

COMPULSIVE BUYING: REVIEW AND RELEVANCE
TO CONSUMER DEBT MANAGEMENT

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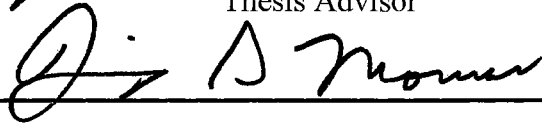
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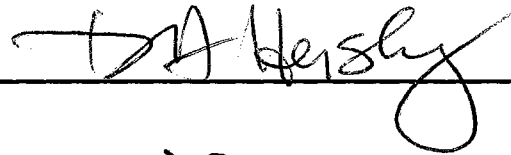
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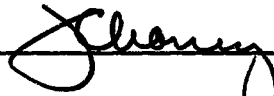
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While I must agree with the aphorism “you can learn something from everybody,” it too often seems those lessons teach us what *not* to do. I would like to express my sincere appreciation to the members of my committee, Drs. John C. Mowen, David Thomas, Doug Hershey, and John Chaney, as well as the late Jim Price, for being my guides as to how things *should* be done. I owe Dr. Mowen and Dr. Thomas a special debt of gratitude for giving me the opportunity of this project two years ago, and for allowing me to wage and win my own war of attrition in which there was no enemy but myself.

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“When the going gets tough, the tough go shopping.”

CHAPTER I

INTRODUCTION

Background

Compulsive consumption in the marketing literature is a term used broadly and often with much license to describe consumptive behaviors across categories including substance abuse, eating disorders, and impulse-control disorders. The marketing literature itself has only recently begun to explicitly recognize differences between types of compulsive consumer behaviors such as shopping, spending, and buying (Natarajan & Goff, 1992) -- distinguishing manifestations of compulsive consumption by differences in the consumption motive. Falling into the category of impulse-control disorders and despite prevalence estimates of approximately two percent of the population (Faber & O'Guinn, 1992), compulsive buying has only recently merited in-depth study in the consumer behavior literature. Prior to 1987, little research on compulsive buying had been published (Faber, O'Guinn, & Krych, 1987).

The phenomenon of compulsive buying represents a unique and difficult challenge to researchers and mental health professionals alike. With the study of the disorder still in its infancy, compulsive buying has to date been examined primarily through case reports, with research participants often drawn from self-help groups or from samples of consumers contacted through advertising. Reports indicate comorbidity with a number of

related impulse-control disorders. This relationship is convergently supported by the effectiveness of similar pharmacological and psychological treatments in treating the symptoms of compulsive buying and depression. The literature suggests that a combination of physiological and social psychological influences may be responsible for compulsive buying behavior (e.g., Faber, 1992).

Definition

Compulsive buying has been studied under a variety of other names, including oniomania, buying mania, impulsive buying, addictive buying, compulsive spending, compulsive consumption, and compulsive shopping. In their excellent review, Natarajan & Goff (1992) add that compulsive depletion, compulsive using, compulsive possession, compulsive accumulation, compulsive hoarding, and compulsive collecting have also been studied under the umbrella term of compulsive consumption. The presence of such a wide range of descriptors clearly indicates that researchers often are not studying the same phenomenon, and lack of a consistent definition creates difficulty in constructing a typology of this specific abnormal consumer behavior (Natarajan & Goff, 1992). “Compulsive buying” describes the phenomenon addressed in this study most accurately; the terms “addiction” and “mania” are neither without stigma nor adequately reflect the major component of this abnormal consumer behavior. Shopping, while a large component of compulsive buying, fails to indicate the importance of the actual purchase in this particular behavior. Finally, “consumption” is too broad a term within which to define a distinct pattern of behavior that explicitly includes purchasing. However, it does provide an excellent point from which to begin study.

Researchers Faber and O'Guinn, who originally defined compulsive buying within the larger framework of compulsive consumption behaviors in general, have conducted the majority of compulsive buying research in the marketing literature. Their 1989 study took a broader view of compulsive behavior, defining it as "an uncontrollable drive or desire to obtain, use, or experience a feeling, substance, or activity that leads an individual to repetitively engage in a behavior that will ultimately cause harm to the individual and/or to others." However, Faber and O'Guinn's earlier work describes compulsive buying as a phenomenon in which consumption itself becomes central. This definition is limiting in that it ignores the social contexts surrounding the purchasing process. As a form of compulsive consumption, compulsive buying should manifest itself as chronic and repetitive purchasing to reduce psychological tension rather than to acquire material goods per se (Black, 1996). Faber & O'Guinn's (1992) later attempt at defining compulsive buying included this negatively reinforcing aspect of the disorder, stating that "chronic, repetitive purchasing... becomes a primary response to negative events or feelings [which]... becomes very difficult to stop and ultimately results in harmful consequences." As we shall see, reinforcement, or feedback, is central to compulsive buying. Faber & O'Guinn's (1992) definition incorporates the three major components of compulsive buying and will be the definition used throughout the remainder of this text.

History and Course

The study of compulsive buying as a clinical syndrome can be traced at least as far back as a 1915 textbook on psychiatry, when it was described by Emil Kraepelin as

buying mania or “oniomania” (as cited in Black, 1996). Bleuler (1924) likewise described the disorder as a reactive impulse, present predominantly in females, which manifests itself as an uncontrollable and frequent urge to buy (p. 538-540). Surprisingly and despite the existence of self-help groups for overspenders and its estimated prevalence today, the topic appears to have been neglected for the fifty years following Bleuler’s text, excepting an occasional appearance in the psychiatric literature. In particular, the psychiatric literature has recognized the importance of its study over the past fifteen years. However, use of the case report as its primary research tool has limited the usefulness of this body of literature to simple description.

A synthesis of reports by Christenson et. al. (1994), Schlosser, Black, Repertinger, & Freet (1994), McElroy, Keck, Pope, Smith, & Strakowski (1994), McElroy, Satlin, Pope, Keck, & Hudson (1991), Elliott, Eccles, & Gournay (1996), and Glatt & Cook (1987) indicates that the typical compulsive buyer is a female in her 30’s suffering from legal, financial, and marital problems resulting from chronic or episodic overspending since her late teens. McElroy, Keck et. al. (1994) describe in greater detail the clinical and demographic features of 20 patients. Of these patients, twelve reported being in debt as a result of compulsive buying, with debt ranging from \$3,000 to \$60,000, with a mean of \$23,000. Three of the patients had declared bankruptcy, while another three were able to stop spending excessively after recognizing the extent of the problem. The remaining 17 patients reported being unable to control their urges to buy. They also reported a peak frequency of buying episodes of 17 per month, each lasting from 1 to 7 hours in duration. Some patients used unusual criteria to determine a purchase, such as buying only certain colors of shirts.

Similar findings were reported by Schlosser, Black, Repertinger, and Freet (1994). Of 46 compulsive buyers, mean (SD) age was 30.7 (9.2) years with age of onset averaging 18.7 (7.2) years. Mean debt was \$5400. Frequency of buying episodes ranged from one to 60 per month, with a mean (SD) of 12.9 (10.2), consistent with the findings of McElroy, Keck et. al.'s (1994). Approximately 80% of the sample were women. Other evidence as well suggests that the majority of compulsive buyers are women; in one relatively large-sample study, over 90% of participants (approximately 355 of 386) were women (O'Guinn & Faber, 1989).

Christenson et. al. (1994) and McElroy, Keck et. al. (1994) go on to describe how compulsive buying develops in the typical consumer. Spending sprees usually begin in the late teens and increase in frequency over a period of years, possibly due to increased tolerance of the anxiety-relieving effects of buying. Accumulated debt eventually becomes so heavy that family and friends often provide financial relief. It is at this point that the person suffering from compulsive buying begins to recognize the extent of the problem, but the cycle of thrill followed by depression is usually too strong to escape. The compulsive consumer often feels frustrated about her inability to control her spending, yet driven and unable to explain why she cannot do so. Frequent purchases provide an almost instant passport to popularity – a brief time during which sales clerks, accompanying friends and acquaintances, and dazzled spectators alike focus their attention upon her. At this stage, compulsive buyers may be forging parents' checks or using credit cards their spouses are unaware they have. The typical compulsive buyer has also developed a history of related disorders, often including depression. The urge to buy appears to be most intense during mildly to moderately severe depressive episodes:

compulsive buyers can more often resist the urge when they are less depressed, and rarely leave the house during periods of extreme depression.

Goods most often purchased by compulsive consumers at this stage are clothing, makeup, jewelry, and shoes; male compulsive buyers also purchase personal items, although they more often purchase larger items such as furniture, electronics, automotive goods, and hardware (Black 1996). Many of these items are thrown away, stacked with others in already-packed closets, and often deliberately hidden from family; others are given away as gifts. Even though compulsively purchased items tend to be less expensive, it is the frequency with which they are bought that ultimately causes financial crisis. Few compulsive buyers report shopping by catalog, home shopping television programs, or over the Internet. Many compulsive buyers report feeling serious problems with buying, not knowing how they got to the store, and even thinking their behavior is not their own (Schlosser, Black, Repertinger, & Freet, 1994). Most report feeling sad during buying episodes and are more likely to purchase during the afternoons or around holidays.

Purpose of the Study

Remarkable growth of consumer debt during the last decade has fueled recent interest in the study of compulsive buying. Between 1992 and 1995, consumer credit card debt alone expanded from \$92 billion to \$130 billion, a rise of 41% (Yoo, 1998). The year 1995 left a median balance of \$1500 on American consumers' bank cards, just under 17% of the \$9000 median total credit limit per family (Smith, 1998). D'Astous (1990) established a link between this increasing debt and compulsive buying, noting that

a strong correlation exists between high credit card usage and compulsive buying.

O'Guinn and Faber (1989), noting the damaging results of abnormal consumer behavior, cite two reasons why its study is important: 1) these behaviors may have adverse consequences for both the individual and others, and 2) greater understanding of normative consumer behavior may be reached through studying its more unusual expressions. Specific to compulsive buying, consumers who incur high levels of debt bring the ancillary consequences of financial and emotional difficulties upon themselves and their families. Thus, the very financial problems that result from compulsive buying also exacerbate the feelings of stress, depression, and alienation that drive compulsive buyers to purchase. In some cases the resultant financial problems may be more protracted or difficult a problem than would have been the underlying compulsion, were it recognized in time. Consequences of the behavior extend beyond the immediate family as well: bad debt created by ensuing nonpayment or bankruptcy indirectly raises costs for all consumers. In any case, resolution of the financial symptoms does not necessarily indicate that the underlying cause has been adequately addressed. Understanding the etiology and development of compulsive consumption would result in the knowledge necessary to limit its frequency and resulting levels of debt, the ability to develop proper treatment and prevention strategies, and ultimately in a more complete understanding of typical consumer behavior.

This paper is organized into the following sections. First, it reviews previous research on compulsive buying and the traits associated with it. No previous research was found on factors influencing the decision of whether or not to enter a debt counseling program; the closest research stream appears to be investigations into compulsive buying.

It goes on to investigate the psychosocial mechanisms involved in compulsive buying and relates those mechanisms to Mowen's (2000) 3M Model of Motivation and Personality.

An overview is given of the 3M and its components, which include control theory and the five factor model of personality. Two studies are then presented. Study 1 investigates the ability of the 3M model to explain variance in respondents' scores on a measure of compulsive buying, and offers a description of compulsive buying in terms of a robust set of behavioral traits. A hierarchical regression analysis is used to determine whether the 3M model increases the variance explained in compulsive buying as compared to the variance explained by five personality trait scales theoretically similar to those making up the Five Factor model of personality (Costa & McCrae, 1985). Study 2 incorporates a logistic regression analysis in order to determine which demographic and psychographic variables best predict whether consumers will enter consumer credit counseling following an initial screening session. Finally, results from both studies are discussed and their public policy and research implications identified.

CHAPTER II

COMPULSIVE BUYING IN THE LITERATURE

Addictive Consumer Behavior

Scherhorn (1990) and DeSarbo and Edwards (1996) describe compulsive buying as a form of addictive consumer behavior. Krych's (1989) model of addictive behavior provides a general framework for understanding how a person may become "addicted" to a particular behavior. In this model, individuals find engaging in a particular behavior pleasurable. They become increasingly preoccupied with the behavior, its frequency increases notably, and defensive reactions begin to be exhibited when others question the behavior. Individuals experience occasional cravings, and they ignore signs that future consequences may ensue. When the person becomes aware of the myriad problems caused by the addiction, he attempts to regulate the behavior. By this time, however, participation in the behavior serves as a form of self-medication rather than as a novel stimulus. The addiction then becomes the only perceived source of relief for anxiety and tension – tension often caused largely by the addiction itself. Family and friends may enable the addiction by trying to help in ways that simply make the addiction easier to maintain. The addiction thus continues to escalate until a major life crisis occurs.

DeSarbo and Edwards (1996) describe the compulsive buying addiction as a coping mechanism for psychological tension in those prone to coping through escape or

avoidance. However, their strictly cognitive interpretation provides only a limited view of the role feedback plays in shaping and maintaining the specific behaviors related to addiction. Addiction itself has recently come to be understood as an adaptive response to the environment (Wise & Bozarth, 1987): pathological gambling, excessive drinking, spending, or eating, and the use of illegal drugs may modify the mood state, enhance self-identity, and serve as a catalyst for social contact (Anderson & Brown, 1984; Elliott, 1994). Though the short-term benefits of addiction typically do not outweigh the long-term consequences, temporal displacement of a reinforcer is negatively related to its effectiveness in modifying behavior. The result is that even though a person may be cognitively aware that he or she has more to lose than to gain through the addiction, the reinforcing effect of the addiction is so strong that escape becomes very difficult. To elaborate, addiction may be simply conceptualized as the acquisition of a specific behavior as a result of positive reinforcement. In the case of compulsive buying, spending provides feelings of power, autonomy, and social connectedness. It also serves as a mood stabilizer. Over time, the baseline rate of feelings of well-being decrease and the reinforcement value fades such that the behavior is undertaken just to feel normal, rather than to feel good (appropriately termed “feeding the addiction.”) Behavioral addiction, then, is a relatively simple combination of positive and negative reinforcement.

Understanding this, the obvious fault with describing specific instances of consumer behavioral reinforcement as cases of “addiction” is that many (if not all) acquired consumer behaviors must then be considered addictive. The approach of studies such as Sherhorn (1990) and DeSarbo and Edwards (1996) seems to be to replace the term “reinforcement” with “addiction” only in cases where the behavior is considered

“deviant.” Hoch and Loewenstein (1991) describe the biphasic reinforcement effect of addiction in cognitive psychological terms, labeling it a “time-inconsistent preference.” The reasoning for this line of thought seems clear enough: consumers are drawn into a pattern of undesirable behavior from which they are unable to abstain. It is comforting in such cases to provide a label recognizing that the reinforcement of a behavior was particularly strong and therefore outside the cognitive control of a person: ergo the term “addiction”.

Nathan (1988) observed that personality factors predictive of an “addictive type” have not been found, counseling even in the title of his article that “the addictive personality is the behavior of the addict.” His observation is succinct: that there can be no addictive personality type because the term “addiction” encompasses all highly reinforcing consumer behaviors. Rather than being driven by an addictive personality factor, particular consumers are prone to engage in particular behaviors because of the efficacy of those behaviors in meeting their needs. Modern trait theories of personality can aid in determining certain cardinal tendencies in behavior that will be expressed through consumer behaviors, and how consumer behaviors are acquired and maintained can be explained within the framework of control theory. These theories are discussed and synthesized in the following chapter, providing a more holistic view of compulsive buying as an adaptive response to the environment rather than as an addiction.

Examination of the Consumption Motive

The combined work of researchers suggests that two categories of influence may be responsible for the buying impulse and the subsequent buying response. These categories

include physiological influences (McElroy et. al., 1994; Faber et. al., 1987; Krych, 1989) and social psychological influences (Black, Monahan, & Gabel, 1997; Bloch, Ridgway, & Nelson, 1991; Faber & O'Guinn, 1989; Hanley & Wilhelm, 1992).

Physiological Influences

The literature is consistent in its assertion that for compulsive buyers, buying represents an attempt at self-medication to relieve negative affective symptoms such as sadness, depression, and anxiety (Faber & Christenson, 1996; Black, 1996; Hassay & Smith, 1996). Biochemical processes have been speculated to be one cause of these negative mood states (McElroy et. al., 1991). This position is supported in the literature: seventy percent of patients describe buying as “a high” or “a rush” (McElroy et. al. 1994), and onset of compulsive buying symptoms is often preceded or followed by the onset of depression within one year. Research by LeJoyeux, Tassain, Solomon, and Adès (1997) shows a 32% rate of compulsive buying among depressed patients. Thus, the relationship between compulsive buying and depression appears to be particularly strong.

Researchers have consistently found a high rate of depression among compulsive buyers (Lejoyeux et al., 1997; McElroy, Keck, et. al., 1994; Schlosser et al., 1994). Further evidence can be found in the increasingly common psychiatric treatment of compulsive buying. McElroy, Satlin, et. al. (1991) present evidence that thymoleptic treatment may be of benefit to compulsive buyers. In their study, three patients responded favorably to antidepressant medication within one to four weeks following the instigation of treatment. Importantly, all participants reported drastically reduced drives to engage in compulsive buying and attributed the remission of symptoms to the

medication. McElroy, Monahan, and Gabel (1997) demonstrated similar findings; 9 of their 10 participants responded favorably to fluvoxamine (Luvox), spending less time shopping or thinking of shopping as well as spending less money. McElroy, Keck, et. al. (1994) similarly report that 10 of 13 compulsive buyers receiving pharmacological treatment showed improvement. Despite compulsive buyers' high rate of response to medication, placebo response rates in studies of depression not uncommonly range up to 50% (Coryell & Noyes, 1988), indicating that care should be taken in generalizing these findings.

Heritable dispositions toward addiction and other psychological disorders have been plausibly explained under the diathesis-stress model. In this model, the physical and social environment play a role in activating a predetermined behavioral tendency within an individual (Tartar, 1988). As has been shown in addiction and other psychological disorders, compulsive buyers are likely to have another family member who is also a compulsive buyer (d'Astous, 1990). Though the results are based on limited samples, compulsive buying appears to demonstrate significant comorbidity with many anxiety disorders, including generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, social phobia, simple phobia (Christenson et. al., 1994; Schlosser, Black, Reperinger, & Freet, 1994), and eating disorders, specifically bulimia nervosa and binge eating disorder (Faber, Christenson, de Zwaan, & Mitchell, 1995). This last study indicates a 0% rate of occurrence of anorexia nervosa in the compulsive buying population. Relatedly, Crisp, Hsu, and Harding (1980) show that shoplifting in anorectics occurs almost exclusively during a bingeing/purging stage. Importantly, this subgroup is more extroverted, sociable, and depressed than their abstaining counterparts

(Crisp, Hsu, & Stonehill, 1979). Although no literature relating shoplifting to compulsive buying has been found, the social rewards which drive compulsive buying appear on their face to conflict with motives for shoplifting, suggesting that they would not co-occur.

Fishbain (1994) and Goldman (1991) illustrate a number of similarities between compulsive buyers and kleptomaniacs, including the episodic nature of the disorder, dysphoria preceding and prompting the behavior, moderate levels of comorbidity, and that the behaviors serve as an antidepressant. However, reports have not stated that compulsive buyers find their compulsive behavior to be sexually stimulating, as some individuals suffering from kleptomania describe. With the presence of such high levels of comorbidity with other disorders, the general conclusion has been that many of these disorders share a common cause and pattern of occurrence. Indeed, Schlosser, Black, Reperntinger, and Freet (1994) have shown that compulsive buyers demonstrate a much higher risk for other impulse-control disorders than the general population, including intermittent explosive disorder (22%), kleptomania (37%), pyromania (2%), trichotillomania (11%), compulsive sexual behavior (13%), and pathological gambling (20%).

Social Psychological Influences

Consumer researchers have argued for the better half of this century that consumer personality can be defined through product use (Sirgy, 1982). One major assertion here is the idea that products can be used both as a reward and as a form of communication with others. Consumers may use product consumption as one method of attaining (or trying to attain) the ideal self, an aspect of personality defined by the person's

relationship to others. The symbols of self-concept represented by a product may be communicated through three channels: visibility of use, variability of use, and personalizability (Holman, 1981). Complimenting this line of research, Grubb and Grathwohl (1967) outline three ways in which consumption is used to enhance the self:

1. Self-concept is of value to the individual, and behavior will be directed toward the protection and enhancement of self-concept.
2. The purchase, display, and use of goods communicates symbolic meaning to the individual and to others.
3. The consuming behavior of an individual will be directed toward enhancing the self-concept through the consumption of goods as symbols.

Both the Holman (1981) and Grubb and Grathwohl (1967) models may be useful in understanding compulsive buyers. While compulsive buying behavior is directed toward protecting the self-concept, it must be done in a context visible to others. Secondly, the compulsively bought items themselves are rarely put to use and thus serve as communicators of symbolic meaning only through their acquisition, and not through their possession. Lastly, items purchased by compulsive buyers are typically personal items. This again suggests that although purchasing does either protect or enhance the self-concept, it does so through the social rewards inherent in consumption of sales services and shopping rather than through the use of those goods as symbols. This last point shows that compulsive buyers may not regard their possessions as being a part of themselves as much as do others. Rather, they may be more experiential consumers.

Black (1996) notes that outings to the mall have supplanted other family activities and are in fact considered a routine pastime. Shopping presents opportunities to interact

with friends and strangers, sensory stimulation, break from routine, and new information (Westbrook & Black, 1985). Other research as well has indicated that shopping has increasingly become a major leisure activity that provides pleasure, relaxation, and social reinforcement (e.g., Bellenger & Korgaonkar, 1980; Bloch, Ridgway, & Nelson 1991). Certainly, the study of hedonic consumption is not new (Holbrook & Hirschman, 1982). However, the focus of current research has shifted from tangible goods to “the fun, emotions, sensory stimulation, fantasy, and amusement elements that may accrue along with goods or alone” (Bloch, Ridgway, & Nelson, 1991, p. 445). Kowinski (1985) argues that these elements are more frequently obtained at the local shopping mall than anywhere else. Consumer researchers have become aware of the importance and opportunity of these trends, as recognized in Pine and Gilmore’s (1998) modern “experience economy.”

Stated from another perspective, the spending of money may no longer be simply a means to a utilitarian end: it has become a social end. Many younger consumers view the accumulation of debt as a necessary and acceptable part of life (Shenk, 1997). Importantly, the selection and purchase of goods has been shown to have increasing importance in the formation and maintenance of identity and as a means of self-expression (Morgan, 1993). Growing numbers of consumers may, then, find their financial considerations in conflict with psychosocial needs. If the selection, purchase, and ownership of goods have indeed become intimately entwined with consumers’ sense of identity and self-worth, it may be very difficult for those consumers to meet their psychological needs within the limits of their available finances. In effect, many consumers are finding themselves in a catch-22, forced to either maintain their

psychological health on a limited budget or sink into debt. One interpretation of the research, then, would be that money increasingly does buy happiness.

In their investigation of compulsive buying among adolescents, d'Astous, Maltais, and Roberge (1990) investigate whether younger consumers may be more likely to become compulsive buyers because of their increased exposure to mass media and advertising. Their hypothesis was not borne out in the study, but it raises an important question: Can we in part blame increased exposure to and effectiveness of advertising for an increase in the occurrence of compulsive buying? The answer must be a qualified "no." Advertisements disseminate information about a product that may or may not meet consumer needs. Whether an individual realized he or she had this need prior to viewing the ad is immaterial; an obvious ramification of progress as we currently define it is that consumer needs must change over time. This necessarily brings with it a period during which consumers become aware of developing needs or of more advanced, effective, or elegant new products or services for meeting pre-existing needs. While ads do bring about awareness of new products to try, compulsive buyers should not be more susceptible. Interestingly, some of these products become socially stigmatized when they threaten to become too successful by meeting psychological needs rather than purely physical needs. (E.g., the marketing of malt liquor beverages to younger African-Americans to meet belongingness and identity needs, or the sale of insurance for home electrical wiring to the less affluent with higher security needs.) Moreover, as has been shown, compulsive buyers tend to buy the same types of items repeatedly and thus would not be expected to be particularly susceptible to advertising. Unfortunately, opportunities

to engage in compulsive buying as a means of coping will only escalate with the increasing popularity of the social shopping experience (Scherhorn, 1990).

A great deal of research suggests that escape from anxiety is the principal motivation underlying compulsive buying (e.g., DeSarbo & Edwards, 1996; Hassay & Smith, 1996). Relevant to psychology, the primary approach to understanding the expression of compulsive buying has thus far been through examining theoretical correlates such as mood state (Faber & Christenson, 1996), depression and anxiety (Christenson et. al., 1994; Schlosser et. al., 1994), binge eating (Faber et. al., 1995), self-image (Dittmar, Beattie, & Friese, 1996), desire for stimulation (Faber, O'Guinn, & Krych, 1987), self-esteem and money attitudes (Hanley & Wilhelm, 1991), propensity to fantasize and the desire for approval by others (O'Guinn & Faber, 1989), and materialism (Rindfleisch, Burroughs, & Denton, 1997). Neither has the psychodynamic perspective within psychology remained silent on the issue (Krueger, 1988).

Budden and Griffin (1996) list shoplifting, illegal transactions, product misuse, fraudulent returns, violation of licensing agreements, credit misuse, and compulsive buying among forms of dysfunctional consumer behavior that result in billions of costs annually to society. A framework for the study of these maladaptive behaviors from a societal perspective is presented by Moschis and Cox (1989). In their model, behaviors result from an interaction between the desirability of a behavior (normative or deviant) and the societal demands on that behavior (regulated or non-regulated). Normative behaviors are thus either rational or mandatory, and deviant behaviors either negligent or criminal. These authors classify compulsive buying as a negligent consumer behavior

and cite maturation, social class, broken homes, and deviant socialization processes as important contributors to the formation of deviant consumer behaviors.

Compulsive Buying: Deviant Consumer Behavior

The DSM-IV (American Psychiatric Association, 1994) makes several implicit distinctions between related compulsive behaviors, firstly that some disorders have direct physical consequences while others do not. The stress related to these behaviors may also cause further physical symptoms. Secondly, the degree of social acceptability varies markedly across different forms of compulsive consumption, ranging from “disease” to “bad habit”. Thirdly, the intent of the ultimate treatment may be either reduction or modification of the behavior (gambling, eating, purchasing) or cessation of the behavior (drug abuse, kleptomania). Several criteria are commonly used to determine the sociocultural acceptability of specific patterns of thought and behavior (American Psychiatric Association, 1994). Criteria often used to gauge whether specific cognitions or behaviors should be considered abnormal are 1) whether those cognitions and behaviors violate societal norms, 2) the degree of deviation from an ideal, 3) the statistical rarity of those thoughts or behaviors, 4) the degree of resulting personal discomfort, and 5) whether the thoughts and behaviors are maladaptive. Compulsive buying represents a very special case, however: compulsive buying by the middle and lower classes are much more likely to meet several of these criteria than is compulsive buying by the upper class. Applying Moschis and Cox’s (1989) criteria, compulsive buying becomes more than simply negligent consumer behavior when the consequences

cause real harm. Because the frequency and intensity of these behaviors can vary widely, no behavior can easily be classified as “negligent” or “maladaptive”.

With relevance to class issues, Hanley and Wilhelm (1992) were unable to find significant differences in income or education between compulsive and normal consumers. However, attitudes toward money were strikingly different between these two groups. Compulsive buyers were shown to be more obsessed with money and more likely to spend money on status goods. Compulsive buyers also more frequently reported not having enough money (possibly due to the financial strain caused by the disorder) and felt greater emotional attachment to the exchange of money for goods.

Many behaviors that may be engaged in compulsively are necessary in some amount for survival. Eating, buying, sex, work, and exercise may all be categorized in such a fashion. Too much variation from the norm for any of these behaviors results in the behavior being considered abnormal. For example, those who eat too little are diagnosed as being anorexic or bulimic, while society currently appears to judge being overweight as more of a flaw than a disease. The norm for each of these behaviors, including how much and how often we should eat, work, exercise, have sex, or purchase unnecessary goods, is established culturally. Thus a given behavior may be considered unacceptable within a culture when negative personal or social consequences begin to emerge. Other types of behaviors, including alcohol use, use of legal drugs such as nicotine and herbal supplements, and gambling, are tolerated socially but are not necessary for survival; they are often seen as indulgences. The point at which some gambling or legal drug use becomes too much varies even regionally with the United States, although criteria for identifying this point are delineated in the American Psychiatric Association’s DSM-IV

(1994). Other behaviors are considered abnormal if displayed at all. Examples of impulse-control disorders falling into this category include kleptomania, pyromania, trichotillomania, and intermittent explosive disorder.

Diagnostic Criteria for Compulsive Buying

On its face, compulsive buying shares a common denominator with obsessive-compulsive personality disorder. It also clearly meets DSM-IV criteria as a form of compulsion (American Psychiatric Association, p. 423). These criteria include repetitive physical or mental behaviors that a person feels driven to perform, with those behaviors aimed at reducing or preventing distress or circumventing a situation or event. However, compulsive behaviors are excessive or unrealistic solutions to the problems they are designed to solve. Compulsive shopping fails to meet all the necessary diagnostic criteria for the obsessive component (p. 422-423), providing evidence that compulsive shopping may be more accurately classified as an Impulse-Control Disorder Not Elsewhere Classified. This category includes other types of impulse-control disorders which have been linked to compulsive buying in both the psychological and marketing literatures (e.g., McElroy et. al., 1994), including kleptomania, pyromania, pathological gambling, urinary and bowel obsessions, compulsive sexual behavior, trichotillomania, eating disorders, monosymptomatic hypochondriasis, and body dysmorphic disorder.

Although other disorders described in the DSM-IV may include either specific or general impulse control difficulties, the essential feature of impulse-control disorders is failure to resist the performance of an act that is directly or indirectly harmful to the self or others. This act is preceded by marked stress or arousal and followed by relief or

gratification. It may be later followed by regret, tension, or fear due to possible or resulting consequences of the act. Because no formal definition exists at this time in the DSM-IV, compulsive buying may most appropriately be termed an Impulse-Control Disorder Not Otherwise Specified. However, borrowing from DSM-III-R criteria, McElroy, Keck et. al. (1994) suggest formal diagnostic criteria for compulsive buying (see Table 1). In order to gauge the effectiveness of ongoing treatment, Monahan, Black, and Gabel (1996) developed the Yale-Brown Obsessive-Compulsive Scale – Shopping Version. This scale assesses cognitions and behaviors related to compulsive buying, as opposed to predicting the presence or absence of the disorder (Compulsive Buying Scale, Faber & O’Guinn, 1992; d’Astous, 1990), or measuring more general obsessive-compulsive behaviors (Yale-Brown Obsessive Compulsive Scale, Goodman et al., 1989).

Personality and Compulsive Consumption

Bellenger and Korgaonkar (1980) report that 69% of consumers qualify as recreational shoppers, a statistic revealing the importance of shopping as a recreational activity. While the majority of these shoppers may be fully in control of their spending, a minority suffer the inability to control this aspect of consumption. Hirschman (1992) provides a striking illustration of this: “the lack of an authentic self-identity and sense of inner stability creates an unbalanced momentum that can swing them radically from one extreme of rigid self-control to the other extreme of free-fall, self-less chaos” (p. 175). Hassay and Smith (1996) provide a more concrete example with a passing mention that compulsive buyers are no more likely than others to indicate that shopping is fun.

TABLE 1

DIAGNOSTIC CRITERIA FOR COMPULSIVE BUYING
FROM MCELROY ET. AL. (1994)

- A. Maladaptive preoccupation with buying or shopping, or maladaptive buying or shopping impulses or behavior, as indicated by at least one of the following:
 - 1. Frequent preoccupations with buying or impulses to buy that is/are experienced as irresistible, intrusive, and/or senseless
 - 2. Frequent buying of more than can be afforded, frequent buying of items that are not needed, or shopping for longer periods of time than intended
- B. The buying preoccupation, impulses, or behaviors cause marked distress, are time-consuming, significantly interfere with social or occupational functioning, or result in financial problems (e.g., indebtedness or bankruptcy)
- C. The excessive buying or shopping behavior does not occur exclusively during periods of hypomania or mania

Gardner and Rook (1988) found that seventy-five percent of consumers feel “better” following an impulse purchase, and that the majority of consumers do use impulse purchasing as a tool to feel pleasure, excitement, relaxation, or power, among other positive emotions. Impulsive and compulsive buying have a number of other elements which may be common as well, to include synchronicity and disregard for consequences (Rook, 1987). Weinberg and Gottwald (1982) define impulsive buying along three axes: affective, cognitive, and reactive. Impulse purchases are made during high consumer activation, low intellectual control, and automatic behavior actuated by a specific stimulus situation. Impulsive and compulsive buying, then, must be differentiated by the characteristic of premeditation: compulsive purchases are typically made during an episode low self-esteem rather than as a result of a rational and conscious exchange. Research also suggests that normative evaluations moderate consumers’ impulsive buying behavior (Rook & Fisher, 1995); in contrast, compulsive buying is not considered normative behavior.

Further differences can be found in that buying considerations in an impulse purchase may include functional, mood, or self-image elements (Dittmar, Beattie, & Friese, 1995), while compulsive buying considerations are composed of the latter two. These same authors (1996) also show that types of consumer goods bought on impulse tend to be different than those bought compulsively. Finally, to distinguish between compulsive buying and impulsive buying, we see that the former is “the whole cognitive process which leads a person to associate a prompt readjustment of his affective disequilibrium to the buying act, and this, through his or her cognitive associations” (Valence, d’Astous, & Fortier, 1988).

Hanley and Wilhelm (1992) investigated the self-esteem and money attitudes of compulsive buyers. Their findings were consistent with the psychiatric literature: compulsive buyers did have lower self-esteem than typical consumers. Importantly, they also more widely held the belief that money was a solution to many problems and that they had less money (and therefore less coping ability) than peers. In their review of the literature, O'Guinn and Faber (1989) found positive relationships between compulsive consumption behaviors and compulsivity, arousal, excitement, fantasy, and sensation seeking, postulating the presence of a general compulsive personality trait.

In a more in-depth study, Rindfleisch, Burroughs, and Denton (1997) expanded on Faber's (1992) observation that respondents from disrupted families have higher overall material values and that these families have higher stress levels which may result in a higher incidence of compulsive buying. Hassay and Smith (1996) uncovered other behavioral components as well, finding that compulsive buyers are more likely to return products and be more concerned with return policies. Ultimately, though, compulsive buyers are not created simply through affluence alone. Materialism and the accompanying impulse to buy can be shown to arise from economic deprivation, family environment and values, patterns of media use, and the absence of a permeating sense of fulfillment (Ahuvia & Friedman, 1998).

Morgan (1993) details the increasing importance of the study of the self in the consumer behavior literature: she notes that because perceptions of the self play a significant role in motivating behavior, and because many of these behaviors increasingly involve products, the development of a "self factor" may prove valuable in better understanding consumer behavior. She also notes that consumers' perceptions of their

possible selves motivate behaviors designed to accomplish the goal of becoming the positive possible self, while avoiding becoming the negative possible self. Further evidence exists which suggests shaping the desired possible self may be more influential of behavior than is the person's current conception of self (Cross & Markus, 1991). This line of research is clearly relevant to compulsive buying because of the inherent differential between the ideal and real selves in these consumers; buying represents an attempt to achieve the ideal self, even if only for a short period of time. However, Morgan's "self factor" which promises to revolutionize the accuracy of target marketing necessarily cannot be one-dimensional if it is to provide the depth of understanding suggested possible by research on the possible self. That is to say, such work has already been accomplished and may be recognized as modern personality psychology.

CHAPTER III

THE META-THEORETIC MODEL OF MOTIVATION AND PERSONALITY

Shortcomings of Current Theoretical Approaches to the Study of Personality

Baron (1995), in his introductory Psychology textbook, defines personality as the relatively consistent patterns of behavior, emotion, and thought exhibited by the individual. If we accept this definition, what distinguishes the study of personality from that of demographics or culture? Though these terms are distinct in concept, in practice they exhibit a great deal of overlap – consistent patterns of behavior can be inferred from personality data (e.g., likelihood to continue consumer credit counseling) or demographic/cultural data (e.g., likelihood to shop using the Internet). In fact, demographics represents by far the prevailing methodology for distinguishing consumer groups, for a number of reasons (Kotler, 1997). First, demographic variables are often predictive of product usage and preference. Second, demographics are more easily measured and obtained than other possible segmentation variables, and are less prone to error. Finally, even if other data were as readily available, demographic data would be necessary in order to estimate the location and potential size of the market. However, demographics are ultimately a proxy measure of potential behavior, separate and distinct from personality. Conceptually distinguishing the two, Mowen (2000) defines personality as “a hierarchically related set of intra-psychic constructs that reveal

consistency across time and that interact with situations to influence the thoughts, feelings, and behavior of individuals.”

Major quantitative orientations to studying personality (specifically with application to consumer behavior) have included social, stimulus-response, lifestyle, self-concept, and trait theories (Kassarjian, 1971), and as is evident from the literature, any number of theoretical (personality) constructs describing relatively persistent trends in behavior have been linked with compulsive buying. The result of this overall approach is that much of the research published on compulsive buying is descriptive rather than explanatory, and fragmented such that presenting a unified view of the field is not possible, as any instructor of the subject can attest.

A cursory look at any introductory textbook in psychology reminds us that the study of personality has been undertaken from a number of diverse viewpoints, and further, that little effort has been made to explore the common strengths and weaknesses of these theories. Also of note is that these traditional approaches have been heavily criticized for at least one, and in some cases many, severe shortcomings. For example, psychoanalytic theory has received tremendous criticism because of its untestable central concepts, modern researchers' inability to verify other of its tenets, and a history of development based predominantly on case studies. Humanistic theories have fallen under attack for failing to account for behavioral determinism, and for their untestable feel-good terminology and assumptions (e.g., the supposition that self-actualization is a common goal and the assumption that people are basically good). Learning theory's exclusive focus on the environment proved limited and ultimately unable to explain cognitive

phenomena that are difficult to measure directly. The result was the development of social cognitive views such as Bandura's.

Social cognitive theories represent perhaps the strongest any of these approaches to the study of personality (Baron, 1995), in part because of their efforts to integrate what had remained separate theories of behavior. However, these theories offer little utility to the consumer researcher. As with all of the aforementioned theories of personality, social cognitive theory cannot account for either the more abstract goals prompting the individual to undertake certain behaviors, or the concrete (instrumental) behaviors undertaken in an effort to reach that goal. The ultimate result of the field's inability to produce a unified theory is that much of the research into consumer behavior over the past three decades has centered on the development of individual difference scales. Examples include Lichtenstein, Netemeyer, and Burton's (1990) coupon proneness scale, Cacioppo and Petty's (1982) need for cognition scale, and particularly relevant to the present topic, Faber and O'Guinn's (1992) compulsive consumption scale. While these scales can account for large portions of variance in specific consumer behaviors, they too fail to integrate goal setting with actual behavior, and in the end offer little insight into the behavior beyond basic prediction.

Trait Theories of Personality

The trait theory approach represents yet another line of research into personality. It has been particularly popular during the past decade, perhaps largely because it lends itself to the development of standardized instruments by which complex behaviors can be measured. The strength of trait theories of personality lies in that they define stable

dimensions along which behavior differs in consistent ways. As Baron (1995, p. 480) succinctly states, “Once we know *how* people differ, we can measure *how much* they differ, and can then relate such differences to behavior in a wide range of settings” (emphasis added). Researchers in consumer behavior have investigated these differences in the widest range of settings as they have incorporated their own unique contributions into existing theories in the social sciences.

The five-factor theory of personality has perhaps been the most influential theory in personality psychology during the past decade (Goldberg, 1993), and Kentle (1995) provides a review of precursors to the development of five “stable” personality factors. As cited in this review, Webb (1915) was perhaps the first to perform factor analyses on correlation matrices of personality measures. This study derived the factor of will in addition to Spearman’s *g*. Garnett (1919), upon reexamining Webb’s data, described the additional factor of cleverness. Burt (1923), in a separate study, reported the more modern factors of extraversion and neuroticism in their earliest forms.

Other components of current theory were discovered independently as well before being integrated into a conceptual whole. McDonough (1929) reported the traits of will, reliability, generosity, and stability. Cattell (1933), noting the persistence of the extraversion factor across studies, provided additional support for the existence of the factor. Guilford and Guilford (1936) and McNamara and Darley (1938) also describe factors related conceptually to current trait theories. Again based on Kentle’s (1995) review, the conclusion is that these studies may represent the continuity of five factorially invariant personality factors.

One of the first scientists to use the trait model to predict consumer behavior was Koponen (1960), in which the relationship between consumer traits and brands/products was investigated. The utility of the trait theory in marketing has been limited because of typically low predictive ability of scaled personality traits (Wells, 1975). One major criticism of trait theory is that personality measures may not adequately tap into enduring characteristics of the individual. Regardless, classic personality models such as Eysenck's three factor model and its subsequent five factor revisions have demonstrated enough utility in explaining consumer behavior that continued development of the theory is warranted (e.g., Weaver, 1991).

Eysenck and Eysenck's (1985) summary of their three-factor model of personality incorporates three broadly descriptive fundamental personality traits: extraversion, neuroticism, and psychoticism. The trait of extraversion describes a continuum ranging from friendly, outgoing, sociable, and adventurous at one end to reserved, cautious, introspecting, and shy at the other. The neuroticism trait describes emotional stability with nervous, hypochondriacal, and moody at one end and calm, relaxed, and stable at the other. Psychoticism ranges from uncooperative, ruthless, and headstrong to gentle, trusting, and helpful, and connotes a willingness and desire to be part of society. While the marketing literatures have in large part retained the titles of neuroticism and psychoticism, other social science literatures have done well to replace these titles, which connote psychological dysfunction, with the titles of (emotional) stability and agreeableness, respectively.

Use of the Eysenck Personality Questionnaire (EPQ) as representative of these personality constructs is not without example in the consumer behavior literature.

Weaver (1991) identified consistent media preference differences between those of different personality types, and Mooradian (1996), using Eysenck's personality constructs, identified differences in ad-evoked feelings by personality type. While these studies did find significant effects, it should be noted that the predictive ability of these three constructs alone is typically low in consumer research. In the case of Mooradian's (1996) findings, the largest amount of variance accounted for by a personality trait is 2.6%. Although even this small degree of relationship can mean millions of dollars to marketers, such low predictive ability is much more tenuous when viewed from a theory-development standpoint.

The current evolution of trait theory can be seen in Costa and McCrae's (1985) version of the five factor model of personality. Essentially, this model expands the three factor model by adding the traits of conscientiousness, which ranges from well-organized, self-disciplined, and conscientious to disorganized, careless, weak-willed; and openness to experience (often referred to as creativity), ranging from imaginative, intellectual, and creative to simple, insensitive, and down-to-earth. It should be noted that this model was developed by factor analyzing huge numbers of personality adjectives, so that this model is purely empirical. However, repeated attempts to discern a stable personality factor structure have consistently demonstrated the factorial invariance of the five factors of extraversion, stability, agreeability, conscientiousness, and openness to experience (e.g., Fiske, 1949; Digman & Takemoto-Chock, 1981). Other researchers, including Goldberg (1993), Saucier (1994), and Duijsens and Diekstra (1995), have developed specialized versions of this five-factor model (often termed the Big Five model) while retaining the same basic factor structure. Goldberg, in his 1993

study, went on to describe the five factor model as having had a larger impact on psychology than any other model. Despite their impact on the field, Block (1995) noted that five factors may emerge because of “unrecognized constraints on the variable sets analyzed” (p. 187). This is joined by a second consistent criticism that the five-factor model enjoys an overabundance of post-hoc justification but lacks the volume of applied research necessary to validate it. Finally, the validity of the factor structure is dependent on the assumption that our language adequately depicts all the basic personality traits that people exhibit.

While the fact that the theory-driven three-factor model nests so well within the larger five factor model does lend support to the latter’s validity, the five-factor model of personality remains at this time a data-driven model. As a general rule, theory should not be developed through this type of analysis (Hatcher, 1994). Doing so may allow an entire theoretical approach to reflect nuances in a single data set, encourage Type I error, and ultimately stifle development in a particular field. However, given the wide acceptance of the theory and a robust factor structure, in addition to its increased predictive ability over the three factor model (Mowen, Stone, & Spears, 1997), it can be expected that future personality research will continue to rely heavily upon this model.

Control Theory

Control theory has only recently been widely recognized as having significant explanatory value in the area of human motivation, despite having been developed over a half-century ago (Klein, 1989). Although control theory offers tremendous insight into human behavior, one explanation for its relative obscurity within the realm of personality

research is that it was initially developed to describe lower-level processes, and that its development occurred outside the mainstream psychology arena (Carver & Scheier, 1982). The basis of control theory is simple: the negative feedback loop is the central mechanism regulating behavior. Six major components comprise the basic cycle (See Figure 1). The input function samples the current perceived state of the environment. This condition is compared to an internal reference value through a comparator mechanism. If a difference exists between the current condition and the reference value, termed an “error”, an output occurs. This output is a specific behavior designed to reduce the discrepancy between the current and reference values, and ideally has an effect on the environment. As a result, when the environment is resampled by the input function, the current environmental condition should more closely approximate the reference value. This process is iterated until the value of the environmental stimulus closely approximates the value of the internal reference value.

External to the system, disturbances account for the fact that behavior does not occur in a vacuum – that is, we may have to compensate for unforeseen as well as planned-for events. Take, for example, tripping on a stair: in addition to the shift in balance created by movement, the sudden change in walking rhythm and momentum must also be compensated for. Momentarily, the superordinate goal of reaching the top of the stairs is superceded by the task of regaining balance, which is in turn guided by the goal of not falling down the stairs.

Also external to the basic feedback loop, the reference value is a function of a number of hierarchically organized feedback systems. That is, the output of a higher level of abstraction serves as the reference value for the following level. This concept of

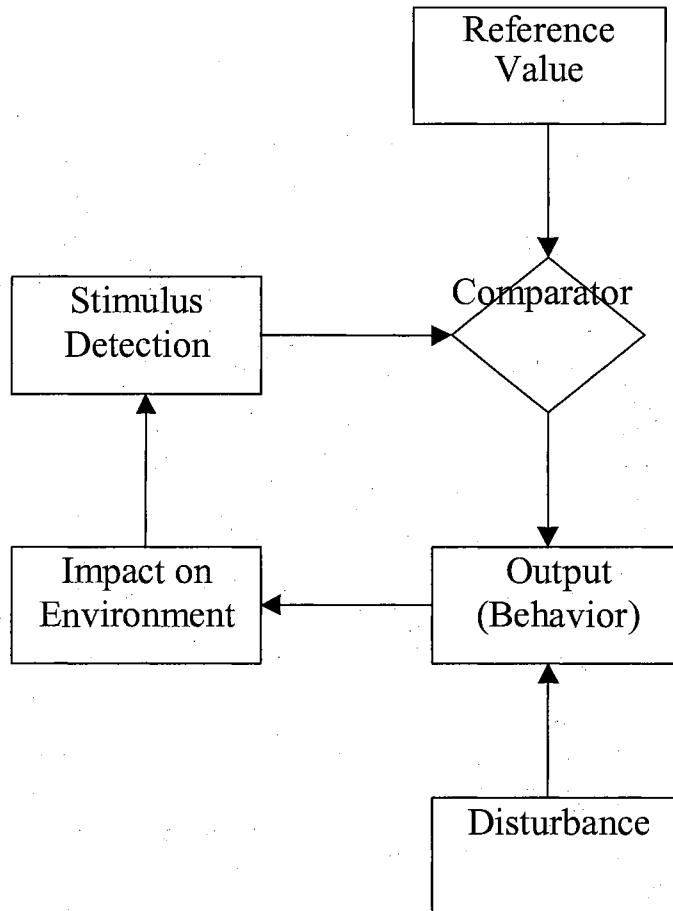


Figure 1. Flow diagram of a negative feedback loop. As shown, a stimulus is detected and compared with an internal reference value. If the two values are sufficiently different (as determined by an individual's sensitivity), a behavior is elicited with the purpose of closing the gap between the two measures. This behavior presumably impacts the environment, which is then re-sampled.

interrelated and hierarchically organized feedback loops is a necessity if we are to extrapolate the control theory model to systems as complex as a living organism (Carver & Scheier, 1982). At the most basic levels, behaviors are observable as muscle contractions. These changes may be guided, for example, at a higher level by a discrepancy between current and reference leg position, and at a higher level still by a discrepancy between current and reference proximity from food. Ultimately, this model allows us to integrate personality and motivation with basic instrumental behaviors.

Several points regarding this model deserve further discussion. Firstly, control theory does not necessarily attribute primacy to either physiological or psychological events – instead, the two coexist and interact. Secondly, the organism regulates its own perception of the environment rather than controlling the environment per se. This tenet accounts for the fact that measurements or perceptions of the environment can be inaccurate, and that we then behave according to those inaccurate data. Other important notes here (Hyland, 1997) are that the reference criterion may vary with time and context (i.e., learning theory) or even be consciously changed (e.g., cognitive therapy for depression), that sensitivity to error can be increased or decreased (e.g., behavioral therapy for phobias), and that perception can be altered. Lastly, when used in the context of personality, control theory can explain phenomena with which traditional approaches have had difficulty.

The 3M Model of Motivation

Mowen's (2000) Meta-Theoretic Model of Motivation and Personality (3M Model) provides a unifying framework for studying how personality and environmental variables

interact to influence behavior and cognition. Organized hierarchically, the 3M integrates control theory, trait theories of personality, and evolutionary psychology theory. The resulting model provides a meta-theory within which researchers can gain further insight into compulsive buying and other consumer behaviors.

The 3M is organized into a hierarchy of four levels of traits, termed “reference levels”. Using the control theory model as a unifying framework, these levels become more concrete as they move from describing traits to values to goals. Elemental traits, which compose Reference Level 4, are basic behavioral dispositions traceable to genetics and early learning. Compound traits, making up Reference Level 3, are the resultant behavioral combinations of elemental traits. Reference Level 2 is described by the interaction of Reference Levels 3 and 4 within a situational context. Surface traits, or category specific dispositions, complete Reference Level 1.

RL4: Elemental Traits

The five-factor model of personality and conceptual analogs in Buss’ (1991) work in evolutionary psychology were used as foundations upon which the 3M’s hierarchical structure was built. These elemental traits are very basic, unidimensional dispositions which can interact to form compound traits. Elemental traits can be conceptualized as self-schemas (Fiske & Taylor, 1984), among the highest of levels in a hierarchical control structure; thus, these higher-order traits determine the consistent patterns in our thoughts, feelings, and behavior – leading us to the most basic definition of personality. Substantial convergent validity can be found for the existence of this type of trait.

A five-factor trait structure has been replicated by a number of researchers (Costa & McCrae, 1985) often using different scales. In a separate line of research, Buss (1991) identified four primal behavioral characteristics along with three derived traits: activity, fearfulness, impulsivity, and sociability, and nurturance, aggressiveness, and dominance. Mowen (2000) notes the conceptual similarities between the five-factor model and Buss' (1991) research: impulsivity and sociability are antonymous with conscientiousness and introversion, and nurturance and fearfulness are equivalent to the five-factor model's traits of agreeability and emotional stability. Openness to experience, hereon referred to as originality to avoid confusion with the need for information resource (e.g., Cacciopo and Petty's 1992 need for cognition scale), finds its analog in Bristow and Mowen's (1998) research on resource needs.

Bristow and Mowen (1998) propose four fundamental resources necessary for survival: information resources, social resources, material resources, and physical resources. From an evolutionary perspective, human behavior must have evolved to maintain these resources – which in turn ensure survival. As a trait, the need for information resources has some similarity to the 3M trait of originality, which expresses itself in the use of information. The need for social resources is similar to both Buss' (1991) trait of sociability and the five-factor traits of extraversion and agreeability. Two other resource needs studied by Bristow and Mowen (1998) are the need for material resources, including the use of tools, clothing, and shelter, and the need for physical (bodily) resources, such as making the body more attractive through exercise or decoration and improving physical skills like strength and agility. These final two resource needs have no equivalent in either the Buss (1991) research or the five factor

model. Because consistent patterns of human behavior must have evolved around the availability of these resources, however, Mowen (2000) proposes material needs (materialism) and physical/body needs as two additional elemental traits.

Although the seven elemental traits enumerated so far offer some insight into the superordinate feedback loops which govern an individual's behavior, none of these traits describes an individual's overall propensity to seek to change his (internal or external) environment. This need for arousal trait implied by the control theory framework, in which individuals vary in their optimum stimulation levels. Within the 3M's control theory framework, this gauge is analogous to overall sensitivity of the control hierarchy; stated in the language of a separate line of research, the trait of need for arousal is the activation principle which bridges the gap between cognition and behavior. Mehrabian and Russell (1974) and Zuckerman (1979) demonstrated that individuals do in fact vary in their need for stimulation, suggesting that under- or over-stimulated individuals seek out situations which will optimize their stimulation level. This theory has been extended to the marketplace as well: Holbrook and Hirschman (1982) have shown that consumers make purchasing decisions in relationship to riskiness of that decision, which in turn moderates arousal. Thus, a total of eight elemental traits comprise the 3M's Reference Level 1: conscientiousness, introversion, agreeability, emotional stability, originality, materialism, need for physical resources, and need for arousal.

RL3: Compound Traits

Continuing the molecular analogy suggested by the elemental traits in Reference Level 4, compound traits occupy the second level of individual difference variables

making up the 3M. Compound traits are theorized to be unidimensional combinations of the elemental traits; because many combinations of the elemental traits are possible and these combinations would guide a more narrowly focused program of behavior, many compound traits may exist. Mowen (2000) investigates eight specific compound traits: need for learning, need for play, need for activity, need for thought, effectance motivation, future orientation, task orientation, and social orientation. He goes on to expand on the molecular analogy as follows:

“The term, compound trait, was selected because these dispositions are proposed to result from combinations of elemental traits while also possessing their own unique properties. For example, water is a compound composed of two parts hydrogen and one part oxygen. However, due to the molecular bonds, its characteristics are different from its component elements. That is, the characteristics of H₂O are very different from the characteristics of either hydrogen or oxygen. In this sense, compounds are unidimensional. Unless one breaks apart its molecular bonds, no matter how you slice H₂O, it still remains water. Similarly, in the 3M compound traits are proposed to result from combinations of elemental traits. Yet, when factor analyzed, they will reveal only one factor” (p. 22).

Mowen (2000) admits some difficulty in operationalizing the compound trait, in part because the range of these traits exhibited by any one individual cannot be expected to cover the entire set of traits which are theoretically possible. However, compound traits should explain more variance in situational traits, the next subordinate level of individual difference variables, than do elemental traits. Compound traits should also exhibit a greater degree of correlation with the appropriate elemental traits than any single

elemental trait will show with the remaining elemental traits. However, even though certain compound traits may share certain elemental components, those traits may not exhibit a high degree of correlation; recall that a compound trait may or may not share the physical/behavioral properties of the elements composing it.

RL2: Situational Traits

Situational traits are conceptualized as unidimensional factors revealing relatively consistent patterns of behavior within individual environmental contexts. Elemental traits, compound traits, prior learning, and the specific situation combine to form the situational traits, which in essence represent cells in a person by situation matrix. Thus, situational traits offer strong classification ability, while the component traits provide some understanding of the underlying processes governing the behavior. As an example, compulsive buying is a situational trait expressed as a result of the combination of certain elemental and compound traits, prior learning that the behavior has a positive effect on mood state, and the means and opportunity to buy.

Scales developed to measure situational traits will clearly account for more variance in the behavior than will measures of elemental or compound traits. This is so partly because these superordinate traits cannot account for the situational context within which behavior occurs, and in part because the scale to measure that behavior has been specifically designed to do so. Unfortunately, the sacrifice researchers make in developing scales of this accuracy is to ignore the underlying process that accounts for the very behavior under study. Take, for example, Faber and O'Guinn's (1992) scale

which identifies compulsive buyers: though it correlates highly with the behavior it was designed to predict, it offers little insight into why those consumers behave as they do.

RL1: Category Specific Dispositions

Category specific dispositions, equivalent to surface traits within a larger psychological context, add another dimension to situational traits. These dispositions might be thought of as occurring within a person by situation by behavioral domain matrix. Thus, individual surface traits are combinations of elemental traits, compound traits, situational traits, and goals. In a marketing context, this would indicate a behavioral predisposition with respect to a particular product category. For example, women have been shown to exhibit compulsive buying behavior in different product categories than do men (Black, 1996).

By this point, the 3M's organization of the hierarchy of traits around a control theory paradigm is implicitly clear. In review, the power of this approach is that it allows the researcher to relate the most basic of behavioral acts to very abstract behavioral events. (For example, moving one's fingers to press specific keys on a keyboard, under the correct environmental conditions, is one of the many motoric behaviors which ultimately result in achieving a Ph.D., although the underlying motivation for this goal could range from the pursuit of knowledge to the pursuit of money.) It allows us to account for our behaviors in light of our personal and shared histories, our goals and values, and the contexts in which we find ourselves. By Carver and Scheier's (1982) account, such an approach may be the only one that can do so.

Components of the 3M

Leveraging its basis in control theory, the 3M goes beyond existing measures of goals and values by positing that they can be linked directly with an individual's personality traits. Eight constructs, consisting of integrated components from control theory, personality psychology, and the hierarchical personality model describe the structure and function of the 3M. Building on the low-level control structure of the task, the 3M incorporates a trait hierarchy, a comparator, a mechanism for cognitive appraisal, purposive activities, behavioral outcomes, available resources, and environmental variability.

Tasks. Control theory defines a hierarchy of behavior in which simple motoric movements are used to modify our environment or perceptions of the environment in a way that ultimately reflects our values. This is accomplished through setting goals, which are met by completing tasks. Control theory provides for the simultaneous operation of multiple programs of behavior; for example, a person can pat his head and rub his stomach at the same time. The task is operationalized at the level such that all of a person's information processing capacity is consumed. Thus, the task here would be patting your head and rubbing your stomach simultaneously, while monitoring to ensure that one hand is indeed patting and the other rubbing, that the observer needs to see more patting and rubbing in order to be convinced, and that your wild gesticulations do not create too much cognitive dissonance. This task is designed to meet the goal of proving to someone that you can indeed pat and rub at the same time, and consumes all available information processing capacity.

It is here that the 3M distinguishes itself from control theory: while a person has limited attentional resources, Star Trek's Data could simultaneously pat his head and rub his stomach in order to impress the Captain with his agility, calculate the probability of escaping this week's alien threat, run a self-diagnostic, and work on any number of other tasks. Thus, Data has little personality because prioritization of tasks is based on optimization rather than on the expression of dominance of a particular self-trait. Importantly, a task can be interrupted: a common example would be reaching down to tune the radio while driving. Although it would appear that the driver is in fact attending to two tasks at once, the feedback loop is in operation for only one of these tasks: the driver is not simultaneously comparing current car position and speed to ideal position and speed, and current radio station to ideal radio station. Instead, each task is attended to for short periods of time until one of the tasks is completed. Thus, implicit in the 3M is that cognitive resources are devoted to tasks in serial rather than in parallel.

Hierarchy of Traits. Humans possess only limited information-processing resources, and the tasks we devote those resources to are in large part descriptive of personality. Task selection, then, is based on the traits that determine internal reference values, the comparator, and the effects of the environment. How that task is executed, which might be recognized as personality, is guided by an individual's trait hierarchy. Mowen (2000) uses the example of buying groceries to illustrate how various traits can stylize this task: the use (or not) of coupons reflects a surface trait; value consciousness by brand, a situational trait; high task orientation, a compound trait; and conscientiousness, an elemental trait. As discussed, these traits are hierarchically organized based on abstractness and correspond to certain values and goals an individual may possess.

Mowen (2000) suggests that the goals and values that accompany individual traits may be so closely linked with those traits that they are inseparable from them.

The Comparator. The comparator as conceptualized in the 3M functions similarly to its namesake in the control theory model. This construct compares perceptual input to an ideal or goal value, thus determining if the outcome of the current task is resulting in a successively closer approximation of the desired end state. This construct also serves to connect the feedback system with emotional variability.

Sensitivity of the comparator is determined by an individual's emotional stability trait. That is, the comparator responds to smaller differences between desired and actual outcomes, or reacts more aggressively with a task which will change the (perception of the) environment more quickly in some individuals than in others. Thus, in some people the taking of decisive action may alone create the perception that desired and actual outcomes are equivalent, regardless of the objective outcome. In any case, affect is positive when outcomes are better than the expected value and negative when worse than the expected value. Sensitivity determines how much different the two values can be before a task is activated to restore equilibrium. When the difference reaches a critical level, however, and the emotion experienced reaches a critical level, the feedback loop is interrupted and a cognitive appraisal process begins.

Cognitive Appraisal. Cognitive appraisal is a separate task occurring when another task becomes insufficient to accomplish its goal. The cognitive appraisal process interrupts the failing task so that alternate tasks which may result in the same goal can be considered; thus, attributional processes and thinking/planning occur during cognitive

appraisal. One notable supposition resulting from this structure is that cognition is activated by emotion, and not vice-versa. This view is not without debate, but does have support in the literature (e.g., Zajonc & Markus, 1982) and is consistent with an evolutionary perspective in that emotion evolved prior to cognition, and thus is primary.

Activities. Activities are the general classes of behaviors undertaken to perform tasks, reach goals, and fulfill values. According to Mowen (2000), the fundamental activities necessary for survival are:

1. Non-action. A state of inactivity in which no activities are occurring. It may take the form of sleep in which the eyes are closed and consciousness is suspended.
2. Locomotion. Actions involving moving from one physical place to another.
3. Consumption/excretion. Acts involving the bodily functions, including eating, drinking, breathing, and having sex. Consumption acts to import energy into the resource system. Excretion acts to eliminate wastes that result from the burning of energy.
4. Thinking/planning. The use of cognitive facilities to determine the causes of actions, identify goals, plan activities, and develop understanding.
5. Tool use. Actions in which tools and materials are manipulated.
6. Signaling. Acts in which a person attempts to provide information to another being.
7. Observing/listening. Taking in information through the senses in order to learn by observing the actions of another being, by observing the consequences of the actions of others to oneself, and by interpreting signals from the environment.
8. Personal contact. Actions involving the physical touching of another being.

These activities are closely tied to the four fundamental resources. For example, observing/listening is necessary to gain information resources, with signaling becoming an important component in the exchange of information. Locomotion, consumption/excretion, personal contact reflect interaction with physical resources and their acquisition or exchange. Thinking/planning could involve exchanging material resources (e.g., money) for information resources (e.g., a Bachelor's degree), with the plan that the degree would pay for itself.

Outcomes. Outcomes are the results of activities undertaken toward completion of tasks. As such, outcomes are positive or negative changes in the environment that we create. The effects of the environment are important considerations in outcomes, however, as the environment directly affects both the efficacy of the activity and the relative importance of the task.

Resources. In the 3M, human behavior is presumed to have evolved around a number of environmental limitations: specifically, the availability of resources necessary for survival. The four fundamental resources proposed in the 3M are material, information, social, and body resources; recall that two of these (information and social resources) are recognized in the 3M as having personality correlates in the existing personality literature. These resources are assets that are assumed to be of value, cumulative, and transferable, and can be used in the completion of tasks.

The Environment. The environment is defined in the 3M as it sounds: the physical things, conditions, and social and cultural forces that impact potential outcomes. One important note is that the 3M defines the environment to contain purely external

influences; this is in contrast to control theory's definition in which both internal and external influences constitute the environment. This distinction is made because the 3M's purpose is to more clearly define the internal environmental conditions that guide behavior.

Linking Personality to Motivational Processes

Personality and motivation typically comprise two separate chapters in psychology textbooks. The 3M credibly links the two fields by combining a hierarchical trait theory of personality within the framework of control theory. Baron (1995) defines motivation as "an inferred internal process that activates, guides, and maintains behavior over time" (p. 375). As with the disparate personality theories, the 3M unifies various theories of motivation: instinct theory (James, 1890), drive theory (Hull, 1943), arousal theory (Geen, Beatty, & Arkin, 1984), and Maslow's hierarchy of needs (Maslow, 1970), as well as providing a synergistic theory of personality and motivation.

Defining Compulsive Buying in Terms of 3M Elemental Traits

A review of the literature shows that researchers have a relatively strong understanding of compulsive buying. Research has also developed a reliable scale for predicting compulsive buying as a situational trait (Faber & O'Guinn, 1990). But what values and goals motivate compulsive buying behavior, and how those values and goals be described in understandable and actionable terms? The elemental traits defined by the 3M may be able to provide some insight into this problem, and thereby give the researcher a beginning point for addressing the needs of these consumers.

Materialism

The most fundamental aspect of compulsive buying is the over-consumption of material goods. Thus, compulsive consumption represents a periodic task that consumers may undertake in order to meet certain goals, which in turn are somehow met through the acquisition of goods. Without speculating at this point whether the attitude (materialism) drives the behavior (compulsive consumption) or vice-versa, the two would appear to be positively related. This analysis is augmented by a second argument: any number of scientific reports can be found to demonstrate that materialism is negatively related to subjective well-being (e.g., Belk, 1985; Sirgy, 1998). It is also clear from the literature that compulsive buying represents an attempt to increase feelings of well-being. Because the presence of compulsive buying is negatively related to feelings of well-being, compulsive buying should be positively related to the trait of materialism.

Belk (1985) classified materialism into three subscales: envy, possessiveness, and nongenerosity. Faber and O'Guinn (1988) found significant differences between compulsive and non-compulsive consumers on the envy and nongenerosity subscales, as well as higher (but not significantly so) scores on the possessiveness subscale. DeSarbo and Edwards (1996) suggest that materialism drives less severe instances of compulsive buying, while the process of buying drives the more severe cases. These arguments support the observation that compulsive buyers do engage in their namesake behavior for reasons other than ownership. Despite this, material goods and the consumer's interaction with them remain the most visible elements of compulsive buying. **H1: Materialism is positively related to compulsive buying.**

Instability

Faber and O'Guinn (1988) found that compulsive buyers experience an emotional high when shopping, a stark contrast to the low mood levels which motivate such shopping excursions. This pattern indicates a good deal of variability in compulsive buyers' trait of emotional stability. Indeed, the bulk of research in the area indicates that compulsive buyers use the experience as a mood leveler (Faber & O'Guinn, 1992). Further, research has shown that compulsive buyers often shop to escape boredom and as a means of emotional stimulation (Hassay & Smith, 1996).

These arguments run parallel to the observation that compulsive buying and depression frequently co-occur. Although it is clear that the consequences resulting from compulsive buying are stressors that can spur depression, it is also clear that their emotional and behavioral components are closely tied and that purchasing, like any number of other tasks, can help ease depression. With regard to control theory, compulsive buying is a behavioral cycle which manipulates the external environment such that it more closely approximates the ideal state; this cycle continues until either a higher-order cycle pre-empts it (e.g., the stress of over-spending becomes too great) or the environment matches the ideal, desired state (e.g., mood stabilizes). **H2: Emotional stability is negatively related to compulsive buying.**

Introversion

Evidence for a relationship between extraversion and compulsive buying can be found in the buying motive of compulsive buyers: their need to purchase stems from the social rewards inherent in the retail situation. This suggests that compulsive buyers are

likely to be more extraverted than other consumers. Faber and O'Guinn's (1988) finding that compulsive buyers score significantly higher on envy subscale of a measure of materialism supports this argument: as envy is an evaluation of negative possession relative to others, it provides indirect evidence that compulsive buyers are extraverted. Finally, research has shown that compulsive buyers are no more likely to shop via catalog than other consumers (Schlosser, Black, Repertinger, & Freet, 1994). **H3: Introversion is negatively related to compulsive buying.**

Agreeableness

As has been shown, compulsive buyers are typically upset by the knowledge that they are hiding excessive purchases from their families. Further, it has been shown that shopping is an increasingly popular form of self-expression (Kowinski, 1985). Thus, while compulsive buyers are aware their excessive buying is deviant, they attempt to hide that behavior so that it would appear to be in accord with established social norms. Certainly some possibility exists for the compulsive buyer to seek emotional equilibration through other compulsive behaviors such as drug use; one might surmise the compulsive buyer feels relatively greater restraint by societal norms. Compulsive buyers demonstrate not only a need to conform to society's expectations, but a desire to be a part of society that is envied. **H4: Agreeableness is positively related to compulsive buying.**

Need for Body Resources

Body image represents an important part of the self-concept, and a great deal of research has been undertaken to define the relationship between the culturally defined

ideal body image and the ideal self-concept (Schouten, 1991). Aesthetic plastic surgery represents the ultimate in symbolic consumption; motives for undertaking such a procedure might include role transition, identity play, and control. Furthermore, both depression and behaviors related to negative body image (e.g., bulimia) are correlated with compulsive buying (Lejoyeux, Tassain, Solomon, & Adès, 1997). However, motivations for compulsive buying clearly differ. Though compulsive buyers may be likely to have frequent cognitions regarding their body image as a result of depression, and even though the goal of compulsive buying and body-related compulsive disorders (e.g., anorexia) may be the same, the underlying trait dominating the expression of the behavior should differ. **H5: Need for body resources is unrelated to compulsive buying.**

Conscientiousness

Nothing was found in the literature relating any measure of conscientiousness to compulsive buying. On the face of it, compulsive buyers would appear to be less conscientious than other consumers because they spend with relatively little thought given to the consequences of that spending. However, care must be taken not to interpret elemental traits purely with regard to the name given that particular multi-item scale. In this particular case the researcher must ask, is the compulsive buyer more disorganized, careless, or weak-willed than is any other consumer?

The answer to this is clearly that they are not; they demonstrate a great deal of care in hiding merchandise and the accompanying bills, as well as willpower in containing their drives to purchase. These acts represent an attempt to at least appear conscientious.

The explanation, then, is that the needs met through compulsive buying are superordinate to and independent of those met through maintaining conscientiousness. It might, then, be plausible that highly conscientious individuals do not tend to buy compulsively; such a dominant conscientiousness trait would override any compulsion to spend more than was prudent. **H6: Conscientiousness is unrelated to compulsive buying.**

Originality

Perhaps the greatest argument against any relationship between the elemental trait of originality and compulsive buying is that compulsive buyers are known to continually repurchase utilitarian items, rather than shopping for new products (Black, 1996). New products often serve as extensions of the self-image. In compulsive buying, however, the product is of little relevance. The nature of the disorder is emotional rather than cognitive. **H7: Originality is unrelated to compulsive buying.**

Need for Arousal

No evidence was found in the literature suggesting a difference between the general population and compulsive buyers and the general population in terms of need for arousal. However, that is not to suggest that need for arousal and compulsive buying are completely unrelated.

Compulsive buyers with greater need for arousal may exhibit more frequent (and possibly less expensive) shopping sprees to equilibrate mood levels. That is, the individual with high need for arousal will have greater sensitivity to differences between actual and desired mood state. Therefore, the behavioral cycle of compulsive buying will

be triggered more easily, but it will also equilibrate more quickly. While it is hypothesized that there is no direct relationship between need for arousal and compulsive buying, subsequent research may find that need for arousal moderates the frequency and severity of shopping binges. Indeed, with continued research into the 3M, need for arousal may be shown to affect the frequency of many situational and surface traits.

H8: Need for Arousal is not correlated with compulsive buying.

Comparing the 3M to the Five Factor Model of Personality

The 3M is a meta-theoretical model which incorporates elements of the five factor model of personality, and one purpose of the current study is to aid in establishing the 3M as a more accurate and descriptive framework within which to study consumer behavior. With this purpose comes the implicit assumption that the 3M will be able to explain more variance in measures of consumer behavior than will the more general five-factor model. Moreover, Hypotheses 1 and 2 predict that two of the additional 3M traits, materialism and emotional stability, will be predictors of compulsive buying. By extension, we must infer that the variance explained by the 3M model will be greater than that explained by the standard five personality factors. **H9: The 3M model will explain more variance in compulsive buying than does a five-factor model of personality.**

CHAPTER IV

STUDY 1

Explaining Compulsive Buying

Method

Subjects. Data for the present study were collected from a known group of 281 individuals with credit card problems participating in programs of the Consumer Credit Counseling Service of Central Oklahoma (CCCS). Respondents completed a consumer needs survey following an initial screening session with CCCS counselors as part of four evening seminars for program participants. Respondents received five dollars for participating in the study. Demographic data for these individuals were obtained from the CCCS database and matched to an ID code. Of 281 respondents, 36 failed to complete the questionnaire or could not be matched with demographic data. These cases were excluded from subsequent analysis, leaving a sample of 245 participants.

Demographic data described the participants as having a mean (SD) age of 36.2 (11.35) years, ranging from 21 to 68. Fifty-six percent were female, while 36% were male; the remainder omitted sex identification. Just over half (52.6%) were married, with the remainder almost evenly split between single and divorced status (23.5% and 19.0% respectively). Additionally, 86.6% described themselves as white, 9.3% as black, and

2.4% as Hispanic, with 46.6% either owning or purchasing their own homes and 42.1% renting. Remaining participants lived with family or omitted this information.

Respondents further described themselves as having a mean (SD) net yearly income of \$19,750 (\$10,546) with annual living expenses estimated at \$16,825. Average (median) total indebtedness was \$35,000 (\$25,500) distributed among an average of 11 creditors. Based on their initial interviews with counselors, respondents were able to lower their average monthly debt service from \$961 to \$553 (median debt service was lowered from \$889 to \$439). Paying off this debt, if participants were to continue in the CCCS program, would take an average of 39 months. However, only 49.8% of participants formally entered the debt service contract following their initial interview.

As expected, scores on the compulsive buying scale were higher for females than for males (38.3 as compared to 34.0). This difference was statistically significant, $t(213.7) = 2.448$, $p = .015$. Compulsive buying tendencies did not differ significantly by marital group (single, married, divorced), all p 's $> .05$. Sample size was not adequate to examine possible racial differences in compulsive buying. Finally, age was significantly negatively correlated with compulsive buying, $r = -.172$, $p = .009$. However, the graph of this bivariate relationship suggests that the regression line is heavily influenced by the low ratio of older to younger respondents. Visual inspection of the scatterplot cautions that this relationship may be spurious.

Of particular importance to the current study was respondents' reasons for entering counseling. These included financial overextension (29%), financial mismanagement (22%), and loss of income (16%), followed by divorce (7%), recounseling (6%), medical expenses (4.9%), and job change (3%). Just over one percent of consumers ($n=3$) labeled

themselves as being “compulsive spenders”. Various other financial problems were listed by the remaining 11% of participants. One relevant concern about using the present sample was that respondents who had mismanaged their funds might be different than those who were victims of circumstance. To address this concern, a logistic regression analysis was conducted to determine whether personality variables of respondents who had entered credit counseling as a result of financial mismanagement, financial overextension, compulsive spending, or credit card abuse (53.5% of the sample) were statistically different than those in counseling for other reasons (divorce, illness, accident, etc.). None of the 3M variables were significant predictors of group membership (all p 's > .25). However, respondents who had mismanaged their funds did allocate over \$8000 in additional debt for credit service on average, $t(172.9) = -2.554$, $p < .05$ (total debt was also slightly over \$8000 higher, but this difference was not significant, $p = .056$), an average of almost two additional creditors, $t(172.9) = -2.202$, $p < .05$, and almost \$8000 in additional gross income, $t(169.4) = -3.762$, $p < .05$. These two groups of respondents did not differ with respect to age, sex, living expenses, months to complete credit counseling, or amount of current monthly debt payment; nor were respondents who had mismanaged their funds significantly more or less likely to return following an initial CCCS interview, $\chi^2(4, N = 245) = 1.18$, $p = 0.278$.

Materials and Procedure. Participants completed approximately 150 questions designed to tap the constructs adapted from Saucier's (1994) brief version of the five-factor model of personality. Multi-item scales measuring three additional 3M elemental traits were included on the questionnaire as well, so that all eight 3M elemental traits were measured. Finally, respondents completed a modified version of Faber and

O'Guinn's (1992) compulsive buying scale and Puri's (1996) measure of consumer impulsiveness. Surveys were administered by consumer credit counselors as part of their interviews during the winter of 1998. An example of the questionnaire can be found in Appendix A.

Reliability of Scales

The scales designed to measure the 3M's eight elemental traits were taken from previous research by Mowen (1997). In that study, items employed by Saucier (1994) and additional multi-item scales developed by Mowen (1997) were assessed via confirmatory factor analysis. Some items were dropped and new items from other five-factor model scales were added in an iterative process until a model was obtained that could be confirmed. This model was then tested on a new set of data, and it was confirmed with acceptable fit indices. Appendixes B and C provide the coefficient alphas for the impulsiveness scale and 3M elemental trait used in the present research. The measure of compulsive buying was an expanded version of Faber and O'Guinn's (1992) Compulsive Buying Screener (see Appendix B for a comparison of the scales). The questionnaire was modified to more accurately reflect the emotional and behavioral components of compulsive buying (e.g., "I have just wanted to buy and didn't care what I bought", "I have bought something, and when I got home I wasn't sure why I bought it") rather than the financial components (e.g., "I wrote a check when I knew I didn't have enough money to cover it", "I made only the minimum payments on my credit cards"). This change was necessary in order to better reflect what has been learned about compulsive buying since the publication of Faber and O'Guinn's (1992) screener.

Analysis

A nested regression model was run to assess the relative predictive ability of the five-factor and 3M models. Notably, such a test may not be an entirely fair one: the multi-item scales used in the present research were developed specifically for the 3M model. As a result, the reduced scales for introversion, conscientiousness, agreeableness, originality, and emotional instability may show a more limited ability to predict specific consumer behaviors than the full five-factor scales. However, modified versions of these scales continue to be widely used in marketing (e.g., Saucier, 1994), and despite continual rewording of the questionnaire set used to derive these common five factors (Digman & Takemoto-Chock, 1981), the same factors continue to emerge. The 3M posits the existence of three additional (oblique) traits which should account for variance in addition to that accounted for by the five trait factors on their own. Thus, the true “fairness” of comparing the five factor model (when composed of proprietary reduced scales) to the 3M would best be assessed by investigating the correlation between the full five factor scales and the three additional 3M elemental trait scales, a task beyond the scope of the current study. Though unfair in the strictest sense, comparing the predictive ability of the 3M and a generic five-factor model (even given the use of reduced scales) does provide some measure of the 3M’s utility in explaining consumer behavior as well as limited insight into what aspects of human personality the five factor model may be leaving out.

The SPSS blocking procedure was used to first enter the five constructs composing the Big 5 model (agreeableness, extraversion, conscientiousness, originality, and stability). The three additional constructs making up the 3M model (materialism and

need for arousal and body resources) were then entered as a block. Regression diagnostics revealed that the criterion variable was reasonably normally distributed and that the variance inflation factor (VIF) for each predictor variable was below 1.4. These results indicated that the assumptions of multiple regression were met.

Results

Table 2 provides the results of the analyses in which the overall models are compared; all tests were conducted at the $p = .05$ level. The five-factor model accounted for 13.0 percent of the variance ($R = .384$) in participants' compulsive buying scores after adjustment for multiple predictor variables. This relationship was statistically significant, $F(5, 239) = 8.278, p = .000$. Adding the 3M constructs to the model increased adjusted R^2 by 14.2%, bringing total variance explained to 27.2%. This increase in explained variance was statistically significant, $F_{\text{change}}(3, 236) = 16.579, p = .000$, and provides substantial support for Hypothesis 9 – that the 3M will explain more variance than the five-factor model.

Tables 2 and 3 list the significance level of each construct at each stage in the regression analysis. Emotional instability and introversion were significant predictors of compulsive buying behavior as part of the five factor model, $t(244) = 5.862, p = .000$ and $t(244) = -2.39, p = .017$, respectively. These two factors remain significant predictors of compulsive buying in the 3M model as well, $t(244) = 4.879, p = .000$ and $t(244) = -1.981, p = .049$, bearing out Hypotheses 2 and 3. Materialism also emerged as an important trait in compulsive buying, $t(244) = 6.76, p = .000$, providing support for Hypothesis 1. The trait of agreeableness neared significance, $t(244) = 1.822, p = .07$,

TABLE 2

SUMMARY OF NESTED REGRESSION MODELS:
COMPARING THE 3M AND FIVE FACTOR MODELS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.384 ^a	.148	.130	12.8329	.148	8.278	5	239	.000
2	.544 ^b	.296	.272	11.7366	.148	16.579	3	236	.000

a. Predictors: (Constant), Instability, Creativity, Introversion, Agreeableness, Conscientiousness

b. Predictors: (Constant), Instability, Creativity, Introversion, Agreeableness, Conscientiousness, Body Resources, Materialism, Need for Arousal

TABLE 3

3M ELEMENTAL TRAITS PREDICTIVE OF COMPULSIVE BUYING

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	30.129	7.283		4.137	.000
	Introversion	-.157	.066	-.148	-2.394	.017
	Agreeableness	6.393E-02	.109	.039	.584	.560
	Conscientiousness	-8.27E-02	.118	-.047	-.699	.485
	Creativity	1.102E-02	.086	.008	.128	.899
	Instability	.424	.072	.387	5.862	.000
2	(Constant)	12.052	7.516		1.604	.110
	Introversion	-.124	.063	-.117	-1.981	.049
	Agreeableness	.190	.104	.116	1.822	.070
	Conscientiousness	-3.14E-02	.110	-.018	-.287	.775
	Creativity	-7.56E-02	.082	-.055	-.923	.357
	Instability	.335	.069	.306	4.879	.000
	Need for Arousal	2.384E-03	.079	.002	.030	.976
	Body Resources	5.725E-02	.089	.037	.641	.522
	Materialism	.604	.089	.408	6.759	.000

^a. Dependent Variable: Compulsive Buying

supporting Hypothesis 4 ($p = .035$ with a directional t -test). None of the remaining elemental traits – need for body resources, conscientiousness, originality, or need for arousal – were statistically significant predictors of compulsive buying, all p 's $> .30$, sustaining Hypotheses 5, 6, 7, and 8. In summary, the current findings suggest that consumers with a combination of lower emotional stability, greater need for material resources, higher extraversion, and to a lesser extent, high agreeableness may be more prone to compulsive buying than are other consumers.

Differentiating Compulsive Buying From Impulsiveness

Compulsive buying and impulsiveness have several traits known to be common. They both involve the acquisition of material goods and the control/stabilization of mood level (Gardner & Rook, 1988). Impulsive and compulsive buyers also share a concern for the social environment which reinforces/moderates the behavior: research has shown that normative evaluations moderate consumers' impulsive buying behavior (Rook & Fisher, 1995). Compulsive buying and impulsiveness, then, might be expected to have in common the 3M traits of materialism, emotional instability, and extraversion. Given that a theoretical relationship exists between impulsiveness and compulsive buying, an analysis of the traits shared by these behaviors and of the variance they have in common may shed additional light on compulsive buying. Theoretically, the two should be distinguishable within the 3M model. One interesting note in this analysis is that it is a comparison of a situational trait with a compound trait. Thus, the regression model for impulsiveness should explain a greater amount of variance than was accounted for in compulsive buying: within the 3M model, as compound traits should share more variance

with elemental traits than do situational traits. **H10: 3M traits should predict more variance in impulsiveness than in compulsive buying.**

Importantly, the types of consumer goods purchased differ for impulsive as compared to compulsive buying: impulsively bought items tend to have functional purposes. In addition to this ostensible “value” (as compared to compulsively bought items), impulsive buying (a situationally specific manifestation of impulsiveness) has a substantial cognitive component (Weinstein & Gottwald, 1982) and thus represents a conscious decision to trade money for goods. Because impulse purchases are definitionally not conscientious, it is hypothesized that more impulsive consumers will be less conscientious than will other consumers. Further, like all purchases, impulse buys involve products related to the self-image. Impulsive items in particular provide the consumer to trial new identities and experience new things. Therefore, impulsiveness and the trait of originality should be positively related. To summarize these hypotheses:

H11: Materialism is positively related to impulsiveness.

H12: Emotional stability is negatively related to impulsiveness.

H13: Introversion is negatively related to impulsiveness.

H14: Conscientiousness is negatively related to impulsiveness.

H15: Originality is positively related to impulsiveness.

Tables 4 and 5 show the results of this second analysis. As predicted, materialism, $t(244) = 4.845$, $p = .000$, emotional instability, $t(244) = 3.603$, $p = .000$, and introversion, $t(244) = -2.614$, $p = .010$ were significant indicators of impulsiveness. These relationships support Hypotheses 11, 12, and 13. Conscientiousness was found to be negatively related to impulsiveness, supporting Hypothesis 14. However, originality was

negatively related to impulsiveness, $t(244) = -3.382$, $p = .001$, opposite from the predicted relationship. This finding is counter to Hypothesis 15. The analysis also showed that the elemental traits do indeed account for more variance in the compound trait of impulsiveness (adjusted $R^2 = .341$) than in a situational trait such as compulsive buying (adjusted $R^2 = .272$), supporting Hypothesis 10 and Mowen's (2000) similar assertion.

A final analysis in this series was conducted to determine the degree of relationship between impulsiveness and compulsive buying. A regression analysis was run including all eight 3M elemental traits as well as the impulsiveness trait as predictor variables. A moderate zero-order correlation was found to exist between impulsiveness and compulsive buying, $r_{xy} = .433$. Regression results further illustrate that impulsiveness is a significant predictor of compulsive buying, and that the elemental traits of extraversion and agreeableness fail to account for a significant amount of variance in compulsive buying that is not already explained by impulsiveness (see Table 6). Materialism and emotional instability, however, remain significant contributors of variance in accounting for compulsive buying.

TABLE 4

VARIANCE ACCOUNTED FOR BY 3M ELEMENTAL TRAITS
IN IMPULSIVENESS AND COMPULSIVE BUYING SCORES

Model Summary: Impulsiveness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.602 ^a	.363	.341	9.5560	.363	16.497	8	232	.000

^a. Predictors: (Constant), Materialism, Introversion, Body Resources, Creativity, Agreeableness, Instability, Conscientiousness, Need for Arousal

Model Summary: Compulsive Buying

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.544 ^a	.296	.272	11.7366	.296	12.402	8	236	.000

^a. Predictors: (Constant), Instability, Body Resources, Creativity, Introversion, Materialism, Conscientiousness, Agreeableness, Need for Arousal

TABLE 5

3M ELEMENTAL TRAITS PREDICTIVE OF IMPULSIVENESS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	60.634	6.164		9.837	.000
	Introversion	-.135	.052	-.148	-2.614	.010
	Agreeableness	.111	.085	.079	1.305	.193
	Conscientiousness	-.535	.090	-.357	-5.954	.000
	Creativity	-.226	.067	-.194	-3.382	.001
	Instability	.201	.056	.216	3.603	.000
	Need for Arousal	4.435E-02	.065	.042	.682	.496
	Body Resources	-5.14E-02	.073	-.039	-.703	.483
	Materialism	.355	.073	.279	4.845	.000

a. Dependent Variable: Impulsiveness

TABLE 6

IMPULSIVENESS AS A PREDICTOR OF COMPULSIVE BUYING

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-9.166	8.657		-1.059	.291
	Impulsiveness	.358	.077	.305	4.625	.000
	Agreeableness	.141	.101	.086	1.402	.162
	Need for Arousal	-4.23E-03	.077	-.003	-.055	.956
	Body Resources	8.132E-02	.086	.052	.943	.347
	Conscientiousness	.155	.114	.088	1.365	.174
	Creativity	6.026E-03	.081	.004	.075	.941
	Introversion	-8.43E-02	.062	-.079	-1.360	.175
	Materialism	.476	.091	.319	5.250	.000
	Instability	.265	.068	.243	3.915	.000

^a. Dependent Variable: Compulsive Buying

CHAPTER V

STUDY 2

Predicting Entrance Into the CCCS Program

Method

Subjects. Initial descriptive statistics of the data collected in Study 1 indicated that fewer than 50 percent of those who contact the Consumer Credit Counseling Service return to enter the program following their initial interview. Study 1 also indicated that personality constructs demonstrate some effectiveness in explaining consumption patterns, and thus might be of use in identifying those who may be more likely to follow up an initial interview. This research question was identified as being particularly important: while the service enjoys some success in retaining its clients, signing them up presents some difficulty. Analyses were conducted using the same data as in Study 1, consisting of a total of 245 respondents.

Materials and Procedure. The present research examined the utility of constructs from the 3M model of motivation in conjunction with measures of compulsive buying, commitment to the program, and ability to imagine doing the things necessary to complete the program (see Appendix C) to predict whether participants would enter the CCCS program following an initial interview. Entrance into the program was used as a

dependent variable instead of program completion for two reasons. First, knowledge of which variables affect entrance into the program would allow the credit counseling service to maximize the number of clients entering the program. Secondly, the average time from entrance to completion is such that its study would require several years.

Predictor variables included the 3M elemental traits as well as respondents' net income, total debt, estimated time to completion of the CCCS program, age, the estimated monthly dollar savings which would result from entry into the program, and a categorical variable of whether the individual was in financial straits due to money mismanagement or uncontrollable circumstances. Measurements of compulsive buying and ability to imagine completing the daily tasks necessary to eventually complete the program, were also included in the analysis.

First, t-tests were conducted on each of the potential predictor variables using the "returned following initial interview" binary variable as a grouping variable. This step was taken at this point because of the large ratio of independent variables to number of observations (approximately 1:5 if missing demographic variables are excluded listwise from the analysis). This ratio would be unacceptably high in logistic regression and would bring the reliability of results into question (Hair, Anderson, Tatham, & Black, 1998). Logistic analysis is appropriate where there is a single categorical dependent variable and multiple metric independent variables, a condition met by the present data set. In logistic regression, the dependent variable should be exhaustive and mutually exclusive. In the present case, whether respondents followed up their initial interviews represents a true dichotomy. The criterion for inclusion into the logistic model was $p < .10$.

Results

T-tests conducted with the goal of reducing the number of predictor variables to be entered into the logistic model indicated that net income, $t(200) = -2.02$, $p = .043$, months to payout, $t(163) = -2.44$, $p = .016$, instability, $t(243) = 1.926$, $p = .055$, and originality, $t(243) = 1.80$, $p = .073$ passed the initial test of $p < .10$. Estimated commitment to the program, $t(243) = -4.070$, $p = .000$, and ability to imagine doing the daily tasks necessary to complete the CCCS program, $t(242) = -1.89$, $p = .060$, were also included in the logistic regression model.

Results of the logistic model showed that months to payout and self-reported commitment to the program were statistically significant predictors of group membership, $R = .174$, $p = .004$ and $R = .161$, $p = .007$, respectively. Correct classification percentage rose from 60.8% (chance) to 66.7%, an increase of almost exactly 6% above chance. Model Chi-Square, roughly equivalent to an overall F-test of a multiple regression model, indicated that the two-variable model was statistically significant and that a true relationship exists between the dependent and independent variables, $\chi^2(2, N = 153) = 16.26$, $p < .001$. Pseudo R^2 , or the proportion of variance explained by the model, was calculated at 7.94% by finding the ratio of the difference in -2Log Likelihood for the final model to the -2Log Likelihood of the original model. However, estimated commitment alone correctly classified 60.4% of respondents. Thus, of 16 separate variables, only respondents' self-reported estimate of commitment to the program and months to payout demonstrated any real utility in discriminating between those who entered the program and those who did not.

Finally, a test of whether compulsive buyers are less likely to continue counseling than other consumers was conducted. Two variables were used to make this comparison: whether respondents entered credit counseling following their initial interview, and an indicator of whether particular consumers were considered compulsive. The second variable was computed by splitting respondents into two groups based on compulsive buying scores; this score was split at the first standard deviation above the mean. The split was made above the mean in order to examine the behavior of the most compulsive of buyers. Even using this criterion, the most compulsive buyers no more or less likely to enter counseling than other respondents. In fact, exactly half of the most compulsive consumers returned to enter counseling, $\chi^2(1, N = 245) = 0.00, p = .977$, matching the 50% of all participants who entered credit counseling following their initial consultation.

TABLE 7

PREDICTING ENTRY INTO COUNSELING USING LOGISTIC REGRESSION

Number of cases included in the analysis: 153
 Dependent Variable.. RETURN Return
 Beginning Block Number 0. Initial Log Likelihood Function
 -2 Log Likelihood 204.92915

* Constant is included in the model.
 Beginning Block Number 1. Method: Forward Stepwise (COND)

Step	Improv: Chi-Sq.	df	sig	Model Chi-Sq.	df	sig	Correct Class %	Variable
1	8.415	1	.004	8.415	1	.004	68.63	IN: MOPAYOUT
2	7.848	1	.005	16.263	2	.000	66.67	IN: ZCOMMIT

No more variables can be deleted or added.
 End Block Number 1 PIN = .0500 Limits reached.

Final Equation for Block 1

Estimation terminated at iteration number 3 because
 Log Likelihood decreased by less than .01 percent.

-2 Log Likelihood 188.666
 Goodness of Fit 154.859
 Cox & Snell - R² .101
 Nagelkerke - R² .137

	Chi-Square	df	Significance
Model	16.263	2	.0003
Block	16.263	2	.0003
Step	7.848	1	.0051

Classification Table for RETURN
 The Cut Value is .50

Observed		Predicted			Percent Correct		
		No	Yes				
		N	I	Y			
No	N	I	21	I	39	I	35.00%
Yes	Y	I	12	I	81	I	87.10%
					Overall		66.67%

----- Variables in the Equation -----

Variable	B	S.E.	Wald	df	Sig	R	Exp(B)
MOPAYOUT	.0371	.0129	8.2366	1	.0041	.1744	1.0378
ZCOMMIT	.1092	.0404	7.3056	1	.0069	.1609	1.1154
Constant	-4.8544	1.5827	9.4072	1	.0022		

CHAPTER VI

DISCUSSION

General Discussion

In his book *The Malling of America*, Kowinski (1985) observes that shopping is a growing trend intimately related to self-esteem. The study of compulsive buying is the intersection of frequent shopping behavior with low self-esteem. Given the rising trends in consumer shopping behavior, the growth of consumer debt levels is not particularly surprising. One result of the increase in consumer indebtedness is a booming debt collections business. Large corporations, such as Commercial Financial Services, Inc., purchase blocks of non-performing creditors from banks and other credit card issuers for pennies on the dollar. These companies then employ highly trained collections agents to convince debtors that paying off their bills is in their best interest. In some cases, the debt collection methods have been severely criticized.

A second type of organization has emerged as a result of the debt problem in the United States – the debt management industry. Non-profit organizations, such as the Consumer Credit Counseling Service (CCCS), provide counseling and debt consolidation services to their clients. According to its 1997 Annual report, over 16,000 persons sought counseling and 3,300 families participated in its debt management program. In this

program, the CCCS works with the individual debtors and with companies to develop a mutually beneficial plan for the consumer to pay off his debt. Organizations such as the CCCS are important because they provide a mechanism for consumers to resolve their debt without declaring bankruptcy. In addition, they provide the valuable social service of educating consumers in debt management while acting as a mediator between the consumer and his or her creditors.

The purpose of the present study was to identify a basic set of personality traits that explains tendencies toward compulsive buying from a motivational standpoint. While current theories (e.g., control theory, sociological theories, theories of addiction) can provide some explanation for compulsive buying, these proprietary theories often focus so closely on certain causes or conditions of the behavior that they can obscure the interrelationship between compulsive buying, other goals and behaviors, and the social contexts within which behavior occurs. The primary accomplishment of the present work was to describe the phenomenon of compulsive buying using a language with extensive use within both psychology and marketing (trait personality theory) and within a framework through which it can be related to other behaviors (control theory).

This goal was approached from two directions. First, using an enriched set of personality traits, compulsive buying was described in terms of a robust set of behavioral tendencies. Emotional instability and introversion were found to be related to compulsive buying in both the 3M and five factor models, providing support for Hypotheses 2 and 3. The addition of the remaining 3M elemental traits to the five factor model resulted in significantly more variance explained in the model; the primary factor responsible for this increase in predictive ability was the trait of materialism

(Hypothesis 1), a trait around which Mowen (2000) proposes human behavior to have necessarily evolved. A second factor contributing to the success of the 3M was agreeableness (Hypothesis 4), which, although present in the five-factor model, became significant only with the inclusion of the materialism trait into the regression model. The most plausible explanation is that agreeableness acted as a suppressor variable, reducing unexplained variance in the regression model rather than increasing explained variance.

The remaining elemental traits of need for body resources, conscientiousness, originality, and need for arousal (Hypotheses 5 through 8, respectively) were hypothesized to be unrelated to compulsive buying, as the findings of the regression analysis support. This analysis should allow marketers to understand compulsive buyers as more materialistic, extraverted, emotionally unstable, and agreeable than other consumers, which will help provide a basis for reaching, and reaching out to, these consumers. Hypothesis 9 addressed the question, Would the 3M explain significantly more variance than the five-factor model variables alone? A hierarchical regression analysis showed that the basic five-factor model accounted for 13.0% of the adjusted variance in compulsive buying. The additional 3M elemental traits increased the variance explained in compulsive buying to 27.2%. This result suggests that the 3M may provide marketers with a more accurate and descriptive tool for investigating other consumer behaviors.

In an effort to provide further insight into compulsive buying behavior, two additional regression analyses were conducted. The first analysis used the 3M elemental traits to predict variance in respondents' scores on Puri's (1996) consumer impulsiveness scale. The hierarchical nature of the 3M dictated Hypothesis 10: that the model would

explain more variance in compound traits (e.g., impulsiveness) than in situational traits (compulsive buying). Confirming this hypothesis, 3M elemental traits explained 34.1% of the adjusted variance in respondents' impulsiveness scores, as compared to 27.2% of the adjusted variance in compulsive buying scale scores. Impulsiveness scores were then regressed on the 3M elemental traits. Results showed impulsive consumers to be significantly more materialistic, emotionally unstable, extraverted, and conscientious than less impulsive consumers, supporting Hypotheses 11, 12, 13, and 14. Hypothesis 15 predicted that originality would be positively related to impulsiveness. In fact, the reverse was found – impulsive consumers scored significantly lower on the 3M's measure of the originality trait than did less impulsive consumers. One possible explanation is that impulsive buying serves as a mentally stimulating activity for those less able to find stimulation in the intangible. Ultimately, these results provide a comparative analysis that allows the researcher additional insights into compulsive buying behavior. It also shows in what ways two related consumer behaviors differ, providing a contrast that illustrates both the unique behavioral components involved in compulsive buying and the ability of the 3M to discriminate between two related consumer behaviors.

A second direction taken in the present study was to investigate the efficacy of the 3M model to predict enrollment in a Consumer Credit Counseling Service following an initial interview. The relevance of this line of questioning was twofold: first, to provide a real-world test of the 3M's predictive ability, and second, to develop a method for the Consumer Credit Counseling Service of Central Oklahoma to increase its enrollment rate. Despite the 3M's success in providing a trait-based explanation of compulsive buying,

results showed that only a self-reported measure of commitment to the CCCS program and the number of months required to pay off CCCS debt were predictive of group membership. The author can offer little explanation as to why debtors with longer payment schedules were more likely to enter the program, especially considering that dollar amount of monthly payments, income, and living expenses for these groups were equivalent. Both results point out that the dynamics of entering a CCCS program are very complex, and may in fact be largely outside of the potential client's control. In any case, entering debt counseling following an initial consultation appears to be independent of compulsive buying tendencies.

Finally, the current study provides some support for continued research into and development of the 3M metatheory. Mowen's (2000) goals for the 3M model were to develop a model that could be empirically tested, explain more variance in consumer behavior than previous personality approaches, and provide a nomological network for understanding how personality interacts with the environment to produce behavior. Within the context of the current study, those goals have been met.

Contribution to the Literature

The current study makes a number of important contributions to the literature. Most importantly, it links the consumer behavior and psychology literatures on compulsive buying through a common language and meta-theoretical framework. This accomplishment sets the stage for further integrative work in the field and points out the limitations of continuing to develop increasingly refined scales for measuring situational traits. Calling for the study of compulsive buying as distinct from other types of

“compulsive consumption”, the current study examines the motivation underlying this behavior and provides a mechanism (control theory) through which these motives are transformed into actual physical behaviors. The current research provides a profile of the typical compulsive buyer. It also revises Faber and O’Guinn’s (1992) compulsive buying screener to more accurately reflect what has been learned about the disorder since the screener was published.

A deeper understanding of compulsive buying promises to bring greater recognition of a very real and increasingly common consumer disorder. Researchers have shown that depression and compulsive buying are related, both through correlation studies and through findings that similar psychopharmacological treatments are effective in reducing symptoms. Through several avenues, the present study illustrates that compulsive buying, like other addictive behaviors, must be considered an adaptive response.

Most importantly, the 3M provided a clear and plausible theoretical explanation of compulsive buying. That is, compulsive buying is illustrated as an adaptive response rather than as simply a “deviant” consumer behavior. Control theory provides the framework for understanding compulsive buying in these terms. Depression, an analog of compulsive buying defined by a set of similar symptomologies, may provide a more salient example.

Hyland (1987) defines depression as the prolonged discrepancy between perceptual input and reference value in a higher-order system highly sensitive to error. This state is referred to as control mismatch. Short-term discrepancies between perceptual input and the reference criterion are termed transient mismatches. Armed with this new model of depression, it becomes clear how various existing behavioral models are related and can

be conceptualized as specific conditions within control theory. For example, treatments based on the assumption that depression results from learned helplessness seek to reduce the sensed discrepancy between an individual's need for efficacy and his or her perception of low self-efficacy. Treatments seeking to restore self-esteem are aimed at changing high reference criteria or sensitivity to error, so that failure is less salient; cognitive-oriented therapies seek to alter perception of the environment; and learning theory-based therapies hope to eliminate prolonged higher-order control mismatch by first eliminating mismatch at lower levels (see Hyland, 1987, for more detail). Within this context, compulsive buying loses much of its mystery: it is simply an instrumental method for correcting control mismatch (emotional instability in compulsive buyers indicating a proneness to control mismatch). This explanation leaves room for the source of the mismatch to vary. Coupled with the current findings that compulsive buyers are relatively materialistic, extraverted, and agreeable, it is easy to see the origin of this behavior involving physical goods (materialism) in a public venue (extraversion) that is recognized to be socially deviant and therefore hidden from others (agreeableness).

Finally, it is hoped that a greater understanding of compulsive buying will increase researchers' perception of its importance, help society learn to limit the occurrence of the disorder or treat it more consistently and effectively, and ultimately contribute to understanding normative behavior through the investigation of non-normative behavior.

Implications

One major finding in the current study is that personality variables do not appear to show any utility in predicting who will enroll in a debt management program following

an initial interview. The potential utility of this investigation was that attracting indebted consumers is not nearly as difficult as retaining those consumers after a consultation. Certainly, this result should be investigated further: should personality traits have been predictive in this context? The present findings suggest that many of the elements that determine whether an individual will enter a debt management program are situational rather than internal. For example, spousal support may be highly influential in this process. If this is so, credit counselors would benefit from identifying which spouse is prone to overspending. Counselors could then assign separate roles and tasks to each spouse, an approach that would help lessen financial and marital stress. Potentially, marriages in which both partners are prone to overspending could be most likely to incur high levels of debt. To effectively reach this population, it may be necessary to utilize a family systems approach and instigate community outreach programs targeted to specific markets.

The methodology of the current research can be employed to develop communications that may be particularly effective in influencing financially overextended individuals to participate in a debt management program. As suggested by Carver and Scheier (1990), personality characteristics form an essential part of a person's schema relevant to his or her self-concept. Thus, it can be expected that a part of the self-concept schema of financially overextended consumers would involve expressions of those personality traits, a theory well-supported by the evidence presented here. Based upon schema congruity theory (Fiske & Taylor, 1994), it can be predicted that personality traits will moderate the effects of messages. Thus, messages using themes that are consistent with these personality based self-schema will evoke increased cognitive

processing, identification with the source of the message, trust in the message, and a greater likelihood of performing behaviors consistent with the schemata.

As a general public policy matter, it is important to discourage consumers from financially overextending themselves and acquiring burdening debt levels. In addition, it is critical to encourage people who encounter financial exigency to seek assistance for their problems. Organizations such as the CCCS provide such services. Certainly, these organizations are actively involved in promoting their services. The larger question is whether and to what extent local, state, or federal agencies should become involved as well. The author suggests that discouraging overindebtedness in general and compulsive buying in particular has two important societal benefits. First, as noted previously, compulsive buying is associated with a number of related disorders. Overindebtedness is the flip side of the coin of encouraging consumer saving, with the benefits of encouraging consumer saving numerous and largely self-apparent. The second societal benefit of a campaign against overindebtedness is that it would combat the massive efforts of corporations encouraging consumers to spend. Except for advertising performed to encourage consumers to purchase stocks and bonds, each commercial message received by consumers implicitly or explicitly encourages consumers to spend. It should also be recognized that the current trend in consumer spending is showing no signs of abating.

Finally, a number of suggestions are apparent for compulsive buying treatment and intervention. Self-change is one possibility. Though most individuals believe themselves capable of controlling an addiction, stimuli such as illness, humiliation, a religious experience, or outside intervention often initiate the self-change effort (Marlatt, Baer, Donovan, & Kivlahan, 1988). Financial problems brought on by compulsive

buying may motivate some compulsive buyers to better control expenses, but the damage is done by the time financial repercussions arise. Professional treatment is another possible avenue; McElroy, Satlin et. al. (1991) demonstrated successful treatment of compulsive buyers with antidepressant medication. Good prognosis of other types of disorders has been associated with patient characteristics such as social stability and higher cognitive functioning (Marlatt, Baer, Donovan, & Kivlahan, 1988).

Understanding how compulsive buying functions within the control theory model provides a number of insights into treatment possibilities. For example, reference value discrepancies might be reduced by changing social circles. Establishing a superordinate monetary goal, such as saving for a major purchase, could help control the disorder. Compulsive buying is one of many ways to stabilize mood, so that a number of other activities might be learned as an acceptable substitute. Similarly, sources of stress are likely to trigger emotional instability. Eliminating those sources could provide substantial relief for many compulsive buyers. Of course removing the compulsive buyer's access to all funds would stop the behavior, but would likely trigger a much more dangerous bout of depression.

The rise in compulsive buying is largely attributable our society's increasing reliance on material goods in forming our identities. Much of our nation's youth spend the afternoons, evenings, and weekends of their school years socializing in the local mall. Only a strong and focused public policy initiative beginning with school-age consumers can forestall the continued growth of consumer debt. Three possible intervention strategies which could be used in conjunction are: the development of public service messages targeted to those particularly susceptible to overspending, an introduction in the

school system to the negative effects of overspending as part of a larger curriculum in consumer economics, and the serious development of the school-related activity (i.e., science clubs, athletics, drama) as a socialization device to which students can turn for support instead of to their parents' wallets and credit cards. Alternate outlets for extraverted, materialistic, and less emotionally stable personalities can also be found in activities as diverse as entrepreneurship, artistry, relaxation techniques, and sports.

Limitations

The present study has several limitations that should be considered. The first concern is that the data were collected from a population known to have large amounts of debt relative to income. This essentially represents a restricted range of the population. Results from the multiple regression analysis in Study 1, then, may not describe those compulsive buyers who do not fall into this range. However, theory was able to predict the personality traits of compulsive buyers, suggesting this limitation may not be crippling. A second, related criticism is that only consumers considering or in need of credit counseling were studied, a concern that may limit generalizability of the findings beyond the sample population. In defense of the sample, it provided a large sample with the established demographic data necessary to make the study possible. Further, the selection of respondents considering credit counseling offered hope of obtaining a sample in which compulsive consumers were particularly abundant; unfortunately, this did not turn out to be the case. In fact, roughly the same proportion of respondents considering counseling labeled themselves as being "compulsive spenders" as would be expected in the population (between one and two percent). Finally, the examination of these

particular consumers allowed the 3M framework to be studied in an applied setting, and for the counseling service to possibly gain insight into its consumers.

A third concern is that although many respondents attended the CCCS workshops with a spouse, data were not collected as to who scheduled the CCCS appointment, who was primarily responsible for the family's current debt level, or the difference in commitment to the program between spouses. Although no data are presently available to support this claim, it is likely that families sharing a strong commitment to a debt management program are much more likely to enter and complete the program than are families without a common commitment.

Perhaps the strongest criticism of the current study is that the scales used to measure the traits of introversion, emotional stability, agreeableness, conscientiousness, and originality were modified versions of other, published scales. As such, the incremental variance accounted for by the additional 3M measures of materialism, need for body resources, and need for arousal could be a result of using different scales to measure the traditional five factors than have been used in the past. For example, Costa and McCrae's (1995) broader five-factor measures may account for some of the same variance explained in the current study by the additional factors of materialism, need for body resources, and need for arousal. Despite this criticism, the purpose of the current study was to extend the basic five factor model of personality so as to increase both its predictive ability and its practical utility; and any extension of the five factor model almost by definition suggests a refinement or revision of its current scales of measurement. Although the methodology used here may not represent a "true" test of the

relative merits of the 3M and five factor models, neither does it represent a wholly unfair one.

Suggestions for Future Research

The findings of the present research suggest a number of future research directions that should be investigated. One avenue would be to research the relationship between compulsive buying and other consumption traits such as that measured by the need for emotion scale (Raman, Chattopadhyay, & Hoyer, 1995). While the need for information scale (Cacioppo & Petty, 1982) quantifies individuals who find thinking to be an engaging activity in itself, examination of the consumption motive suggests that compulsive buyers seek certain emotional, rather than cognitive, elements. Specifically, stabilization of emotional levels is a primary drive in compulsive buying. However, compulsive buyers in their search for emotionally arousing situations appear to feel relief rather than fulfillment after compulsive buying (emotional) experiences. If this is in fact the process taking place, compulsive buyers would earn only an average score on the Need for Emotion scale. Other relevant surface traits, such as product expertise, should be investigated as well.

The present research shows a strong trait relationship between impulsiveness and compulsive buying – the traits of materialism, extraversion, and emotional instability are common in both. Impulsiveness also displays the traits of (non) conscientiousness and (non) originality. One fascinating implication is that impulsiveness is actually a more complex or rich trait than is compulsive buying. Considering what is known about compulsive buying as an easily understood mechanism for mood stabilization, this may

well be the case. Commonalities between impulsiveness and compulsive buying suggest that the more well-developed literature on impulsive buying might stimulate more causal research in compulsive buying. For example, two factors known to influence impulse purchases are product animation and feelings of synchronicity (Rook, 1987). A relationship between compulsive and impulsive buying would appear to exist that should be investigated in more detail.

A third potential avenue for research involves testing the schema congruity theory approach to developing communications to reach compulsive buyers. Relationships identified in the present research provide the basis for such a study and suggest that the message contained in a print, television, or radio ad should contain copy that activates self-schemas associated with extraversion, materialism, and emotional instability. The research should also contain variables that measure the proposed mediators in the self-schema congruity theory approach.

A number of products have come under fire as having been marketed unethically. These products typically meet psychological needs rather than concrete, physical needs; for example, products such as malt liquor and electrical wiring insurance are marketed primarily through how well they fulfill psychological needs. A fourth suggestion for future research is the use of the 3M model to determine whether a common analogue exists as to which psychological needs these types of products tend to meet.

Hassay and Smith (1996) show that compulsive buyers are more concerned with product return policies and more likely to return products than are typical consumers. They also found that compulsive buyers are no more likely to purchase from nonstore retailers than the general population. These findings suggest two avenues of research.

First, that compulsive buyers, composing a significant (2%) portion of the population, may be responsible for a large number of unnecessary product returns and complaints regarding return policies. Identification of these consumers could allow retailers to better control unnecessary returns and complaints. Secondly, direct marketers could significantly increase response to a campaign by avoiding sending materials to compulsive buyers, who are known to be less likely to purchase through the mail. In theory, compulsive buyers would not be good candidates for direct marketing because store retailers “sell” social rewards as well as tangible products. Further, no study has investigated whether compulsive buyers may be more likely to purchase goods through multilevel marketing campaigns (e.g., Tupperware) or through an online community.

One particularly interesting observation regarding compulsive buying is that these consumers repeatedly purchase products that have no physical value to them; it is the act of purchasing itself that seemingly stills this compulsion. A study of compulsive buyers’ purchase of experience products (e.g., day spa visits, movies, etc.) relative to physical products would help clarify the role materialism plays in compulsive buying. Shopping is itself an experience product. The question, then, is about the role of the physical product in the behavior: are those fifty pairs of shoes in the compulsive buyer’s closet much like discarded cigarette butts, the physical enabler of the experience? Do they have any value at all to the compulsive buyer other than that they provided a reason to go shopping?

A final suggestion for further research concerns the inability of the present study to discriminate between those who do and do not return to complete a financial counseling program following the first planning meeting. This is potentially a very important question: retaining participants in a credit counseling program appears to be as

necessary a goal as getting them to attend an introductory meeting, especially considering less than half are retained at present. Some success was found through the use of participants' estimates of their commitment to the program. Perhaps a refined scale would provide a better measure. Number of monthly payments to finish the program was significantly correlated with returning to begin the program but total debt was not, indicating that more and lower monthly payments may encourage participation. Those who did return had lower average monthly payments (\$489 as compared to \$604), but this difference was not significant, $p > .20$. Also, and perhaps most importantly, compulsive buying may be conceptualized as a behavioral tendency which can be partly understood and predicted using a hierarchical model of personality. Results from the present study, however, suggest that a search should be made for stronger environmental variables influencing participation in debt management program. For example, continuance of compulsive buying behavior may depend on perceived acceptability of the behavior, level of dependence on the behavior to meet psychosocial needs, positive spousal and family support, and outside intervention such as psychological treatment and aid from organizations such as the CCCS which can help control the repercussions of overspending. Assuming such relationships are found to be significant, the implication is that policy solutions may be very effective at controlling the growth of consumer debt.

REFERENCES

- Ahuvia, A. C., & Friedman, D. C. (1998). Income, consumption, and subjective well-being: Toward a composite macromarketing model. Journal of Macromarketing, 18, 153-168.
- American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: American Psychiatric Association.
- Anderson, G., & Brown, R. I. F. (1984). Real and laboratory gambling, sensation-seeking, and arousal. British Journal of Psychology, 75, 401-410.
- Baron, R. A. (1995). Psychology (3rd ed.). Needham Heights, MA: Allyn & Bacon.
- Bellenger, D. N., & Korgaonkar, P. K. (1980). Profiling the recreational shopper. Journal of Retailing, 56, 77-92.
- Belk, R. W. (1985). Materialism: Trait aspects of living in the material world. Journal of Consumer Research, 12, 265-280.
- Black, D. W. (1996). Compulsive buying: A review. Journal of Clinical Psychiatry, 57, 50-55.
- Black, D. W., Monahan, P., & Gabel, J. (1997). Fluvoxamine in the treatment of compulsive buying. Journal of Clinical Psychiatry, 58, 159-163.
- Bleuler, E. (1924). Textbook of psychiatry. New York, NY: Macmillan.
- Bloch, P. H., Ridgway, N. M., & Nelson, J. E. (1991). Leisure and the shopping mall. Advances in Consumer Research, 18, 445-452.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. Psychological Bulletin, 117, 187-215.

- Bristow, D. N., & Mowen, J. C. (1998). The consumer resource exchange model: An empirical investigation of construct and predictive validity. Marketing Planning & Intelligence, 16(6), 375-386.
- Budden, M. C., & Griffin, T. F., III. (1996). Explorations and implications of aberrant consumer behavior. Psychology & Marketing, 13, 739-740.
- Buss, D. M. (1991). Evolutionary personality psychology. Annual Review of Psychology, 42, 459-491.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. Journal of Personality and Social Psychology, 42, 116-131.
- Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality – social, clinical, and health psychology. Psychological Bulletin, 92(1), 111-135.
- Carver, C. S., & Scheier, M. F. (1990). Origins and functions of positive and negative affect: A control-process view. Psychological Review, 97, 19-35.
- Christenson, G. A., Faber, R. J., de Zwaan, M., Raymond, N. C., Specker, S. M., Ekern, M. D., Mackenzie, T. B., Crosby, R. D., Crow, S. J., Eckert, E. D., Mussell, M. P., & Mitchell, J. E. (1994). Compulsive buying: Descriptive characteristics and psychiatric comorbidity. Journal of Clinical Psychiatry, 55 (1), 5-10.
- Coryell, W., & Noyes, R. (1988). Placebo response in panic disorder. American Journal of Psychiatry, 145, 1138-1140.
- Costa, P. T. Jr., & McCrae, R. R. (1985). The NEO personality inventory manual. Odessa, FL: Psychological Assessment Resources.

Crisp, A. H., Hsu, L. K. G., & Harding, B. (1980). The starving hoarder and voracious spender: Stealing in anorexia nervosa. Journal of Psychosomatic Research, 24, 225-231.

Crisp, A. H., Hsu, L. K. G., & Stonehill, E. (1979). Personality, body weight and ultimate outcome in anorexia nervosa. Journal of Clinical Psychiatry, 40, 332-335.

Cross, S., & Markus, H. (1991). Possible selves across the life span. Human Development, 34, 230-255.

D'Astous, A. (1990). An inquiry into the compulsive side of "normal" consumers. Journal of Consumer Policy, 13, 15-31.

D'Astous, A., Maltais, J., & Roberge, C. (1990). Compulsive buying tendencies of adolescent consumers. Advances in Consumer Research, 17, 306-312.

DeSarbo, W. S., & Edwards, E. A. (1996). Typologies of compulsive buying behavior: A constrained clusterwise regression approach. Journal of Consumer Psychology, 5, 231-262.

Digman, J. M., & Takemoto-Chock, N. K. (1981). Factors in the natural language of personality: Re-analysis, comparison, and interpretation of six major studies. Multivariate Behavioral Research, 16, 149-170.

Dittmar, H., Beattie, J., & Friese, S. (1995). Gender identity and material symbols: Objects and decision considerations in impulse purchases. Journal of Economic Psychology, 16, 491-511.

Dittmar, H., Beattie, J., & Friese, S. (1996). Objects, decision considerations and self-image in men's and women's impulse purchases. Acta Psychologica, 93, 187-206.

Duijsens, I. J., & Diekstra, R. F. W. (1995). The 23BB5: A new bipolar big-five questionnaire. Personality and Individual Differences, 19, 753-755.

Elliott, R. (1994). Addictive consumption: Function and fragmentation in postmodernity. Journal of Consumer Policy, 17, 159-179.

Elliott, R., Eccles, S., & Gournay, K. (1996). Revenge, existential choice, and addictive consumption. Psychology & Marketing, 13, 753-768.

Eysenck, H. J., & Eysenck, M. W. (1985). Personality and individual differences: A natural science approach. New York: Plenum Press.

Faber, R. J. (1992). Money changes everything: Compulsive buying from a biopsychosocial perspective. American Behavioral Scientist, 35, 809-819.

Faber, R. J., & Christenson, G. A. (1996). In the mood to buy: Differences in the mood states experienced by compulsive buyers and other consumers. Psychology & Marketing, 13 (8), 803-819.

Faber, R. J., Christenson, G. A., de Zwaan, M., & Mitchell, J. (1995). Two forms of compulsive consumption: Comorbidity of compulsive buying and binge eating. Journal of Consumer Research, 22, 296-304.

Faber, R. J., & O'Guinn, T. C. (1988). Compulsive consumption and credit abuse. Journal of Consumer Policy, 11, 97-109.

Faber, R. J., & O'Guinn, T. C. (1989). Classifying compulsive consumers: Advances in the development of a diagnostic tool. Advances in Consumer Research, 16, 738-744.

Faber, R. J., & O'Guinn, T. C. (1992). A clinical screener for compulsive buying. Journal of Consumer Research, 19, 459-469.

- Faber, R. J., O'Guinn, T. C., & Krych, R. (1987). Compulsive consumption. Advances in Consumer Research, 14, 132-135.
- Fiske, D. W. (1949). Consistency of the factorial structures of personality ratings from different sources. Journal of Abnormal and Social Psychology, 44, 329-344.
- Fiske, S. T., & Taylor, S. E. (1984). Social cognition. Reading, MA: Addison-Wesley Publishing Company.
- Fishbain, D. A. (1994). Do compulsive buyers and kleptomaniacs share identical characteristics? Journal of Clinical Psychiatry, 55, 545.
- Gardner, M. P., & Rook, D. W. (1988). Effects of impulse purchases on consumers' affective states. Advances in Consumer Research, 15, 127-130.
- Geen, R. G., Beatty, W. W., & Arkin, R. M. (1984). Human motivation. Boston: Allyn and Bacon.
- Glatt, M. M., & Cook, C. C. H. (1987). Pathological spending as a form of psychological dependence. British Journal of Addiction, 82, 1257-1258.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. American Psychologist, 48, 26-34.
- Goldman, M. J. (1991). Kleptomania: Making sense of the nonsensical. American Journal of Psychiatry, 148, 986-996.
- Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill, C. L., Heninger, G. R., & Charney, D. S. (1989). The Yale-Brown obsessive-compulsive scale: I. Development, use, and reliability. Archives of General Psychiatry, 46, 1006-1011.

Grubb, E. L., & Grathwohl, H. L. (1967). Consumer self-concept, symbolism, and market behavior: a theoretical approach. Journal of Marketing, 31, 22-27.

Hair, J. F. Jr., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate data analysis (5th ed.). Upper Saddle River, NJ: Prentice-Hall.

Hanley, A., & Wilhelm, M. S. (1992). Compulsive buying: An exploration into self-esteem and money attitudes. Journal of Economic Psychology, 13, 5-18.

Hassay, D. N., & Smith, M. C. (1996). Compulsive buying: An examination of the consumption motive. Psychology & Marketing, 13 (8), 741-752.

Hatcher, L. (1994). A step-by-step approach to using the SAS system for factor analysis and structural equation modeling. Cary, NC: SAS Institute.

Hirschman, E. C. (1992). The consciousness of addiction: Toward a general theory of compulsive consumption. Journal of Consumer Research, 19, 155-179.

Hoch, S. J., & Loewenstein, G. F. (1991). Time-inconsistent preferences and consumer self-control. Journal of Consumer Research, 17, 492-507.

Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. Journal of Consumer Research, 9, 132-140.

Holman, R. A. (1981). Product as communication: A fresh appraisal of a venerable topic. In B. M. Ennis & K. J. Roering (Eds.), Review of Marketing (pp. 106-119). Chicago: American Marketing Association.

Hull, C. L. (1943). Principles of behavior. New York: Appleton Century Crofts.

Hyland, M. E. (1987). Control theory interpretation of psychological mechanisms of depression: Comparison and integration of several theories. Psychological Bulletin, 102 (1), 109-121.

James, W. J. (1890). Principles of psychology. New York: Holt.

Kassarjian, H. H. (1971). Personality and consumer behavior: A review. Journal of Marketing Research, 8, 409-418.

Kentle, R. L. (1995). Contributions to the history of psychology: XCX. Some early precursors of five personality factors. Psychological Reports, 77, 83-88.

Klein (1989). An integrated control theory model of work motivation. Academy of Management Review, 14(2), 150-172.

Koponen, A. (1960). Personality characteristics of purchasers. Journal of Advertising Research, 1, 6-12.

Kowinski, W. S. (1985). The malling of america. New York: William Morrow and Company.

Krueger, D. W. (1988). On compulsive shopping and spending: A psychodynamic inquiry. American Journal of Psychotherapy, 42 (4), 574-584.

Krych, R. (1989). Abnormal consumer behavior: A model of addictive behaviors. Advances in Consumer Research, 16, 745-748.

Lejoyeux, M., Tassain, V., Solomon, J., & Adès, J. (1997). Study of compulsive buying in depressed patients. Journal of Clinical Psychiatry, 58 (4), 169-173.

Lichtenstein, Netemeyer, & Burton (1990). Distinguishing coupon proneness from value consciousness: An acquisition-transaction utility theory perspective. Journal of Marketing, 54(3), 54-67.

Marlatt, G. A., Baer, J. S., Donovan, D. M., & Kivlahan, D. R. (1988). Addictive behaviors: Etiology and treatment. Annual Review of Psychology, 39, 223-252.

Maslow, A. H. (1970). Motivation and personality (2nd Ed.). New York: Harper & Row.

McElroy, S. L., Keck, P. E., Jr., Pope, H. G., Jr., Smith, J. M. R., & Strakowski, S. M. (1994). Compulsive buying: A report of 20 cases. Journal of Clinical Psychiatry, 55, 242-248.

McElroy, S. L., Pope, H. G., Jr., Hudson, J. I., Keck, P. E., Jr., & White, K. L. (1991). Kleptomania: A report of 20 cases. American Journal of Psychiatry, 148, 652-657.

McElroy, S. L., Satlin, A., Pope, H. G., Jr., Keck, P. E., Jr., & Hudson, J. I. (1991). Treatment of compulsive shopping with antidepressants: A report of three cases. Annals of Clinical Psychiatry, 3, 199-204.

Mehrabian, A., & Russell, J. (1974). An approach to environmental psychology. Boston: MIT Press.

Monahan, P., Black, D. W., & Gabel, J. (1996). Reliability and validity of a scale to measure change in persons with compulsive buying. Psychiatry Research, 64, 59-67.

Mooradian, T. A. (1996). Personality and ad-evoked feelings: The case for extroversion and neuroticism. Journal of the Academy of Marketing Science, 24(2), 99-109.

Morgan, A. J. (1993). The evolving self in consumer behavior: Exploring possible selves. Advances in Consumer Research, 20, 429-432.

- Moschis, G. P., & Cox, D. (1989). Deviant consumer behavior. Advances in Consumer Research, 16, 732-737.
- Mowen, J. C. (2000). The 3M Model of Motivation and Personality: Theory and empirical applications to consumer behavior. Norwell, MA: Kluwer Academic Press.
- Mowen, J. C. (1997). The 3M: A meta-theoretic model for understanding the role of motivation on consumer behavior. Unpublished manuscript, Oklahoma State University, Stillwater.
- Mowen, J. C., & Spears, N. (1999). A hierarchical model approach to understanding compulsive buying among college students. Journal of Consumer Psychology, 8(4), 407-439.
- Mowen, J. C., Stone, J. C., & Spears, N. (1997). Personality traits and predicting movie preferences: An exploratory comparison of the Big 3, Big 5, and 3M personality models. Unpublished manuscript, Oklahoma State University, Stillwater.
- Natarajan, R., & Goff, B. G. (1992). Manifestations of compulsiveness in the consumer-marketplace domain. Psychology & Marketing, 9 (1), 31-44.
- Nathan, P. E. (1988). The addictive personality is the behavior of the addict. Journal of Consulting and Clinical Psychology, 56, 183-188.
- O'Guinn, T. C., & Faber, R. J. (1989). Compulsive buying: A phenomenological exploration. Journal of Consumer Research, 16, 147-157.
- Pine, B. J. II, & Gilmore, J. H. (July-August 1998). Welcome to the experience economy. Harvard Business Review, 97-105.
- Puri, R. (1996). Measuring and modifying consumer impulsiveness: A cost-benefit accessibility framework. Journal of Consumer Psychology, 5 (2), 87-113.

- Raman, N. V., Chattopadhyay, P., & Hoyer, W. D. (1995). Do consumers seek emotional situations: The need for emotion scale. Advances in Consumer Research, 22, 537-542.
- Rindfleisch, A., Burroughs, J. E., & Denton, F. (1997). Family structure, materialism, and compulsive consumption. Journal of Consumer Research, 23, 312-325.
- Rook, D. W. (1987). The buying impulse. Journal of Consumer Research, 14, 189-199.
- Rook, D. W., & Fisher, R. J. (1995). Normative influences on impulsive buying behavior. Journal of Consumer Research, 22, 305-313.
- Saucier, G. (1994). Mini-markers: A brief version of Goldberg's unipolar big-five markers. Journal of Personality Assessment, 63 (3), 506-516.
- Scherhorn, G. (1990). The addictive trait in buying behavior. Journal of Consumer Policy, 13, 33-51.
- Schlosser, S., Black, D. W., & Repertinger, S., & Freet, D. (1994). Compulsive buying: Demography, phenomenology, and comorbidity in 46 subjects. General Hospital Psychiatry, 16, 205-212.
- Schouten, J. W. (1991). Selves in transition: Symbolic consumption in personal rites of passage and identity reconstruction. Journal of Consumer Research, 17, 412-425.
- Shenk, J. W. (1997, June 9). Between credit cards and student loans, Gen X-ers find debt a major life force. U.S. News & World Report, 38.
- Sirgy, M. J. (1982). Self-concept in consumer behavior: A critical review. Journal of Consumer Research, 9, 287-300.

- Sirgy, J. M. (1998). Materialism and quality of life. Social Indicators Research, 43, 227-260.
- Smith, F. B. (1998, February). Are consumers sinking in a sea of debt? Consumers' Research Magazine, 81, 10-13.
- Tartar, R. E. (1988). Are there inherited behavioral traits that predispose to substance abuse? Journal of Consulting and Clinical Psychology, 56 (2), 189-196.
- Valence, G., d'Astous, A., & Fortier, L. (1988). Compulsive buying: Concept and measurement. Journal of Consumer Policy, 11, 419-433.
- Weaver, J. B. III. (1991). Exploring the links between personality and media preferences. Personality and Individual Differences, 12, 1293-1299.
- Weinberg, P., & Gottwald, W. (1982). Impulsive consumer buying as a result of emotions. Journal of Business Research, 10, 43-57.
- Wells, W. D. (1975). Psychographics: A critical review. Journal of Marketing Research, 12, 196-213.
- Westbrook, R. A., & Black, W. C. (1985 Spring). A motivation-based shopper typology. Journal of Retailing, 61, 78-103.
- Wise, R. A., & Bozarth, M. A. (1987). A psychomotor stimulant theory of addiction. Psychological Review, 94 (4), 469-492.
- Yoo, P. S. (1998, January / February). Still charging: The growth of credit card debt between 1992 and 1995. Review – Federal Reserve Bank of St. Louis, 80, 19-27.
- Zajonc, R. B., & Markus, H. (1982). Affective and cognitive factors in preferences. Journal of Consumer Research, 9 (2), 123-131.

Zuckerman, M. (1979). Sensation seeking: Beyond the optimum level of arousal.

Hillsdale, NJ: Lawrence Erlbaum.

APPENDICES

APPENDIX A
CONSUMER NEEDS SURVEY

Client Number: _____

Consumer Needs Analysis

This survey is conducted by researchers at Oklahoma State University to measure the motivations and purchase patterns of consumers. Whether you participate will not affect the services you receive from the Consumer Credit Counseling Service. Your participation is completely voluntary and you can withdraw from the study at any time by contacting the Consumer Credit Counseling Service.

The survey will take you about 15 minutes to complete. As a token of thanks, you will receive \$5 for completing it.

The survey is confidential. Your name will never be put in a computer or attached to the survey forms. Based upon your Client ID number, Consumer Credit Counseling will provide us with demographic information on your sex, age, income, occupation, and marital status. We will not give to Consumer Credit Counseling any of your answers to the survey items.

Directions

For each item, please circle the number that indicates how accurately the phrase or adjective describes how you feel or act. Circle the number that describes how you actually act in your daily life, not how you wish you would act. If the phrase never describes you, put a 1. If it rarely describes you, put a 2 or 3. If it sometimes describes you, put a 4, 5, or 6. If it very frequently describes you, put a 7 or 8. If it always describes you, put a 9.

There are no right or wrong answers. In general, it is best to put down the first response that you feel or think is the best.

The study has been approved by the Institution Review Board of OSU, Phone: 405-744-5700, Gay Clarkson, Executive Secretary, 305 Whitehurst, Stillwater, OK 74078.

Part I:**How often do you feel/act this way?**

	Never									Always								
Prefer to be alone rather than in a large group.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Feel uncomfortable in a group of people.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Feel bashful more than others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Bold.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Extroverted when with people.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Quiet when with people.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Shy.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Talkative when with others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Withdrawn from others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Enjoy buying expensive things.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
My possessions are important for my happiness.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Like to own nice things more than most people.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Acquiring valuable things is important to me.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Enjoy owning luxurious things.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Enjoy learning new things more than others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Prefer complex to simple problems.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Think hard before making decisions.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
People consider me to be intellectual.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Enjoy working on new ideas.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Information is my most important resource.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Focus on my body and how it feels.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Worry about making my body look good.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Devote time each day to improving my body.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Feel that making my body look good is important.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Work hard to keep my body healthy.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Energetic in comparison to others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Keep really busy doing things.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Try to cram as much as possible into a day.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Have a hard time keeping still.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Extremely active in my daily life.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Have a hard time sitting around.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
People view me as impulsive and unpredictable.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Drawn to experiences with an element of danger.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Like the new and different more than the tried and true.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Seek an adrenaline rush.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9

How often do you feel/act this way?

	Never									Always								
Bored around same people and places.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Actively seek out new experiences.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Enjoy taking more risks than others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Long term goal oriented.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Achieving success is extremely important to me.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
When doing a task, I set a deadline for completion.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Set long term goals for the future.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Approach tasks in a very serious manner.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
My abilities and efforts determine my success.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Bothered a lot if others do things better than me.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Feel a strong need to compare myself to others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Enjoy competition more than others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Feel that it is important to outperform others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Enjoy testing my abilities against others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Feel that winning is extremely important.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Moody more than others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Temperamental.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Touchy.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Envious.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Emotions go way up and down.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Testy more than others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Jealous.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Frequently feel highly creative.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Imaginative.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Appreciate art.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Enjoy beauty more than others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Find novel solutions.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
More original than others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Rude with others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Harsh when others make a mistake.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Tender hearted with others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Sympathetic.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Cold to others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Kind to others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Cooperative with others.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
Careless.	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9

	<u>How often do you feel/act this way?</u>								
	Never								Always
Precise.	1	2	3	4	5	6	7	8	9
Efficient.	1	2	3	4	5	6	7	8	9
Organized.	1	2	3	4	5	6	7	8	9
Sloppy.	1	2	3	4	5	6	7	8	9
Orderly.	1	2	3	4	5	6	7	8	9
I have bought things that I could not really afford.	1	2	3	4	5	6	7	8	9
I have felt that others would be horrified if they knew of my spending habits.	1	2	3	4	5	6	7	8	9
I have bought something to make myself feel better.	1	2	3	4	5	6	7	8	9
I have just wanted to buy and didn't care what I bought.	1	2	3	4	5	6	7	8	9
I often buy things simply because they are on sale.	1	2	3	4	5	6	7	8	9
I have felt anxious on days I don't go shopping.	1	2	3	4	5	6	7	8	9
I have bought something, and when I got home I wasn't sure why I bought it.	1	2	3	4	5	6	7	8	9
I have felt depressed after shopping.	1	2	3	4	5	6	7	8	9
I have gone on a buying binge and wasn't able to stop.	1	2	3	4	5	6	7	8	9
I feel a great deal of self-respect.	1	2	3	4	5	6	7	8	9
I feel sour and pessimistic about life in general.	1	2	3	4	5	6	7	8	9
Thinking back, in a good many ways I don't think I have liked myself very well.	1	2	3	4	5	6	7	8	9
In almost every way, I'm very glad to be the person I am.	1	2	3	4	5	6	7	8	9
I feel very positive about myself.	1	2	3	4	5	6	7	8	9
I would like to be a very different person than I am.	1	2	3	4	5	6	7	8	9
I feel in control of what is happening to me.	1	2	3	4	5	6	7	8	9
I find that once I make up my mind, I can accomplish my goals.	1	2	3	4	5	6	7	8	9
I set goals, but frequently lack the will to accomplish them.	1	2	3	4	5	6	7	8	9
I have a great deal of will power.	1	2	3	4	5	6	7	8	9
Feel that I have little influence over what happens to me.	1	2	3	4	5	6	7	8	9
What happens to me is my own doing.	1	2	3	4	5	6	7	8	9

Part II. Read each of the adjectives and indicate how well they would describe you by circling the number on the scale. Numbers near 1 indicate that the adjective seldom describes you, numbers near 4 indicate that it would sometimes describe you, and numbers near 9 indicate that it would usually describe you.

	Seldom would describe me			Sometimes would describe me				Usually would describe me	
Impulsive.	1	2	3	4	5	6	7	8	9
Self-controlled.	1	2	3	4	5	6	7	8	9
Extravagant.	1	2	3	4	5	6	7	8	9
Farsighted.	1	2	3	4	5	6	7	8	9
Responsible.	1	2	3	4	5	6	7	8	9
Restrained.	1	2	3	4	5	6	7	8	9
Easily tempted.	1	2	3	4	5	6	7	8	9
Rational.	1	2	3	4	5	6	7	8	9
Methodical.	1	2	3	4	5	6	7	8	9
Enjoy spending.	1	2	3	4	5	6	7	8	9
A planner.	1	2	3	4	5	6	7	8	9

Part III. Rate the extent that each of the below statements described you prior to coming to Consumer Credit Counseling Service.

	<u>How often did you feel/act this way?</u>								
	Never			Always					
I frequently made the minimum payment on my credit card purchases each month.	1	2	3	4	5	6	7	8	9
My credit card purchases were threatening to bankrupt me.	1	2	3	4	5	6	7	8	9
I considered borrowing money to pay my debts.	1	2	3	4	5	6	7	8	9
I was often late in paying off my creditors.	1	2	3	4	5	6	7	8	9

Part IV. Can you visualize yourself doing the things that will allow you to successfully complete the program developed for you by the CCCS? Please rate the extent that you are able to see in your mind's eye the things happening that are identified in the statements given below. If you are unable to visualize the event, circle 1 or 2. If you are unsure about visualizing the event, circle the 3. If you can definitely visualize the event, circle 4 or 5.

	Unable to Visualize	Unsure			Definitely can Visualize
Can you clearly imagine sending a money order or cashier check in the full amount to Consumer Credit Counseling each month?	1	2	3	4	5
Can you clearly see yourself saying "no" to buying things that do not fit into your budget?	1	2	3	4	5
Can you readily imagine checking your budget each week to ensure that you do not go over it?	1	2	3	4	5
Can you clearly see yourself buying less expensive things in order to stay within your budget?	1	2	3	4	5
Can you visualize very close family members taking active steps to help you spend less each month?	1	2	3	4	5
Can you clearly imagine your friends taking active steps to help you spend less each month?	1	2	3	4	5

Circle who in your household is primarily responsible for paying bills:

A. Me

B. Spouse/significant other

Part V. Please indicate the extent that you agree or disagree with each of the statements given below. If you strongly disagree with the statement, circle the 1 or a 2. If you partially agree with the statement, circle the 3. If you strongly agree with the statement, circle the 4 or 5.

	Strongly Disagree		Partially Agree		Strongly Agree
The goals of the CCCS program are quite acceptable to me.	1		2	3	4 5
The CCCS program is important because it focuses on my important goals.	1		2	3	4 5
Overall, I feel uncomfortable with the CCCS program.	1		2	3	4 5
The high quality of the program encourages me to achieve my goals.	1		2	3	4 5
I believe that everyone in my situation should enroll in this program.	1		2	3	4 5
My goals in the program have been developed through discussions with the counselors.	1		2	3	4 5
Truthfully, I have very little commitment to the goals of the CCCS program.	1		2	3	4 5
Achieving the goals of the CCCS program are critical to the rest of my life.	1		2	3	4 5
People's financial problems result from their own carelessness.	1		2	3	4 5
Whether or not people have financial problems is a matter of chance.	1		2	3	4 5
When it comes to finances, there is no such thing as "bad luck".	1		2	3	4 5
Some financial problems are so bad that nothing can be done about them.	1		2	3	4 5
Anyone can learn a few basic principles that can go a long way in preventing financial problems.	1		2	3	4 5
People who never have financial problems are just plain lucky.	1		2	3	4 5
Good financial health is largely a matter of good fortune.	1		2	3	4 5
I am always courteous even to people who are disagreeable.	1		2	3	4 5
I have never been irked when people express ideas very different from my own.	1		2	3	4 5
No matter who I am talking to, I am always a good listener.	1		2	3	4 5

I am always willing to admit when I make a mistake.

1 2 3 4 5

I have never felt that I was punished without cause.

1 2 3 4 5

Part VI. Please estimate how likely it is that you will successfully complete the program with Consumer Credit Counseling. Circle the percentage likelihood of success. 10% indicates that you think there is little chance of completion. 50% indicates that failure or success is equally likely. 100% indicates that you are certain you will complete the program successfully.

Your estimated chance of successfully completing the program is:

10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

APPENDIX B

COMPULSIVE BUYING AND IMPULSIVENESS SCALES

Compulsive Buying Scale
(as used in the current study)

Coefficient alpha = .8587

I have bought things that I could not really afford
I have felt that others would be horrified if they know of my spending habits
I have bought something to make myself feel better
I have just wanted to buy and didn't care what I bought
I often buy things simply because they are on sale
I have felt anxious on days I didn't go shopping
I have bought something, and when I got home I wasn't sure why I bought it
I have felt depressed after shopping
I have gone on a buying binge and wasn't able to stop

Compulsive Buying Screener
(as used in Faber and O'Guinn's 1992 study;
provided here for comparison purposes only)

Coefficient alpha = .95

If I have any money left at the end of the pay period, I just have to spend it
Felt others would be horrified if they know of my spending habits
Bought things even though I couldn't afford them
Wrote a check when I knew I didn't have enough money to cover it
Bought myself something in order to make myself feel better
Felt anxious or nervous on days I didn't go shopping
Made only the minimum payments on my credit cards

Impulsiveness
(taken from Puri, 1996)

Coefficient alpha = .7656

Impulsive
Self-controlled (R)
Extravagant
Farsighted (R)
Responsible (R)
Restrained (R)
Easily tempted
Rational (R)
Methodical (R)
Enjoy spending
A planner (R)

APPENDIX C
3M MULTI-ITEM SCALES

Introversion

Coefficient alpha = .8648

Prefer to be alone rather than in a large group
Feel uncomfortable in a group of people
Feel bashful more than others
Quiet when with people
Shy
Withdrawn from others

Emotional Instability

Coefficient alpha = .9029

Moody more than others
Temperamental
Touchy
Envious
Emotions go way up and down
Testy more than others
Jealous

Agreeableness

Coefficient alpha = .8338

Rude with others (R)
Harsh when others make a mistake (R)
Tender hearted with others
Sympathetic
Cold to others (R)
Kind to others
Cooperative with others

Conscientiousness

Coefficient alpha = .8248

Careless (R)
Precise
Efficient
Organized
Sloppy (R)
Orderly

Originality

Coefficient alpha = .8790

Frequently feel highly creative
Imaginative
Appreciate art
Enjoy beauty more than others
Find novel solutions
More original than others

Materialism

Coefficient alpha = .8854

Enjoy buying expensive things
My possessions are important for my happiness
Like to own nice things more than most people
Acquiring valuable things is important to me
Enjoy owning luxurious things

Need for Body Resources

Coefficient alpha = .8908

Focus on my body and how it feels
Worry about making my body look good
Devote time each day to improving my body
Feel that making my body look good is important
Work hard to keep my body healthy

Need for Arousal

Coefficient alpha = .8533

People view me as impulsive and unpredictable
Drawn to experiences with an element of danger
Like the new and different more than the tried and true
Seek an adrenaline rush
Bored around same people and experiences
Actively seek out new experiences
Enjoy taking more risks than others

Commitment

Coefficient alpha = .7817

The goals of the CCCS program are quite acceptable to me
The CCCS program is important because it focuses on my important goals
Overall I feel uncomfortable with the CCCS program (R)
The high quality of the program encourages me to achieve my goals
I believe that everyone in my situation should enroll in this program
My goals in the program have been developed through discussions with the counselors
Truthfully, I have very little commitment to the goals of the CCCS program (R)
Achieving the goals of the CCCS program are critical to the rest of my life

Imaginative

Coefficient alpha = .6919

Can you clearly imagine sending a money order or cashier's check in the full amount to
Consumer Credit Counseling each month?
Can you clearly see yourself saying "no" to buying things that do not fit into your
budget?
Can you readily imagine checking your budget each week to ensure that you do not go
over it?
Can you clearly see yourself buying less expensive things in order to stay within your
budget?
Can you visualize very close family members taking active steps to help you spend less
each month?
Can you clearly imagine your friends taking active steps to help you spend less each
month?

APPENDIX D
IRB REVIEW FORM

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: 11-25-97

IRB#: BU-98-014

Proposal Title: PREDICTING CREDIT CARD PROBLEMS

Principal Investigator(s): John C. Mowen

Reviewed and Processed as: Expedited

Approval Status Recommended by Reviewer(s): Approved

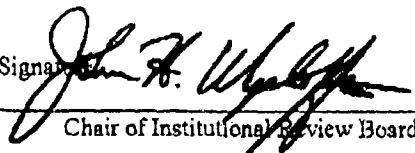
ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING, AS WELL AS ARE SUBJECT TO MONITORING AT ANY TIME DURING THE APPROVAL PERIOD.

APPROVAL STATUS PERIOD VALID FOR DATA COLLECTION FOR A ONE CALENDAR YEAR PERIOD 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 Disapproval are as follows:

Signature



Chair of Institutional Review Board

Date: December 2, 1997

VITA γ

James Carl Stone IV

Candidate for the Degree of

Doctor of Philosophy

Thesis: COMPULSIVE BUYING: REVIEW AND RELEVENCE TO CONSUMER
DEBT MANAGEMENT

Major Field: Psychology

Biographical:

Personal Data: Born in Oklahoma City, Oklahoma, March 6, 1973. Married Julie
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Education: Graduated from Frederick High School, Frederick, Oklahoma in May,
1991; received Bachelor of Arts degree in Psychology in May 1996 and
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the Doctor of Philosophy degree in Psychology at Oklahoma State
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Professional Experience: Mental Health Technician, Century Center of
Stillwater, 1995 Summer; Graduate Instructor, Department of Psychology,
Oklahoma State University, August 1995 – May 1998; Co-Founder and
Vice President, ViaSource, Inc., March 1996 – January 1997; Teaching
Assistant, Native Americans in Biological Sciences, Department of
Microbiology and Molecular Genetics, Oklahoma State University,
Summer 1996; Senior Associate, Marketing Research, GTE Directories
Corporation, July 1999 – Present; Co-Founder, StarFlash
Communications, 1999.

Professional Memberships: Southwestern Psychological Association, American
Psychological Association, American Psychological Society, American
Marketing Association.