated in Table 8, the results of the matrix are very consistent with the results presented in Table 7. More specifically, the physical scale scores did not perform as predicted. However, with the exception of the relationship between social scores and scores on the Material Values Scale, the other measures performed as hypothesized.

<u>Hypotheses 3, 4, 5, and 6</u>

H3 Subject responses on items from the financial factor of the CRMM will be highly correlated with their responses on items from the Material Values Scale (MVS).

RESULTS: HYPOTHESIS SUPPORTED. The results of the MTMS matrix revealed that responses on financial items from the CRN were most strongly correlated with Material

Table 7

Multitrait-Multiscale Correlation Matrix: Examination of Construct Validity

CRN Item	Existing Scale Items																	
	Conform Motive				Mat'l Value				Weight		Info Seek				Mkt Maven			
	1	2	3	4	1	2	3	4	1	2	1	2	3	4	1	2	3	4
s1	.23	.20	.37	.28	.31	.21	.22	.25	.10	.10	.13	.18	.19	.14	.03	.15	.12	.12
s2	.20	.21	.38	.25	.28	.14	.20	.26	.10	.13	.09	.04	.09	.16	.10	.00	.09	.04
s3	.19	.19	.39	.27	.35	.19	.19	.19	.04	.11	.03	.07	.12	.11	.00	.12	.09	.06
s5	.19	.21	.40	.24	.32	.19	.25	.25	.05	.15	.11	.12	.19	.12	.05	.12	.11	.02
s7	.07	.12	.19	.19	.12	.01	.02	.10	.00	.07	.01	.01	.04	.07	.00	.09	.05	.05
f1	.02	.09	.15	.13	.24	.20	.29	.25	.01	.15	.01	.05	.03	.06	.00	.01	.00	.03
f2	.22	.06	.19	.15	.51	.19	.38	.36	.01	.02	.18	.10	.14	.26	.07	.02	.02	.09
f3	.12	.07	.09	.06	.32	.22	.23	.38	.04	.12	.14	.10	.14	.06	.00	.13	.12	.12
f5	.04	.01	.12	.09	.31	.39	.25	.33	.02	.04	.20	.16	.21	.06	.02	.06	.04	.13
f6	.01	.09	.10	.11	.35	.26	.35	.41	.00	.14	.19	.14	.15	.12	.04	.14	.05	.19
f7	.16	.11	.15	.09	.45	.29	.37	.57	.10	.12	.20	.17	.13	.21	.03	.12	.18	.16
f9	.12	.13	.07	.11	.32	.24	.21	.55	.00	.16	.11	.18	.15	.20	.06	.17	.13	.18
p3	.28	.13	.23	.16	.23	.32	.32	.17	.10	.19	.10	.15	.21	.26	.03	.00	.08	.18
p7	.29	.16	.31	.18	.20	.35	.34	.20	.21	.34	.15	.09	.17	.16	.08	.10	.07	.25
p8	.29	.17	.25	.14	.29	.35	.33	.23	.18	.25	.11	.16	.15	.14	.02	.07	.04	.20
p11	.26	.16	.30	.17	.28	.32	.30	.26	.15	.27	.09	.12	.16	.21	.01	.06	.00	.27
i1	.00	.03	.00	.03	.01	.00	.00	.03	.00	.00	.07	.17	.15	.19	.15	.14	.18	.16
i2	.00	.08	.08	.08	.04	.05	.04	.11	.01	.06	.05	.15	.24	.18	.12	.17	.20	.15
i3	.02	.09	.03	.08	.07	.09	.19	.16	.02	.01	.04	.17	.20	.23	.13	.11	.20	.10

Table 8

Multitrait-Multiscale Matrix:
Correlations Between Respondent Scores on Existing Scales and Scores on CRN Scale Factors

CRN Scale	Existing Scales				
	Conform Motive	**Mat'l Values**	**Weight Involve**	**Info. Seek**	**Market Maven**
Social	.46	.40	.18*	.19*	.17*
Finance	.22*	.75	.16*	.30*	.20*
Physical	.38*	.49*	.23	.25	.16
Inform	.02*	.13*	.01*	.24	.25

Note: Correlations followed by an asterisk (*) are significantly different than correlation presented in the diagonal of the matrix.

Values Scale items (average correlation = .32). Indeed, the analysis revealed that all 28 of the correlations were in the predicted direction and were significant at the .01 level. As indicated in Table 8, the correlations between subject composite scores on the Material Values Scale and items from the financial factor of the CRMM (.75) further substantiated these findings.

H4 Subject responses on items from the social factor of the CRMM will be highly correlated with their responses on items from the Conformity Motivation Scale (CMS).

RESULTS: HYPOTHESIS SUPPORTED. The MTMS matrix provided evidence that, in general, the correlations between subject responses on items from the Conformity Motivation Scale and responses on CRN social factor items exhibited the predicted pattern (average correlation = .30). The results revealed that 19 of 20 correlations were in the predicted direction and were significant at the .05 level. The results of the correlation matrix of composite scale scores (see Table 8) provide additional support for this hypothesis.

H5 Subject responses on items from the information factor of the CRMM will be highly correlated with their responses on items from the Information Seeking Scale (ISS) and the Market Maven Scale (MMS).

RESULTS: HYPOTHESIS SUPPORTED. The matrix shows that subject responses to informational items from the CRN scale were most strongly correlated with items from the information seeking scale and/or the Market Maven Scale (average correlation = .15 for both scales). Of the twelve correlations made between the CRN items and the Market Maven items, nine were significant at the .01 level. In addition, the matrix showed that seven of the twelve correlations between items from the informational factor of the CRN scale and Information Seeking Scale items were significant and in the predicted direction.

Closer examination of the matrix revealed an interesting phenomenon concerning the correlations between the CRN informational items and the Market Maven Scale items. More specifically, the results showed that the Market Maven item that read, "I like introducing new brands and products to my friends," consistently violated the predicted pattern of correlations.

Such findings suggest that these results may be due to a problem with the Market Maven item itself rather than with the items from the informational factor of the CRN. In order to examine this possibility, the item-to-total correlations for the four items from the Market Maven Scale were re-examined. If the problem is indeed with a specific item of the Market Maven Scale, one would expect the correlation between that item and the total score for the four factors to be relatively weak.

This examination revealed that the specific item from the Market Maven Scale exhibited the lowest of the four item-to-total correlations for those scale items (.44). While the correlation is acceptable, the findings do support the *post-hoc* prediction espoused above. Accordingly, it is suggested that in future research this item from the Market Maven Scale be replaced or revised.

Table 8 provides further support for Hypothesis 5. Indeed, the correlations between subject responses to CRN information items and the Market Maven and Information Seeking Scale were .23 and .25, respectively. In contrast, correlations between scores on the CRN information items and items from the Conformity Motivation Scale (.02), the Material Values Scale (.13), and the Weight Involvement Scale (.01) were significantly lower.

H6 Subject responses on items from the physical factor of the CRMM will be highly correlated with their responses on items from the Weight Involvement Scale (WIS).

RESULTS: HYPOTHESIS NOT SUPPORTED. While the MTMS revealed that the correlations between physical CRN items and Weight Involvement items were generally stronger (average correlation = .21) than between other CRN factor items and Weight Involvement items, other concerns exist. More specifically, physical factor items from the CRN correlated relatively strongly with items from the Material Values and

Conformity Motivation Scales (.28 and .21, respectively). In essence, contrary to predictions, subject responses on items from the physical factor of the CRN scale did not correlate most strongly with items from the Weight Involvement Scale. This lack of support for Hypothesis 6 is substantiated by the results found in Table 8.

Summary of Hypotheses H3 Through H6 Results

As predicted in Hypotheses 3 through 5, subject responses on CRN scale items were most highly correlated with items from existing instruments designed to assess similar constructs. Furthermore, the vast majority of these correlations were in the predicted direction and were statistically significant. Hypothesis 6 was not supported. Based on these findings, specifically the support of Hypotheses 3 through 5, it is concluded that the Consumer Resource Needs scale adequately demonstrates convergent validity.

Hypotheses 7, 8, 9, and 10

Hypotheses 7 through 10 predicted that the correlations between subjects' responses on items from each of the factors in the Consumer Resource Needs scale and items from existing scales designed to assess distinctly different constructs would be significantly lower than the correlations found in Hypotheses 3 through 6.

As outlined earlier, support of Hypotheses 7 through 10 would be interpreted as an indication of the discriminant validity of the CRN scale. Once again, Table 7 and Table 8 present the details of the multitrait-multiscale correlation matrix employed to test these hypotheses. Each of the hypotheses and the results regarding each are presented below.

H7 Correlations between subject responses on items from the financial factor of the CRMM and responses on items from the ISS/MMS, the CMS, and the WIS will be significantly lower than the correlations found in H3 through H6.

RESULTS: HYPOTHESIS SUPPORTED. As predicted, the correlations between subject responses on items from the financial factor of the CRN scale and items from each of the noncorresponding existing scales were generally less than the correlations outlined in Hypothesis 3. That is, the average correlation between items from the financial factor of the CRN and items from the Material Values Scale were .32. The average correlation between financial scale items and Conformity Motivation items was .10; Weight Involvement items, .08; Market Maven items, .07; and Information Seeking items, .13. These findings are interpreted as support for Hypothesis 7.

This conclusion is supported by the findings reported in Table 8 as well. The correlation between subject scores on the Material Values Scale and CRN financial items was .75. The correlations between Material Values Scale scores and Conformity Motivation, Weight Involvement, Market Maven, and Information Seeking scores were .22, .16, .30, and .20, respectively.

H8 Correlations between subject responses on items from the social factor of the CRMM and responses on items from the ISS/MMS, the WIS, and the MVS will be significantly lower than the correlations found in H3 through H6.

RESULTS: HYPOTHESIS SUPPORTED. The results of the MTMS provide support for the predicted relationship between items from the social factor of the CRN scale and items from noncorresponding extant scales. For example, the average correlation between social and Conformity Motivation items was .30. The average correlation between social items and Information Seeking, Market Maven, Weight Involvement, and Material Values items were .13, .06, .08, and .20, respectively.

Once again, the results of the scale/factor score matrix presented in Table 8 provide additional support for this hypothesis. As seen, the correlation between social factor scores and scores on three of the four noncorresponding scales were significantly lower than correlations between social and conformity motivation scores. The one exception is the correlation between social factor scores and Material Values Scale scores. More specifically, the corresponding scale score correlation is .46 compared to .40 for noncorresponding scale scores. While these correlations are in the predicted direction, the difference is not statistically significant. This inconsistent finding is discussed in more detail in Chapter VI.

H9 Correlations between subject responses on items from the information factor of the CRMM and responses on items from the CMS, the WIS, and the MVS will be significantly lower than the correlations found in H3 through H6.

RESULTS: HYPOTHESIS SUPPORTED. The correlations between items from the information factor of the CRN scale and items from noncorresponding existing scale items were predictably low. Specifically, the average correlation between information items and Conformity Motivation, Weight Involvement, and Material Values items were .01, .01, and .06., respectively. Importantly, the average correlation between information items and the Market Maven and Information Seeking scale items was .15 (for both scales). These results are interpreted as evidence of the discriminant validity of the CRN scale.

In a manner consistent with these findings, Table 8 provides supplementary evidence of these conclusions. That is, noncorresponding scale correlations were significantly lower than were corresponding scale correlations. Again, these findings are interpreted as an indication of the construct validity of the CRN scale.

H10 Correlations between subject responses on items from the physical factor of the CRMM and responses on items from the ISS/MMS, the CMS, and the MVS will be significantly lower than the correlations found in H3 through H6.

RESULTS: HYPOTHESIS NOT SUPPORTED. In a manner consistent with the lack of support for Hypothesis 6, Hypothesis 10 was not supported. That is, as seen in Table 7, items from the physical factor of the CRN scale tended to be correlated nearly equally with the Weight Involvement Scale (.21), the Material Values Scale (.28), and the Conformity Motivation Scale (.21). These findings are consistent with the results provided in Table 8. This unexpected finding is discussed in more detail in Chapter VI.

Summary of Hypotheses H7 through H10 Results

In summary, the MTMS correlation matrix reveals support for Hypotheses 7 through 9, but show no clear support of Hypothesis 10. These results are consistent with the findings regarding Hypotheses 3 through 6 and are interpreted as evidence of the discriminant validity of the Consumer Resource Needs scale. Table 9 presents a more detailed look at the average correlations between CRN scale items and items from each of the existing scales.

Table 9

Multitrait-Multiscale Matrix of Average Correlations* Between CRN Scale Items and Extant Scales

Consumer Resource Needs Scale Items	Existing Scales				
	CMS	MVS	WIS	MMS	ISS
Social Factor	.30	.20	.08	.06	.13
Financial Factor	.10	.32	.08	.07	.13
Physical Factor	.21	.28	.21	.08	.15
Information Factor	.01	.06	.01	.15	.15

*Note: Correlations represent average correlation between all CRN scale items and all existing scale items

Predictive Validity

Hypotheses 11, 12, 13, and 14

It was predicted in Hypotheses 11 through 14 that the correlation between corresponding indices from the Consumer Resource Needs scale and indices created from the predictive validity items discussed earlier would be higher than correlations between noncorresponding indices. In order to test these hypotheses, two procedures were implemented. First, a fourth correlation matrix, presented in Table 10, was employed. In a manner similar to the method used to test Hypotheses 3 through 10, the correlations between the predictive validity items included in the assessment instrument employed in the main study and composite scores on each factor of the Consumer Resource Needs scale were examined.

Table 10

Multitrait-Multiscale Correlational Matrix for the Investigation of Predictive Validity

Consumer Resource Needs Scale Item Indices	Predictive Validity Indices			
	Soc. Idx.	Fin. Idx.	Phy. Idx.	Inf. Idx.
Social Index	.18	.09	.23	.07
Financial Index	.10	.25	.14	.14
Physical Index	.03	.00	.19	.08
Informational Index	.07	.13	.07	.25

*Note: Figures represent correlations between indices created from all items from each factor of the CRN scale and indices created from all items from the predictive validity items included in the survey instrument.
Key: Soc Idx = Social Predictive Validity Index
Inf Idx = Informational Predictive Validity Index
Phy Idx = Physical Predictive Validity Index
Fin Idx = Financial Predictive Validity Index

Composite predictive validity indices were created by summing subject responses on each of the predictive validity question types, as indicated in Figure 12. Similarly, indices were created for subject scores on each of the four Consumer Resource Management Model factors.

Furthermore, the internal consistency of the items included in each of the predictive validity indices was evaluated. Specifically, overall Cronbach alphas and item-to-total correlations were calculated for each index. As seen in Figure 12, the indices demonstrated adequate Hypotheses 11 through 14 and the results of each are presented below.

Figure 12

Cronbach Alphas and Item-to-Total Correlations For Predictive Validity Indices

Predictive Validity Index Items	
Financial Predictive Validity Index	Alpha = .79
1. Developing a budget to better manage your money	.46
2. Spending time planning a new investment strategy	.76
3. Reviewing your investment portfolio	.74
4. Working overtime to make more money	.34
5. A video on how to invest in the stock market	.58
Physical Predictive Validity Index	Alpha = .50
1. Getting a good physical workout	.34
2. Touring an art museum	.27
3. Eating a delicious meal	.11
4. Going for a long, solitary walk	.30
5. A video on maintaining good health	.37
Social Predictive Validity Index	Alpha = .67
1. Meeting new people	.42
2. Spending an evening with friends	.56
3. Going to a movie with friends	.49
4. Relaxing and talking with relatives	.41
5. A video on how to get along with other people	.30
Informational Predictive Validity Index	Alpha = .62
1. Listening to a talk informing you about new technology	.34
2. Reading a new book about your favorite hobby	.40
3. Learning about a new hobby	.40
4. Learning a new way to do a routine task	.41
5. A video on how to improve your reading speed	.39

H11 The CRN financial index and the financial predictive validity index will be more highly correlated than will be the same CRN index and the social, physical, and informational predictive validity indices.

RESULTS: HYPOTHESIS SUPPORTED. As shown previously in Table 9, the correlation between the financial index from the CRN scale and the predictive validity financial index was .25. The correlation between the CRN financial index and the social, informational, and physical predictive validity indices were .18, .14, and .14, respectively. These results are consistent with the predictions of Hypothesis 11.

H12 The CRN informational index and the informational predictive validity index will be more highly correlated than will be the same CRN index and the financial, social, and physical predictive validity indices.

RESULTS: HYPOTHESIS SUPPORTED. It was predicted that the correlation between the CRN informational index and the informational predictive validity index would be higher than the correlations between the same CRN index and noncorresponding predictive validity indices. The correlation matrix in Table 9 again provides evidence to support this prediction. More specifically, the correlation between the information indices was .25, while the correlation between the informational CRN index and the social, physical, and financial predictive validity indices were .07, .07, and .13, respectively.

H13 The CRN physical index and the physical predictive validity index will be more highly correlated than will be the same CRN index and the social, financial, and informational predictive validity indices.

RESULTS: HYPOTHESIS SUPPORTED. The results of the correlation matrix show that the predicted relationship between physical items from the CRN scale and corresponding predictive validity items did indeed exist. The correlation between the physical CRN index and the physical predictive validity index was .19, compared to

.03, .08, and .00 for the social, informational, and financial indices, respectively. These findings are supportive of Hypothesis 13.

H14 The CRN social index and the social predictive validity index will be more highly correlated than will be the same CRN index and the financial, physical, and informational predictive validity indices.

RESULTS: HYPOTHESIS NOT SUPPORTED. The results of the correlation matrix failed to provide evidence of the predictive validity of the social items of the Consumer Resource Needs scale. As seen in Table 9, the correlation between the social index of the CRN scale and the corresponding predictive validity index was .18. However, the correlation between the social index of the CRN and the physical predictive validity index was .23. This result is interpreted as an indication of a lack of support for Hypothesis 14. This finding is discussed more fully in Chapter VI.

The results presented above provide evidence of the predictive validity of the Consumer Resource Needs scale. However, in order further examine this conclusion, cross-tabulations were employed. As seen in Table 10, this procedure revealed a positive relationship between consumers' scores on the CRN factor indices and the corresponding predictive validity indices.

More specifically, the cross-tabulation procedure showed that consumers scoring high (low) on the CRN financial index also tended to score high (low) on the financial predictive validity index. Indeed, as seen in Table 11, this pattern was found for the information, the physical, and the social indices as well. These findings were all significant at the .10 level.

Table 11

Cross Tabulations of Consumer Resource Needs Scale Indices and Predictive Validity Indices

CRN Financial Index Score	**Financial Predictive Validity Index Score**		
	Low	Medium	High
Low	33	40	20
Medium	35	46	38
High	43	27	64
CRN Information Index Score	**Information Predictive Validity Index Score**		
	Low	Medium	High
Low	34	31	22
Medium	17	20	22
High	51	66	84
CRN Physical Index Score	**Physical Predictive Validity Index Score**		
	Low	Medium	High
Low	33	36	25
Medium	44	42	41
High	31	43	53
CRN Social Index Score	**Social Predictive Validity Index Score**		
	Low	Medium	High
Low	33	36	37
Medium	39	29	36
High	35	42	60

In summary, based on the results of the correlation matrix and the cross tabs procedure, it was concluded that the Consumer Resource Needs scale satisfactorily demonstrated predictive validity.

Testing for the Social Desirability Bias

In addition to the inclusion of the scale items detailed above, items from the Social Desirability Scale (Crowne and Marlowe 1964) were also added to the survey instrument employed in this dissertation. High correlations between respondent scores on the Social Desirability Scale and scores on another measure are generally accepted as an indication that the latter is measuring respondents' desire to answer in a socially preferred manner (Bearden, Netemeyer, and Teel 1989). Conversely, low correlations provide evidence that the scale of interest is relatively free of social desirability bias. Such information is critical in assessing the validity of newly developed assessment instruments.

Again, a correlation matrix was used to test for indications that subjects might have been responding in a socially desirable manner. As seen in Table 12, this matrix reveals that subject responses were relatively free of such bias – 75% of the correlations were less than .15, and only one correlation exceeded .25.

Based upon these results, one might be disposed to conclude that the subjects' responses were relatively free of the social desirability bias. However, in order to further investigate this element of the CRN scale, the significance level of the correlations between CRN scale items and items from the Social Desirability Scale were examined.

Table 12

Correlations* Between CRN Scale Items and Social Desirability Items

Consumer Resource Needs Scale Items	Social Desirability Items			
	SD1	SD2	SD3	SD4
Financial	.11	.13	.11	.10
Informational	.05	.04	.01	.10
Physical	.15	.12	.09	.11
Social	.13	.10	.09	.17

*Note: Correlations represent an average of correlations between all items from each factor of the CRN scale and each item from the Social Desirability Scale.

This procedure revealed that 41 of 220 correlations were significant at the .05 level. Accordingly, it was concluded that subject responses to items from the CRN scale were relatively free of the social desirability bias.

CHAPTER VII

SUMMARY AND CONCLUSIONS

This chapter of the dissertation is comprised of three sections. The first is a discussion section containing a brief review of the main purposes of the dissertation as well as an analysis of the specific results and promising avenues for future research. The second section presents a discussion of limitations of the study, and the final section of the chapter discusses several theoretical contributions made by the work presented.

Discussion

Overview

This discussion begins with a return visit to the main purposes of the dissertation – a review of the human needs and motivation literature, the development of a theoretical foundation for a resource-based model of consumer motivation, the development of a paper-and-pencil assessment instrument based on the new model, and the investigation of the construct validity of the instrument.

The literature review focused on the works of Maslow (1943), Alderfer (1969), McClelland et al. (1953), Cohen (1967), the VALS instruments (1985), and Kahle's List of Values (1986). The review painted a picture of controversy and complexity, limited empirical support, and little application to the consumer behavior arena. However, it is important to note that the works cited above coupled with work by Foa and Foa (1974), Kahneman and Tversky (1979), and others offer valuable contributions for further research in the area of human needs (Kotler 1994). Indeed, the models and theories reviewed in chapter two of this dissertation served as the theoretical foundation for a new model of consumer motivation.

A second purpose of the dissertation was to develop a pencil-and-paper scale – the Consumer Resource Needs scale – based on the Consumer Resource Management Model. This portion of the dissertation consisted of two studies in which the widely accepted paradigm developed by Churchill (1979) was utilized.

In order to examine the construct validity of the assessment instrument, an adaptation of the multitrait-multimethod matrix developed by Campbell and Fiske (1959) was employed. Using this procedure, a correlation matrix was constructed that allowed for the examination of the relationship between items from the newly developed scale and extant assessment instruments in terms of construct validity.

The results of the studies revealed general support for the hypotheses set forth in the dissertation. Table 13 presents a summary of the results for each hypothesis. The findings of the pilot study and the main study in the dissertation are discussed in the following section.

Analysis of Results

The results of the initial work to develop individual difference measures of resource needs supported the proposed Consumer Resource Management Model of motivation. The findings of the pilot study revealed four basic resource need types – physical, social, financial, and informational – that make up the Consumer Resource

Needs scale. These initial results also revealed that the CRN scale exhibited satisfactory internal reliability.

However, no evidence of the enhancement/protection facets of the resource need types was found. It was proposed that this lack of support may have been due in part to the make-up of the pilot study sample – the average subject was 22 years of age and had an annual income of less than $10,000.

It was suggested that such demographics might be indicative of consumers who had become accustomed to or had adapted to relatively low levels of accumulated resources. The researcher suggested that such consumers may experience little incentive to protect such resources and may, instead, focus on the accumulation of additional resources in the future. This issue was addressed more fully in the main study of this work.

The main study of the dissertation was designed to further examine the underpinnings of the Consumer Resource Management Model of motivation and the structure of the CRN scale. The results of the main study again revealed strong support for the underlying dimensions of the CRMM and also provided further evidence of the reliability of the structure of the four factors of the CRN scale. Cronbach alphas for the social, financial, physical, and information factors were .787, .724, .792, and .563, respectively. Further, the scale items included in each of the factors in the main study were nearly identical to the items retained in the pilot study.

Table 13

Summary of Research Results By Hypothesis

H1 Consumers possess fundamental resource needs that include: physical, social, financial, and informational.

Result: Hypothesis supported. The scale structure revealed four meaningful factors that closely matched those proposed a priori in the Consumer Resource Management Model of motivation.

H2 Individual differences exist in the level of importance consumers attach to each of the resource need types identified in the Consumer Resource Management Model of motivation.

Result: Hypothesis supported. Analyses revealed that consumers exhibited stronger preferences for some resource types than other resource types.

H3 Subject responses on items from the financial factor of the CRMM will be highly correlated with their responses on items from the Material Values Scale (MVS).

Result: Hypothesis supported.

H4 Subject responses on items from the social factor of the CRMM will be highly correlated with their responses on items from the Conformity Motivation Scale (CMS).

Result: Hypothesis supported.

H5 Subject responses on items from the information factor of the CRMM will be highly correlated with their responses on items from the Information Seeking Scale (ISS) and the Market Maven Scale (MMS).

Result: Hypothesis supported.

H6 Subject responses on items from the physical factor of the CRMM will be highly correlated with their responses on items from the Weight Involvement Scale (WIS).

Result: Hypothesis not supported. Correlations between items from physical factor correlated nearly evenly with the various scales employed to investigate the construct validity of the Consumer Resource Needs scale.

H7 Correlations between subject responses on items from the financial factor of the CRMM and responses on items from the CMS, the ISS and the MMS, and the WIS will be significantly lower than the correlations found in H3 through H6.

Result: Hypothesis supported.

H8 **Correlations between subject responses on items from the social factor of the CRMM and responses on items from the ISS and the MMS, the WIS, and the MVS will be significantly lower than the correlations found in H3 through H6.**

Result: Hypothesis supported.

H9 **Correlations between subject responses on items from the physical factor of the CRMM and responses on items from the CMS, the ISS and the MMS, and the MVS will be significantly lower than the correlations found in H3 through H6.**

Result: Hypothesis supported.

H10 **Correlations between subject responses on items from the information factor of the CRMM and responses on items from the CMS, the WIS, and the MVS will be significantly lower than the correlations found in H3 through H6.**

Result: Hypothesis not supported. In a manner consistent with Hypothesis 6, the correlations between the physical items of the CRN *scale were nearly equal across scales.*

H11 **The CRN financial index and the financial predictive validity index will be more highly correlated than will be the same CRN index and the social, physical, and informational predictive validity indices.**

Result: Hypothesis supported.

H12 **The CRN informational index and the informational predictive validity index will be more highly correlated than will be the same CRN index and the financial, social, and physical predictive validity indices.**

Result: Hypothesis supported.

H13 **The CRN social index and the social predictive validity index will be more highly correlated than will be the same CRN index and the financial, physical, and informational predictive validity indices.**

Result: Hypothesis supported.

H14 **The CRN physical index and the physical predictive validity index will be more highly correlated than will be the same CRN index and the social, financial, and informational predictive validity indices.**

Result: Hypothesis not supported. The results of the correlation matrix revealed that the correlation between the CRN *social index and the physical predictive validity index were .23 compared to .18 between the* CRN *social index and the social predictive index. This finding may be related to the proposed relationship between physical and social items from the* CRN *(see discussion section in Chapter VI).*

In essence, answers were provided to each of the two primary questions raised at the beginning of the dissertation. First, the author feels confident in concluding that the results provide strong evidence indicating that a new and comprehensive, theoretically founded, resource-based model of consumer motivation has been successfully developed. Secondly, using the well-known Churchill (1979) paradigm, a reliable and valid assessment instrument based on the newly developed model has been developed.

In addition, as stated above, of primary interest in the main study of the dissertation was the question of the enhancement/protection dimensions of the four resource need types. It was thought that a more heterogeneous, mature sample of consumers might provide evidence of the enhancement/protection element. That is, it was postulated that consumers who had accumulated greater levels of the four resource types would have greater incentive to protect the level of resources to which they had become accustomed.

In order to further explore these issues, additional items were included in the final assessment instrument. However, in a manner consistent with findings of the pilot study, no evidence of the enhancement/protection dimensions of the resource need types was found.

Upon further reflection, it seems possible that the enhancement/protection facets of the four resources in the CRM model may not be directly related to individual difference characteristics. Rather, it may very well be that such differences in the importance consumers attach to each resource need type may be more situational in nature.

If such is indeed the case, a variety of extraneous variables may significantly impact a consumer's need to protect and/or enhance current levels of each or any of the resource need types. Such extraneous variables might include changes in one's career, the birth of a child, a marriage or divorce, changes in the economy and so on. The presence of these or similar variables and situations may very well dramatically influence the degree to which a consumer experiences the need to maintain or augment existing levels of the four resource need types. Accordingly, it is recommended that in future research, carefully constructed scenarios be developed to facilitate further investigation of this possibility.

The main study was also designed to address a major limitation of the pilot study. That is, as stated earlier in Chapter IV, the primary weakness of the pilot study was the lack of a specific examination of the construct validity of the Consumer Resource Needs scale. In order to overcome this shortcoming, additional items from existing assessment instruments were added to the questionnaire employed in the main study.

Using an adaptation of the multitrait-multimethod matrix developed by Campbell and Fisk (1959), a multitrait-multiscale correlation matrix was developed to facilitate the examination of the convergent and discriminant validity of the Consumer Resource Needs scale. The correlation matrix revealed that, in general, the newly developed scale exhibited both convergent and discriminant validity.

The one inconsistent aspect of this construct validity examination involved scale items from the physical factor of the scale. The MTMS matrix revealed no support for the predicted correlational pattern between these items and items from existing scales.

A closer examination of the items included in the physical factor of the CRN scale may provide some insight to this unexpected finding. For example, consider the items from the physical factor of the CRN scale:

1. It is important that the products I buy make me physically attractive;
2. It is important that the products I buy make me look good;
3. I would buy a product that would improve how my body looks;
4. My overall physical attractiveness is a very important asset for me.

It appears that statements 1, 2, and 3 may have multiple interpretations. Indeed, each of these statements seems to be related to perceptions of a consumer's physical appearance. That is, the items involve one's desire to "look good" or to "appear attractive." Such desires not only involve self-perceptions, but also the way in which the consumer may be perceived by others.

Considered from this perspective, it seems plausible that these items are inadvertently tapping into the social dimension of consumer resource needs. Indeed, as revealed in the multitrait-multiscale matrix in Figure 6, the correlation between the physical items from the CRN scale and the conformity motivation scale are stronger than predicted (average correlation = .21). and are virtually identical to the correlation between the same CRN items and the Weight Involvement Scale items.

The MTMS in Figures 6 and 7 also indicate a stronger-than-predicted correlation between the physical CRN scale items and items from the Material Values Scale items (average correlation = .28). In fact, the MTMS reveals that, compared to items from other existing scales, the Material Values items correlated more strongly than expected with all factor items from the CRN scale.

In general, correlations between items from noncorresponding scales were predictably low, averaging less than .10. The exception to this finding was the correlations between factor items and the Material Values items. This unexpected finding may very well be due to the underlying nature of the research. More specifically, the study revolves around a consumer's ability and/or likelihood of purchasing products associated with one or more of four resource need factors. This ability to purchase, regardless of the importance a consumer attaches to any single resource factor, may present a built-in correlation between items related to purchase ability and all other items.

In light of this explanation, it is important to emphasize the fact that the relationship between items from the financial factor of the CRN scale and items from the Material Values Scale (.32) were indeed the strongest of any found in the MTMS. These results lend credence to the factor structure revealed in the common factors analysis.

In summary, the multitrait-multiscale matrix employed in the main study revealed general evidence of the construct validity of the Consumer Resource Needs scale. As noted above, the correlations in this phase of the study were well within acceptable bounds as outlined in the individual differences literature. As such, it was concluded that the CRN scale does exhibit convergent and discriminant validity. It is important to note, however, that the author recommends that in subsequent research, items from alternative "existing scales" be included in the assessment instrument. For instance, the choice of the Weight Involvement Scale seems, upon reflection, a somewhat questionable choice. While the scale items are related to a person's physical attributes, they have limited application to the consumer behavior arena. A better choice for future research might be items from the Sensation Seeking Scale (Zuckerman 1979) or to develop additional items via the literature and/or through consultation with other consumer behavior researchers.

A final objective of the main study in the dissertation was the investigation of the predictive validity of the Consumer Resource Needs scale. Two procedures were employed in this investigation: a correlation matrix and cross tabulations. In general, both procedures provided evidence that the CRN does indeed exhibit predictive validity. For example, participants who scored highly on an index of the financial items from the CRN also tended to score highly on an index of financial predictive validity items. In essence, this provides preliminary evidence that there is a positive relationship between a consumer's scores on the CRN scale items and their purchase behavior.

A caveat must be added to this implication. As noted above, as seen in the correlation matrix in Figure 9, the relationship between participants' scores on the social index of the CRN were correlated more highly with the physical predictive validity index (.23) than they were with the social CRN index (.18). This finding can be interpreted in much the same way as the relationship between the items from the physical factor of the CRN scale and the items from the Conformity Motivation Scale.

That is, as stated above, the physical items of the CRN appear to be tied to a consumer's concept of how other people perceive him or her. Accordingly, in future research the author recommends a re-examination of the predictive validity question after the suggested re-wording of items has been implemented.

Limitations

While the findings of the studies reported in this dissertation are encouraging and overall are supportive of the hypotheses, limitations need to be addressed. For example, a key potential limitation of the present study involves the research methodology and administration procedure employed.

In general, research conducted in field settings offers the advantages of realism and the reduction of induced artificiality in both surroundings and subject responses. However, it is important to note that in return for this increase in external validity, the researcher engaging in field research sacrifices some degree of control. For instance, one would prefer that the survey instrument used in the dissertation be completed at a time when the respondent was alone and could focus on the task at hand.

Unfortunately, in the main study of this dissertation, the author could not observe the participants as they completed the questionnaire. Further, exit interviews could not be conducted with respondents, introducing the possibility of hypothesis guessing.

Such potential limitations are somewhat inherent in the research design employed. However, several elements of the research program diminish the probability of such problems in this study. First, subjects were encouraged in the cover letter to find a time when they could relax and concentrate on completing the survey. Further, at the time the surveys were distributed, participants were advised to complete the instruments at home rather than at their place of employment. This step was designed to act as a deterrent to discussion of the research between subjects. Second, subjects were reminded twice (once in the cover letter and a second time in the directions for completing the survey) that their candid response was the best response. Finally, the agency directors who distributed the surveys were instructed to encourage their colleagues to complete the survey by themselves without input from others.

In regard to the possibility of hypothesis guessing, the nature of the study itself lessens the author's concern with this potential problem. The cover letter included with the packet of research materials clearly states the reason for conducting the research. This was further substantiated in the letter written by the United Way director, which explained who was conducting the research and that it was part of the author's dissertation. In addition, there is no hidden agenda nor subtle experimental manipulation included in the study. No cover story or carefully constructed scenario was needed to mask the purpose of the research. Rather, respondents were informed of the researcher's interest and reasons for conducting the research.

The pilot study also offers insight into the concern with hypothesis guessing. As the reader may recall, the pilot studies were conducted in classroom settings where respondents were observed and exit interviews were conducted. No indications of hypothesis guessing were revealed in either session.

In light of these concerns, it is important to note that the overall response rate for the study was quite high (70%). Furthermore, of 350 returned surveys, only 2 were unusable (due to lack of completion). Subjects did not voice any concerns or problems to the researchers, and all indications were that the participants understood and took the research task seriously. Accordingly, the methodology employed appeared appropriate and the administration of the survey successful.

A second limitation of the research is based on the make-up of the sample of subjects in the main study. While the sample did include a more mature and diverse sample than did the pilot studies, one primary limitation remains. As shown in Table 3, 90% of the participants were Caucasian. This condition may severely limit the generalizability of the research findings to other ethnic backgrounds and/or nationalities. Thus, a key issue for future research is to strive to attain a more ethnically heterogeneous sample.

An additional limitation of the study warrants discussion – the possibility of scale items tapping into two different factors of the Consumer Resource Management Model of motivation. As discussed earlier in this dissertation, it appears that items from the physical and social factors of the Consumer Resource Needs scale may be inadvertently associated.

More specifically, participants in the study may have interpreted some physical factor scale items from either an individual or a social perspective. For instance, consider the following statement: "It is important that the products I buy make me physically attractive." It is quite possible that responses to this item from the Consumer Resource Needs scale could be based upon either self-perception or upon the perceived perceptions of others.

Accordingly, it is strongly recommended that additional research be conducted in which the physical items from the CRN scale are revised to overcome this double-entente problem. It may be that further exploration of existing scales and/or the development of new scale items are necessary to overcome this limitation of the study.

In a similar manner, a portion of the scales employed to investigate the construct validity of the Consumer Resource Needs scale warrants further attention. In future research, the author recommends the replacement of items from the Weight Involvement Scale and Information Seeking Scale with items from scales more closely related to the various factors of the CRN.

Theoretical Contributions

What contribution does this research make to the consumer behavior literature? The author suggests that it makes five contributions. First, the Consumer Resource Management Model of motivation directly links consumer needs to exchange processes. The model proposes that consumer needs arise from a drive to maintain or enhance the resources required for adequate functioning in the modern world. Because the consumer buying process involves the exchange of resources, the CRMM provides an account of the mechanism through which needs lead to transactions in the marketplace.

A second contribution of the CRMM is that it synthesizes a number of general and mid-range models of motivation under one rubric. As noted by Bacharach (1989), one contribution of research is to parsimoniously account for a variety of phenomena. The author suggests the CRMM model integrates within one theoretical framework ideas from Maslow, McClelland, Alderfer, Cohen, and from the VALS and LOV instruments. In addition, it can account for findings within the reactance theory literature (Clee and Wicklund 1980). Finally, by employing concepts from behavioral decision theory, the CRMM model can be linked with the literature on risk and the evaluation of outcomes.

A third contribution of the CRMM is that it identifies variables on which individual differences in needs for resources may be delineated. As such, it may be used as a basis for psychographic inventories, which are useful for segmentation analysis.

A fourth contribution of the model is that it directly relates to means-end-chain concepts. One of the primary advantages of means-end-chain models is that they can assist researchers in identifying the linkage between consumer values and the product attributes that they seek (Peter and Olson 1990). The CRMM model offers researchers a tool that can be used to predict which attributes consumers may seek in a product. For example, an individual possessing a high need for information can be predicted to seek products and attributes of products that enhance or protect knowledge. Accordingly, the model can be used by marketing managers to develop strategies for products, price, and promotion.

Finally, the CRMM addresses several areas not included in other models of motivation. Specifically, the CRMM introduces financial and informational needs to the motivation literature. In addition, it suggests for the first time that the desire to achieve and to obtain safety apply to each of the four categories of resource needs.

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APPENDIX A

COMPLETE SET OF RESEARCH MATERIALS EMPLOYED IN PHASE 2 OF THE PILOT STUDY

Directions for Completing

We are conducting a survey in order to gather information on your view of consumer purchases. We would appreciate your participation in this important research.

There are no correct or incorrect responses; your response is the best response. It is important that you respond to each item on the survey. Further, your responses will remain strictly confidential and all results of the survey will presented in aggregate form only.

Your participation in this research is completely voluntary; if you so choose, you may discontinue your participation at any time during the survey.

Instructions for Using the Scales

Given below are the scales you will be using to respond to several statements. It is important that you feel comfortable using the entire range of the scale. Please take a moment to familiarize yourself with the scale.

The scale will be used to assess your strength of belief about statements regarding consumer purchases. For example, consider the statement:

	agree strongly	agree	neutral	disagree	disagree strongly
1. American made automobiles are far superior to most import automobiles.	1	2	3	4	5

[A sample Scantron sheet inserted here]

If you strongly agree with the statement, circle the number '1' on the scale and blacken the number '1' on the Scantron answer sheet as indicated above. If you strongly disagree with the statement, circle and mark the number '5'; if you are neutral regarding the statement, circle and mark the number '3'; and so forth. Take your time and mark your responses carefully.

IMPORTANT NOTE: Please record the last four digits of your student ID in the upper left-hand corner of the Scantron sheet, where your name would usually be placed. (This information is necessary in case your materials become separated during this study. At no time will this number be used in any write-up, nor will it be made available to any individual or organization.)

	agree strongly	agree	neutral	disagree	disagree strongly
1. Learning to use new products is exciting for me.	1	2	3	4	5
2. It is important that the products I buy make me feel good.	1	2	3	4	5
3. It is important that the products I buy identify me with other groups of people.	1	2	3	4	5
4. It is important to me to buy really nice things.	1	2	3	4	5
5. I take active steps to avoid buying food products that could be unhealthful.	1	2	3	4	5
6. Concerning the products I buy, I want to know how and why they work.	1	2	3	4	5
7. The most important thing about a job is that it pay enough so I can buy the things I want.	1	2	3	4	5
8. When I buy products, quality is much more important than price.	1	2	3	4	5
9. It is really true that buying things can make people happy.	1	2	3	4	5
10. It is important to me that other people buy things that are similar to what I buy.	1	2	3	4	5
11. I would buy a product that would improve how my body looks.	1	2	3	4	5
12. I would prefer complex products to simple products.	1	2	3	4	5
13. In general, I don't like to give others information on the products I buy.	1	2	3	4	5
14. My friends have a great deal of influence on my purchase decisions.	1	2	3	4	5
15. I like products that require little thought to use.	1	2	3	4	5
16. I often buy small gifts and send card to people to enhance our relationship.	1	2	3	4	5
17. I like to buy and collect things.	1	2	3	4	5
18. I work hard to develop budgets so that I don't overspend.	1	2	3	4	5
19. I would like to be rich enough to buy any product I want.	1	2	3	4	5

	agree strongly	agree	neutral	disagree	disagree strongly
20. It is important that the products I buy make me physically attractive.	1	2	3	4	5
21. Most of the satisfaction I feel comes from the things I buy.	1	2	3	4	5
22. I want to obtain the maximum flavor from the foods I buy.	1	2	3	4	5
23. I find it satisfying to deliberate long and hard about a purchase decision.	1	2	3	4	5
24. I would prefer automobiles that are fast and exciting.	1	2	3	4	5
25. When purchasing big-ticket items I am extremely price conscious.	1	2	3	4	5
26. I would consider plastic surgery if it would make me more physically attractive.	1	2	3	4	5
27. It sometimes bothers me that I can't afford to buy all the things I want.	1	2	3	4	5
28. Overall, I buy products to provide me with information rather than other benefits.	1	2	3	4	5
29. I am very rational in how I buy goods and services.	1	2	3	4	5
30. It is important to me that the clothing I buy feels good against my skin.	1	2	3	4	5
31. It is important to me that my friends like the things I buy.	1	2	3	4	5
32. My dream in life is to be able to buy expensive things.	1	2	3	4	5
33. I like to be responsible for a purchase decision that requires a lot of thinking.	1	2	3	4	5
34. Making a really dumb purchase decision is one of the worst things I can do.	1	2	3	4	5
35. I usually end up deliberating about purchase decisions which affect me personally.	1	2	3	4	5
36. I would buy a low-quality product if it was physically attractive.	1	2	3	4	5
37. When I buy a car or other expensive item, I bargain hard to get a better price.	1	2	3	4	5
38. I am willing to purchase products that will help me attain my financial goals.	1	2	3	4	5

	agree strongly	agree	neutral	disagree	disagree strongly
39. It is important that the products I buy look like high-quality products.	1	2	3	4	5
40. It is important that the things I buy convey a feeling of physical excitement.	1	2	3	4	5
41. When I buy clothing I like to have my friends along so I don't make a purchase mistake.	1	2	3	4	5
42. I find it especially satisfying to use products that require a lot of mental effort.	1	2	3	4	5
43. When I buy products, I think about how they will serve me in the long term.	1	2	3	4	5
44. I try to buy products that are similar to those my friends buy.	1	2	3	4	5
45. I am very careful to avoid products that might harm me.	1	2	3	4	5
46. I buy a lot of products (e.g., books, computer software) that give me information.	1	2	3	4	5
47. I would not buy a high quality product if it didn't make me feel good.	1	2	3	4	5
48. I am very concerned with whether my friends will like the products I buy.	1	2	3	4	5
49. When purchasing a product, I usually consider it's safety features.	1	2	3	4	5
50. I wouldn't buy a product, even if I really liked it, if my friends didn't like it.	1	2	3	4	5
51. I try to purchase products that will make others want to be with me.	1	2	3	4	5
52. The things I buy give me great pleasure.	1	2	3	4	5
53. I would prefer a product that is intellectually stimulating to one requiring little thought.	1	2	3	4	5
54. It is important that he products I buy make look good.	1	2	3	4	5
55. I would be happier if I could afford to buy more things.	1	2	3	4	5

Please provide the following information about yourself:

56. Age: (1) 18-20 (2) 21-23 (3) 24-26 (4) 27-30 (5) over 30

57. Sex: (1) female (2) male

58. Marital Status: (1) single (2) married

59. Approximate Income: (1) under $10,000 (2) $10-15,000 (3) $16-20,000 (4) $21-25,000 (5) over $25,000

60. Are you an international student: (1) yes (2) no

APPENDIX B

COMPLETE SET OF RESEARCH MATERIALS EMPLOYED IN THE MAIN STUDY

Cover Letter from Researcher to Each Participant (Sent on University letterhead)

Greetings!

I would like to begin by thanking you in advance for agreeing to complete the attached survey. I am interested in learning more about your thoughts, behaviors, and ideas as a consumer. In order to do this, it is important that you carefully read and respond to each item on the survey. It should take you approximately 30 minutes to complete all the items. I encourage you to find a time when you can relax and concentrate on completing the survey. You may find it to be a rather enjoyable experience!

I would also like to remind you that there are no "correct" responses to the survey. Rather, your candid response to each item is the best response. Please remember that all responses to this survey will remain anonymous. As such, I ask that you do not put your name on the survey.

In closing, thank you very much for agreeing to participate in this project. Your assistance is genuinely appreciated. If you have any questions, please contact me (744-8640) or John Mowen (744-5112).

Sincerely,

Dennis Bristow

Directions For Completing

We are conducting a survey in order to gather information on your view of consumer purchases. There are no correct or incorrect responses; your response is the best response. It is important that you respond to each item on the survey. Your participation in this research is completely voluntary and if you so choose, you may discontinue your participation at any time during the survey. Your responses will remain strictly confidential.

Example. Consider the following statement: "American cars are far superior to most import cars." If you **strongly agree** with the statement, circle the number '1' on the scale:

	agree strongly	agree	neutral	disagree	disagree strongly
1. American cars are far superior to most import cars.	1	2	3	4	5

If you **agree** with the statement, circle the number '2' on the scale.

	agree strongly	agree	neutral	disagree	disagree strongly
1. American cars are far superior to most import cars.	1	2	3	4	5

If you **neither agree nor disagree** with the statement, circle the number '3' on the scale.

	agree strongly	agree	neutral	disagree	disagree strongly
1. American cars are far superior to most import cars.	1	2	3	4	5

If you **disagree** with the statement, circle the number '4' on the scale.

	agree strongly	agree	neutral	disagree	disagree strongly
1. American cars are far superior to most import cars.	1	2	3	4	5

If you **strongly disagree** with the statement, circle the number '5' on the scale.

	agree strongly	agree	neutral	disagree	disagree strongly
1. American cars are far superior to most import cars.	1	2	3	4	5

	agree strongly	agree	neutral	disagree	disagree strongly
1. It is important that the products I buy make me feel good.	1	2	3	4	5
2. It is important that the products I buy identify me with other groups of people.	1	2	3	4	5
3. Concerning the products I buy, I want to know how and why they work.	1	2	3	4	5
4. The most important thing about a job is that it pay enough so I can buy the things I want.	1	2	3	4	5
5. I admire people who won expensive homes, cars, and clothes.	1	2	3	4	5
6. My physical stamina is a very important resource for me.	1	2	3	4	5
7. I often read the information on the package of products just out of curiosity.	1	2	3	4	5
8. I never worry about my weight.	1	2	3	4	5
9. I actively avoid wearing clothes that are not in style.	1	2	3	4	5
10. Maintaining high levels of physical conditioning is vital to achieving my goals.	1	2	3	4	5
11. My ability to think quickly is a very important personal quality that helps me get what I want.	1	2	3	4	5
12. It is a very important advantage to me to achieve greater financial wealth than others.	1	2	3	4	5
13. It is important to have friends who can help me every-day life.	1	2	3	4	5
14. I sometimes feel resentful if I don't get my way.	1	2	3	4	5
15. It is important to me that other people buy things that are similar to what I buy.	1	2	3	4	5
16. I would buy a product that would improve how my body looks.	1	2	3	4	5
17. It is really true that buying things can make people happy.	1	2	3	4	5

	agree strongly	agree	neutral	disagree	disagree strongly
18. My friends have a great deal of influence on my purchase decisions.	1	2	3	4	5
19. Buying things gives me a lot of pleasure.	1	2	3	4	5
20. My overall physical attractiveness is a very important asset for me.	1	2	3	4	5
21. The knowledge I possess has very little to do with my accomplishments in life.	1	2	3	4	5
22. I prefer to avoid asking other people for their help or assistance.	1	2	3	4	5
23. The financial wealth that I have accumulated is critical in helping me get what I want out of life.	1	2	3	4	5
24. I generally read even my junk mail just to know what it is about.	1	2	3	4	5
25. Others seem more concerned about their weight than I am about mine.	1	2	3	4	5
26. When I am uncertain how to act in a social situation, I look to the behavior of others for cues.	1	2	3	4	5
27. I like gossip at times.	1	2	3	4	5
28. It is important to me that the products I buy make me physically attractive.	1	2	3	4	5
29. I would like to be rich enough to buy any product I want.	1	2	3	4	5
30. I find it satisfying to deliberate long and hard about a purchase decision.	1	2	3	4	5
31. The high level of information that I possess helps me achieve my goals.	1	2	3	4	5
32. My overall physical characteristics help me a great deal in getting what I want out of life.	1	2	3	4	5
33. I would prefer automobiles that are fast and exciting.	1	2	3	4	5
34. I like a lot of luxury in my life.	1	2	3	4	5

	agree strongly	agree	neutral	disagree	disagree strongly
35. I enjoy sampling different brands of commonplace products for the sake of comparison.	1	2	3	4	5
36. My weight is a concern in my life.	1	2	3	4	5
37. It's important for me to fit in with the group I'm in.	1	2	3	4	5
38.I can remember "playing sick" to get out of something.	1	2	3	4	5
39. It sometimes bothers me that I can't afford to buy all the things I want.	1	2	3	4	5
40. I like to be responsible for purchase decisions that require a lot of thinking.	1	2	3	4	5
41. Making a really dumb purchase decision is one of the worst things I can do.	1	2	3	4	5
42. I am willing to purchase products that will help me attain my financial goals.	1	2	3	4	5
43. When I buy clothing I like to have other people along so I don't make a purchase mistake.	1	2	3	4	5
44. My dream in life is to be able to buy expensive things.	1	2	3	4	5
45. I like introducing new brands and products to my friends.	1	2	3	4	5
46. I like to browse through mail order catalogs even when I don't plan to buy anything.	1	2	3	4	5
47. I take great pleasure in experiencing positive feelings through my senses.	1	2	3	4	5
48. At parties I usually try to behave in a manner that makes me fit in.	1	2	3	4	5
49. It is sometimes hard for me to go on with my work if I am not encouraged.	1	2	3	4	5
50. If a high quality product didn't make me feel good, I wouldn't buy it.	1	2	3	4	5
51. I try to buy products that are similar to those my friends buy.	1	2	3	4	5

	agree strongly	agree	neutral	disagree	disagree strongly
52. I am very concerned with whether other people will like the products I buy.	1	2	3	4	5
53. My friends think of me as a good source of information when it comes to new products or sales.	1	2	3	4	5
54. It is important that the products I buy make me look good.	1	2	3	4	5
55. I would be happier if I could afford to buy more things.	1	2	3	4	5
56. I like helping people by providing them with information about many kinds of products.	1	2	3	4	5
57. I actively seek the feelings that come from experiences such as smelling a flower, touching a silk shirt, and viewing a sunset.	1	2	3	4	5
58. I wouldn't buy a product, even if I really liked it, if other people didn't like it.	1	2	3	4	5
59. People ask me for information about products, placesto shop, or sales.	1	2	3	4	5
60. I try to purchase products that will make others want to be with me.	1	2	3	4	5

On a scale from 1 to 9 (with 1 meaning you value the item very much and 9 meaning you value the item very little) rate the following items:

		Value Very Highly								Value Not At All
61.	Self Respect	1	2	3	4	5	6	7	8	9
62.	Security	1	2	3	4	5	6	7	8	9
63.	Warm Relations	1	2	3	4	5	6	7	8	9
64.	Sense of accomplishment	1	2	3	4	5	6	7	8	9
65.	Self-Fulfillment	1	2	3	4	5	6	7	8	9
66.	Being well respected	1	2	3	4	5	6	7	8	9
67.	Sense of belonging	1	2	3	4	5	6	7	8	9
68.	Fun, enjoyment, Excitement	1	2	3	4	5	6	7	8	9

On a scale from 1 to 9 (with 1 meaning you would prefer very much and 9 meaning you would not prefer at all) rate your preference for spending 2 hours engaged in the following types of activities:

		Prefer Very Much Much								Prefer Not At All
69.	Getting a good physical workout	1	2	3	4	5	6	7	8	9
70.	Meeting new people	1	2	3	4	5	6	7	8	9
71.	Listening to a talk informing you of new technology	1	2	3	4	5	6	7	8	9
72.	Touring an art museum	1	2	3	4	5	6	7	8	9
73.	Spending an evening with friends	1	2	3	4	5	6	7	8	9
74.	Reading a new book about your favorite hobby	1	2	3	4	5	6	7	8	9
75.	Spending time planning a new investment strategy	1	2	3	4	5	6	7	8	9
76.	Eating a delicious meal	1	2	3	4	5	6	7	8	9
77.	Going to a movie with friends	1	2	3	4	5	6	7	8	9
78.	Reviewing your investment portfolio	1	2	3	4	5	6	7	8	9
79.	Learning a new way to do a routine task	1	2	3	4	5	6	7	8	9
80.	Going for a long, solitary walk	1	2	3	4	5	6	7	8	9
81.	Working overtime to make more money	1	2	3	4	5	6	7	8	9
82.	Relaxing and talking with relatives	1	2	3	4	5	6	7	8	9
83.	Learning about a new hobby	1	2	3	4	5	6	7	8	9
84.	Developing a budget to better manage your money	1	2	3	4	5	6	7	8	9

On a scale from 1 to 9 (with 1 meaning you would prefer the topic very much and 9 meaning you would prefer the topic not at all) rate your preference for winning a free video cassette on the following topics:

		Prefer Very Much								Prefer Not At All
85.	An exercise video	1	2	3	4	5	6	7	8	9
86.	A video on how to invest in the stock market	1	2	3	4	5	6	7	8	9
87.	A video on how to improve your reading speed	1	2	3	4	5	6	7	8	9
88.	A video on how to get along better with other people	1	2	3	4	5	6	7	8	9

Please complete the following information about yourself

89. Age: Under 21 years ___ 21-28 ___ 29-36 ___ 37-44 ___
45-52___ 53-60 ___ 61-68 ___ 69+ ___

90. Gender: Female ___ Male ___

91. Marital Status: Single ___ Married ___

92. Highest Educational Level Attained: High School Diploma ___
Bachelor's Degree (BA/BS) ___ Master's Degree (MA/MS) ___
MBA ___ Doctoral Degree (Ph.D./Ed.D.) ___
Professional Degree (MD/JD/DDS) ___
Other______________________________

92. Number of Household Members: 1 ___ 2-4 ___ 4+ ___

93. Ethnic Background: Caucasian ___ Asian ___ African American ___
Native American ___ Hispanic ___
Other______________________

94. Is yours a dual income household: yes ___ no ___

95. Approximate Household Income: under $10,000 ___ $10,000 - $20,000 ___
$21,000 - $30,000 ___ $31,000 - $40,000 ___ $41,000 - $50,000 ___
$50,000+ ___

96. Occupation____

2

VITA

DENNIS N. BRISTOW
Assistant Professor of Marketing

THESIS: THE CONSUMER RESOURCE MANAGEMENT MODEL OF MOTIVATION: THEORETICAL AND SCALE DEVELOPMENT

MAJOR FIELD: Business Administration

BIOGRAPHICAL:

Education: Received Associate of Arts degree in Marketing from Wadena Technical College in 1979; received Bachelor of Science degree in Psychology and Master of Arts degree in Industrial/Organizational Psychology from Mankato State University in 1988 and 1990, respectively; completed the requirements for the Ph.D. in Marketing from Oklahoma State University in December, 1995.

Experience: Term Appointment Instructor, Department of Psychology at Mankato State University, 1990 - 1991; Graduate Assistant Instructor, Department of Marketing, Oklahoma State University, 1991 - 1994; Assistant Professor of Marketing, University of Alaska at Anchorage, 1994 - present.

Awards and Honors: MSU Scholarship recipient, 1986; Graduated Magna Cum Laude, Mankato State University, 1988; Oklahoma State University Graduate Student Council Association, 1993; Best Logistics/Channel Management Paper, Academy of Marketing Science National Conference, 1994.

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: 05-16-95 **IRB#:** BU-93-020

Proposal Title: THE CONSUMER RESOURCE MANAGEMENT MODEL OF MOTIVATION: THEORETICAL AND SCALE DEVELOPMENT

Principal Investigator(s): John Mowen, Dennis Bristow

Reviewed and Processed as: Modification

Approval Status Recommended by Reviewer(s): Approved

APPROVAL STATUS SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING.
APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL.
ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Reasons for Deferral or Disapproval are as follows:

Modifications received and approved.

Signature: John H. Wycoff Date: May 18, 1995
Chair of Institutional Review Board