

Compulsive Shopping Disorder: Is It Real And Can It Be Measured?

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ABSTRACT

MONIQUE MOORE: Compulsive Shopping Disorder: Is It Real And Can It Be Measured?
(Under the direction Joseph Lowman, Ph.D)

In recent decades, diagnostic criteria to identify individuals who repeatedly engage in extreme and problematic over-spending have been proposed and used by clinicians and researchers. A prolonged pattern of over-spending that interferes with life-functioning is referred to as “compulsive shopping” or “compulsive buying” disorder. Some investigators have argued that individuals suffering from the disorder are numerous enough to merit the syndrome’s inclusion in the next version of the DSM.

Despite growing clinical and mainstream attention to compulsive shopping, several key issues stand in the way of the syndrome’s inclusion in the DSM. First, measures used to identify individuals with compulsive shopping disorder have not been adequately tested. Therefore, it remains uncertain whether psychometrically valid and reliable screeners exist. Second, debates over how to best classify compulsive shopping behaviors remain unresolved. While some investigators argue that compulsive shopping should be classified as a sub-type of impulse-control disorder, others argue that it should be classified as a sub-type of obsessive-compulsive disorder or addiction. Finally, a major block to classifying compulsive shopping as a distinct disorder is that there remains a paucity of empirical research tying together core differential factors and what characteristics of the proposed disorder best define the difference between compulsive and non-compulsive shoppers.

To advance an understanding of whether compulsive shopping should be considered a true clinical disorder, the present study will first survey and analyze debates over how to measure the problem of chronic overspending on luxury goods. Existing clinical criteria for compulsive shopping will be evaluated and the psychometric soundness of two measures frequently used to diagnose individuals with compulsive shopping disorder will be tested. The present study then proposes a new measure for identifying individuals with compulsive shopping disorder, the Shopping Motivations Inventory (SMI). The SMI will be argued as advancement over existing measures because it contains the potential to assess core differential factors thought to be central to compulsive shopping disorder. This approach may be advantageous given important proposed changes to the DSM-V.

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CHAPTER 1

INTRODUCTION

The amount of debt Americans are accruing seems to be skyrocketing at an alarming rate. In 1990, national credit card debt amounted to \$243 billion. By 2000 that number nearly tripled to \$683 billion, and in the last U.S. Census Bureau study on debt in 2005 the national credit card debt had reached nearly \$985 billion, (U.S. Census Bureau 2008). Although many credit purchases undoubtedly have gone toward meeting legitimate needs, such as medical bills and food and shelter expenses, studies have long indicated that a significant portion of credit purchases, both in this country and abroad, have been increasingly spent on discretionary luxury items and shopping sprees (U.S. Census Bureau, 2002; Dittmar, 1992; Elliot, 1994; McCracken, 1990; Benson, 2008).

In the lead up to our current economic crisis, shopping beyond one's income had become commonplace and living in a state of debt no longer was the exception to the norm, it was the norm. In such a climate, it might appear senseless to discuss "excessive shopping" as a pathology. After all, if a large proportion of society participates in an act, how can the act be considered abnormal? Yet, therapists are seeing an increase in the number of people complaining that an inability to control excessive behaviors is undermining their personal relationships, work performance, and a general ability to experience happiness and enjoyment. (O'Guinn and Faber, 1989; McElroy, Keck, and Harisson, 1994; Kasser, & Kanner, 2004; Benson, 2008).

It is in this growing context of problems that psychologists have increasingly begun to consider excessive shopping as a unique, psychologically and biologically driven disorder that merits clinical investigation and tailored treatment. The intent of the present paper will be to consider whether compulsive shopping should be described as a clinical syndrome and whether its features merit a unique place in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V).

CHAPTER 2

HISTORY OF COMPULSIVE SHOPPING DISORDER

Early Study of Compulsive Shopping Disorder

Compulsive shopping was first proposed as a unique mental disorder by Emil Kraepelin and Eugene Bleuler in the early 1900's (Bleuler, 1924). Kraepelin and Bleuler conceived of compulsive shopping as a form of impulse-control disorder and emphasized the tendency of those seeking help for overspending habits to cite feeling "little or no control" while shopping. Since the 1900's, compulsive shopping has been referred to by various names including onionmania, buying mania, compulsive consumption, compulsive buying and addictive or impulse buying. The shifting terminology used to describe compulsive shopping behavior reflects the various ways the syndrome has been conceptualized through the years. Until recently, however, little empirical research has been done to investigate what the core diagnostic features of the disorder might be, much less its etiology.

Renewed Attention and Current Conceptualizations

In 1989, Thomas O'Guinn and Ronald Faber reinitiated attempts to understand compulsive buyers from an empirical perspective. In building upon Kraepelin and Bleuler's conceptualization of excessive shopping, O'Guinn and Faber (1989) distributed a battery of questionnaires to 388 people who had written to a self-help group offering help for compulsive buyers and to 292 adults who were contacted randomly via a mass mailing. Questionnaire items given to all participants were primarily designed to assess whether

problem shoppers differed significantly from the general population on traits thought to be common to individuals who repeatedly engaged in behaviors, despite wanting to stop due to undesirable consequences (e.g. gambling, binge eating, or a range of obsessive-compulsive behaviors).

In analyzing responses to questionnaire items across groups, O’Guinn and Faber (1989) found, not surprisingly, that the self-identified problem buyers reported greater debt and adverse social consequences as a result of their shopping behaviors than did individuals who did not complain of compulsive shopping habits. More interestingly, however, O’Guinn and Faber (1989) also found that self-identified problem buyers scored significantly higher on the obsessive-compulsive subscale of the MMPI-II, scored significantly lower on measures of self-esteem, and reported experiencing not only a greater emotional lift during the buying process, but also greater emotional suffering (primarily guilt and anxiety) following shopping episodes.

Based on their research, O’Guinn and Faber (1989) asserted that a four-step cycle, dubbed, “the compulsive shopping cycle,” characterized the experience of compulsive shoppers. The compulsive shopping cycle consisted of: (1) a general pre-disposition towards feelings of anxiety and low self-esteem that appeared to worsen directly before urges to shop; (2) impulsive shopping episodes, typically accompanied by feelings of “elation” or “intoxication;” (3) guilt and remorse following shopping episodes; and (4) a renewed impulse to shop, in part to escape feelings of low self esteem, anxiety, and guilt that had been exacerbated during the shopping episodes. Based on these findings, in the conclusion of their paper, O’Guinn and Faber (1989) argued for an emergent definition of compulsive shopping disorder as, “chronic, repetitive purchasing that becomes a primary response to negative

events or feelings, becomes very difficult to stop, and that ultimately results in harmful consequences” (O’Guinn and Faber, 1989, p. 155).

In a follow up to O’Guinn and Faber’s (1989) report, McElroy, Keck, Pope, and Strakowski (1994) analyzed clinical intake interview transcripts of 20 patients reporting to have problems with excessive shopping and found that patients described their shopping experiences in ways that paralleled the four step compulsive shopping cycle described by O’Guinn and Faber (1989). Specifically, 17 of the 20 patients interviewed reported “irresistible urges” or “impulses” to buy, and 15 attributed these urges to feelings of mounting tension or anxiety preceding shopping episodes. Further, 19 of the 20 patients studied reported that purchases bought “relief of tension” or pleasurable feelings described as, “a high like taking cocaine,” “a buzz,” “a rush,” and “like taking a narcotic.” Finally, all patients reported an inability to cease excessive shopping behavior, despite awareness that harmful financial and/or social consequences were likely to follow.

Based on these findings as well as O’Guinn and Faber’s (1989) work, McElroy et. al. (1994) proposed operational diagnostic criteria for compulsive shopping. McElroy et. al. (1994) fashioned their proposed criteria around O’Guinn and Faber’s (1989) definition of compulsive shopping and core defining features of impulse-control disorders, which they felt most closely resembled features of the problems described by compulsive shoppers.

McElroy et. al.’s (1994) proposed diagnostic criteria are below in Table 1:

Table 1: Diagnostic Criteria for Compulsive Buying

A. Maladaptive preoccupation with buying or shopping, or maladaptive buying or shopping impulses or behavior, as indicated by at least one of the following: <ol style="list-style-type: none">1. Frequent preoccupation with buying or impulses to buy that 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 preoccupations, 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.

McElroy et. al.'s (1994) proposed criteria have become heavily referenced by researchers investigating the disorder of compulsive shopping and remain the criteria that researchers in support of including the disorder in the next edition of the DSM are hoping to have listed (Koran et. al., 2006; Benson, 2008).

A more recent study by Koran, Faber, Aboujaoude, Large, and Serpe (2006) echoes earlier patterns of findings that support the clinical definition of compulsive shopping put forward by McElroy et al. (1994). In their investigation, Koran et al (2006) found that in a sample of 2,162 individuals randomly recruited via a mass mailing, 134 compulsive shoppers identified via the compulsive buying questionnaire (CBS) (Faber and O'Guinn, 1992): (1) took greater pleasure in shopping and buying; (2) more often made senseless and impulsive purchases; (3) more often felt anxious or depressed after shopping; and (4) more often experienced uncontrollable buying binges.

Epidemiology of Compulsive Shopping Disorder

According to investigations that rely largely upon the CBS (Faber and O'Guinn, 1992) to identify compulsive shoppers, it is estimated that between 1.4% and 16% of the adult U.S. population meet the CBS's criteria for compulsive shopping disorder, with females outnumbering males by as many as 9 to 1 (Faber and O'Guinn, 1992; Koran et. al. 2006). In the latest and largest systematic investigation of compulsive shoppers, Koran, Faber, Aboujaoude, Large, and Serpe (2006) conducted a national telephone survey of 2,513 randomly selected adults between the ages of 18 and 85 and found that a significant number appeared to meet criteria for a diagnosis of compulsive shopping disorder. A qualifying diagnosis was based upon responses to the Compulsive Buying Scale (CBS) (Faber and O'Guinn, 1992), a measure specifically designed to identify compulsive shoppers. Specifically, using the CBS's recommended cut off criteria of two standard deviations below the mean for a diagnosis of compulsive shopping, 5.8% of individuals sampled were thought to have compulsive shopping disorder. Using even stricter identifying criteria of three standard deviations below the mean for a diagnosis of compulsive shopping disorder, 1.4% of the population sampled was taken to qualify for a diagnosis of compulsive shopping disorder.

Several large-scale population studies indicate that compulsive shopping behaviors typically emerge around one's late teens to early twenties, but do not tend to reach the level of clinical significance until one's mid-thirties (Faber and O'Guinn, 1992; Koran et. al., 2006). In terms of socio-economic status, compulsive shoppers may be found across all income groups (Faber and O'Guinn, 1989; Scherhorn, Reisch, and Raab, 1990; Christenson, Faber, and, DeZwaan, 1994).

Co-Morbidity

A number of investigators have argued that individuals with compulsive shopping disorder are more likely than typical shoppers to suffer from a number of co-morbid Axis I disorders. Specifically, using the CBS as a way to identify compulsive shoppers, it is estimated that, (1) 25-50% of individuals who meet criteria for compulsive shopping disorder also meet criteria for depression (Christensen, Faber, and de Zawaan, 1994; McElroy, Kleck, Pope, Smith, & Strakowski, 1994; Schlosser, Black, Repertinger, & Freet, 1994); (2) 21-30% meet criteria for an anxiety disorder (Christensen, Faber, and de Zawaan, 1994; and Schlosser, et. al. 1994); (3) 4-35% meet criteria for obsessive-compulsive disorder (Christensen, Faber, & de Zawaan, 1994; McElroy, et. al. 1994a; Schlosser, et. al., 1994); (4) 10-45% meet criteria for a substance abuse disorder (Christensen, Faber, & de Zawaan, 1994; McElroy, et. al., 1994a; Schlosser, et. al., 1994); (5) 4-37% meet criteria for a second impulse-control disorder (Christensen, Faber, & de Zawaan, 1994; McElroy, et. al., 1994a; Schlosser, et. al., 1994) ; and (6) 12-35% also meet criteria for bulimia or binge eating disorder (Christensen, Faber, & de Zawaan, 1994; McElroy, et. al., 1994a; Schlosser, et. al., 1994).

Other reports indicate that compulsive shoppers are more likely to suffer from a range of sub-clinical negative mood states. Specifically, research indicates that compulsive shoppers tend to have lower self esteem (d'Astous, Maltais, and Roberge, 1990; O'Guinn and Faber 1989; Scherhorn, Reisch, and Raab 1990), score higher on measures of loneliness, isolation, emptiness, anger, and irritability (Christenson, Faber, and de Zwann, 1994; Kottler, 1999; Scherhorn. Reisch, & Raab, 1990; and Valence, d'Astous and Fortier, 1988); and display higher levels of anxiety and obsessions on the MMPI (O'Guinn and Faber, 1989;

Scherhorn, Reisch, & Raab, 1990). Taken together, studies show that individuals who suffer from compulsive shopping disorder may be more likely than typical shoppers to suffer from a range of negative emotions.

* * *

A potential limitation to current estimates of the number of compulsive shoppers and the incidence of other associated psychological problems in compulsive shoppers is that the screener used in most of these studies, the CBS, may be flawed. While the CBS remains widely used to identify compulsive shoppers, recent analysis has pointed out that it likely overestimates the numbers of individuals diagnosed with compulsive shopping (Koran et. al, 2006; Manolis & Roberts, 2007). A more careful examination of the CBS will be discussed in Chapter VI of the present dissertation.

CHAPTER 3

CLASSIFICATION OF COMPULSIVE SHOPPING DISORDER

Like other new or developing theories or concepts, researchers often try to understand compulsive shopping disorder by comparing the disorder and its symptoms to other, more established disorders. The high number of compulsive shoppers who meet criteria for a second psychological disorder (based primarily on their having been screened as compulsive shoppers by the CBS) has led investigators to debate what category of disorder compulsive buying might most closely resemble. Growing discontent with the current DSM's rigid classification system and the close relationship that compulsive shopping disorder shares with other impulsive and obsessive compulsivity disorders has led to an emerging debate as to whether these different disorders should be classified less categorically and more dimensionally in the DSM-V.

Proposed Classifications of Compulsive Shopping Disorder

Although compulsive shopping disorder has historically been classified as an impulse-control disorder, NOS (Bleuler, 1924, McElroy et. al, 1994a; Benson, 2008), some researchers argue that the disorder is more closely related to obsessive-compulsive disorder (McElroy, Philips, and Keck, 1994b, Black, Monahan, & Gabel, 1997), while others argue its features most closely resemble addictive disorders (Scherhorn, 1990, DeSarbo and Edwards, 1996), and yet others argue that its characteristics most closely resemble binge eating disorders or bulimia (Faber et. al., 1995). Additionally, many researchers have

observed that because compulsive shopping appears to progress through stages, it should be considered as progressing through qualitatively distinct states, or types of disorders, over time (Benson, 2000; Benson, 2008, McElroy et. al., 1994).

Although the outcome of debates over classification remains unresolved, the various arguments concerning where to diagnostically file compulsive shopping are worthy of consideration because these differences guide investigative pathways. This section outlines the most prevalent views surrounding compulsive shopping disorder's classification.

Compulsive Shopping as an Impulse-control Disorder or Obsessive-compulsive Disorder

As has been discussed, compulsive shopping has historically been conceived of as an impulse-control disorder, NOS (Bleuler, 1924, Benson, 2008). This classification is based on similarities between patients diagnosed with impulse-control disorders and experiences described by compulsive shoppers. According to the DSM-IV-TR (2000), impulse-control disorders are defined by three essential features: (1) failure to resist an impulse-drive or to resist temptation to perform some act that is harmful to the person or others; (2) an increasing sense of tension or arousal before committing an impulsive act; and (3) an experience of pleasure, gratification, or release at the time the act is committed.

According to the compulsive buying cycle outlined by O'Guinn and Faber (1989) as well as McElroy et al. (1994a), individuals who experience compulsive shopping share all defining features related to impulse-control disorders; They experience: (1) an inability to resist impulses to shop; (2) an increased sense of arousal before committing a shopping act; and (3) a feeling of relief and pleasure during or following a shopping spree.

Although many researchers consider compulsive shopping disorder to be a type of impulse-control disorder, however, others have wondered whether it is better classified as a form of obsessive-compulsive disorder. Although strong behavioral urges characterize both types of disorders, impulse-control behaviors tend to be driven by sensation-seeking and are spontaneous as well as ego-syntonic, whereas compulsions characteristic of obsessive-compulsive disorder are generally performed to manage feelings of anxiety, are somewhat pre-meditated, and are thought to be ego-dystonic.

Those who argue that compulsive shopping might be best classified as an impulse-control disorder argue that a high need for arousal and desire for novel sensations appears to drive impulsive shopping episodes (Bleuler, 1994, McElroy et. al, 1994a; Benson, 2008). Researchers in support of compulsive shopping's classification as an impulse-control disorder argue that the "high" compulsive shoppers report while shopping (O'Guinn and Faber, 1989; McElroy et. al., 1994a) is reminiscent of the "sensation seeking" tendencies that characterize impulse-control behaviors (O'Guinn and Faber, 1989).

Moreover, a number of researchers have argued that compulsive shopping is best categorized as an impulse control disorder because while both individuals with compulsivity and impulsivity share tendencies to engage in repetitive behaviors largely experienced as being outside of rational control, individuals with obsessive-compulsive disorders are driven to engage in repetitive behaviors primarily to alleviate anxiety that arises from obsessive thoughts, while individuals with impulse-control disorders, as well as compulsive shopping disorder, appear to derive inherent pleasure from their repetitive behaviors (Storch, Abramowitz, Goodman, 2008, Abramowitz and Houts, 2002). Specifically, as Abramowitz and Houts (2002) clarify, "[i]ndividuals with kleptomania report a 'rush,' 'thrill' or 'manic

high' associated with their stealing, and compulsive buying is described as a 'high like cocaine.' Similarly patients with pathological gambling report pleasure or gratification during or after gambling. The drive to perform these behaviors, and the emotional experiences associated with their completion, are qualitatively different than those present in OCD." (Abromowitz and Houts, 2002, p. 143).

In contrast, researchers who support the view that compulsive shopping is best classified as a type of obsessive-compulsive disorder point to research that indicates that compulsive shoppers are pre-occupied with thoughts of shopping before engaging in shopping, score high on measures of compulsiveness on the MMPI (O'Guinn and Faber, 1989), and often engage in shopping acts in an effort to alleviate negative thoughts, fears, or feelings of anxiety (d'Astous, Maltais, and Roberge, 1990; Faber and O'Guinn, 1992; Elliot, 1995; Koran, Bullock, Hartston, Elliot, and Andrea, 2002).

To support the notion of an underlying relationship between obsessive-compulsive disorder and compulsive shopping, moreover, some researchers argue that drug treatments used to treat obsessive-compulsive disorder have been successful in decreasing shopping fantasies and shopping episodes in individuals reporting problems with compulsive shopping. Specifically, Black, Monahan, & Gabel (1997) found that when ten compulsive shoppers were given the SRI Fluvoxamine, which is used to treat obsessive-compulsive disorder (as well as depression), the frequency with which patients complained of pre-occupying shopping fantasies significantly declined. Another study by Saxena et. al. (2002), found that 20 patients with compulsive shopping problems showed a significant decrease in shopping urges following the administration of an SSRI drug, Citalopram, which is commonly used to treat obsessive-compulsive disorder.

In a follow-up to the above investigations, researchers at Stanford University (Koran, Bullock, Hartston, Elliot, and Andrea, 2002) have been working on a drug that is uniquely designed to treat individuals with compulsive shopping disorder. The drug they are developing is chemically and structurally modeled after Citalopram (Koran, et. al., 2002). In preliminary trials the new drug has been effective in reducing compulsive shopping episodes in people with the disorder (Koran et. al., 2002).

Taken together, researchers conducting drug treatment studies argue that the effectiveness of drugs used to treat both patients with obsessive-compulsive disorder and compulsive shopping suggests a common underlying biological risk factor. The implication behind these arguments is that individuals with compulsive shopping disorder are more biologically prone to shop than are typical shoppers and that this tendency is linked more generally to anxiety-driven obsessive tendencies.

Compulsive Shopping as an Addictive Disorder

Others have argued that excessive shopping may best be understood as an addictive behavior. Proponents of this view argue that the “high” that problem shoppers report is similar to descriptions of the “high” addicts report when using drugs (Campbell, 2000; Scherhorn, 1990; DeSarbo and Edwards, 1996). A number of studies have pointed to compulsive shoppers describing the intoxicating feelings that they experience when shopping (O’Guinn and Faber, 1989; McElroy et. al., 1994; Scherhorn, 1990; DeSarbo and Edwards, 1996). One study, for example, found that a small sample of compulsive shoppers interviewed frequently described acts of spending as “stimulating,” “tranquilizing,” and “pain relieving” (Scherhorn, 1990). Similarly, in the McElroy et. al. (1994a) study of interview

transcripts of 20 self-reported problem spenders, several compulsive shoppers described their shopping experiences as, “a high like taking cocaine,” and “a rush.”

According to the shopping-as-addiction view, dysfunctional spending among compulsive shoppers is not so much an impulsive or compulsive act as it is a conditioned habit that individuals develop as a result of repeatedly seeking out the addictive high, or intoxicating pleasure, associated with shopping. A leading proponent of this theory, Gerhard Scherhorn (1990), argues that the term “addiction” best characterizes compulsive shopping on the grounds that, “the term compulsion connotes pressure to do something against one’s will, whereas the behavior in question involves the extension of normal behavior into a pathological habit” (Scherhorn, 1990; p.159). In this view, it is not so much uncontrollable drives that propel dysfunctional shopping sprees as it is a habitual pursuit of a pleasurable sense of release, escape, and enjoyment gained from the act. (Scherhorn, 1990; Campbell, 2000).

In response to the addictive features of compulsive shopping, self-help groups similar in structure to Alcoholics Anonymous have been set-up to provide treatment to “shopaholics.” “Debtors Anonymous” (D.A.) is modeled after Alcoholics Anonymous, with the only differences being the replacement of the words “alcohol” and “alcoholics” with the words “debt” and “debtors” in the 12-step literature. Admitting powerlessness over debt and acknowledging how unmanageable one’s life has become as a result of debt constitutes the first step in D.A.’s program of recovery. Currently, no research has been done to test the effectiveness of these programs in treating dysfunctional shoppers (Benson, 2008).

Compulsive Shopping as a Mood Regulation Disorder

Some researchers have argued that the negative mood-states that Faber and O'Guinn (1989) found to contribute to the "compulsive buying cycle" may be, at root, related to broader problems with mood regulation. These researchers argue that the fluctuating mood-states that seem to contribute to compulsive buying cycles may be more closely related to mood regularity difficulties. Black, Monahan, and Gabel (1997), for example, argue that both impulse-control disorders and mania associated with bipolar disorder involve mood swings similar to those reported by compulsive shoppers. In support of a connection between bipolar disorder and mood swings reported by compulsive shoppers, Black, Monahan, and Gabel (1997) argue that the oscillation between the low mood preceding a shopping spree, the elevated high experienced while shopping, and the bounce back to a low mood upon recognition of the harm accompanying shopping sprees is reminiscent of the dramatic high and low mood cycles often cited by those with bipolar disorder.

To further support a connection between compulsive shopping and mood disorders, researchers have found that treating compulsive shoppers with mood stabilizing drugs may be effective in decreasing episodes of compulsive shopping. In a study of 20 patients with self-reported compulsive shopping difficulties, McElroy, Satlin, & Pope (1991), reported that compulsive shopping episodes significantly diminished when patients were given a mood stabilizer such as Valproate, Lithium, or an anti-psychotic drug. A second study by Lejoyeux, Hourtane, and Andes, (1995a), found that two patients who suffered from compulsive shopping episodes dramatically reduced their spending habits following the prescription of a selective serotonin reuptake inhibiting (SSRI) antidepressant. Based on this finding, the researchers concluded that depression may be primary to dysfunctional spending and may

underlie compulsive shopping disorder. Additionally, in a follow up to these findings, Black, Monahan, and Gabel, (1997b), found that nine out of ten compulsive shopping patients who did not meet criteria for depression reported a decrease in spending following the administration of an SSRI drug, Fluvoxamine (Black, Monahan, and Gabel, 1997a).

Researchers supporting the view that depression might underlie excessive shopping maintain that the alleviation of shopping urges following the prescription of mood stabilizing and anti-depressant drugs points to a strong biological association between shopping urges and depressive traits, even though some compulsive shopping patients may not experience depressive symptoms at clinically significant levels (Lejoyeux, et. al, 1997; Black, Monahan, and Gabel, 1997b).

Dimensional Views of Compulsive Shopping Disorder

Several researchers have argued that, perhaps, everyone is correct. Perhaps compulsive shopping disorder might best be thought of as lying somewhere along a continuum between several sets of disorders (McElroy, Philips, and Keck, 1994b; Hollander and Allan, 2006; Benson, 2008). The first to introduce this argument was McElroy, Philips, and Keck (1994b). In their paper, the researchers posited a theory that impulse-control disorders and obsessive-compulsive disorders may be related and linked together by a common underlying biological factor. In extending a dimensional impulsive-obsessive-compulsive control disorder model to dysfunctional shopping behavior, the researchers argue that compulsive shoppers may best be thought of as falling somewhere along a continuum whereby occasional impulse buys progress to increasingly frequent spending sprees and eventually escalate to the point where shopping is turned to as a means of escaping negative feelings of guilt and anxiety proceeding acts of unbridled spending (a pattern that may be

described as compulsive). Envisioned as such, McElroy et. al. (1994b) argue that variations in symptomatology among compulsive shoppers reflect differences in where along an ICD/OCD continuum an individual tends to fall.

Advancing this dimensional-classification approach, DeSarbo and Edwards (1996) argue that the addictive model might best characterize later stages of the syndrome, whereas impulsivity and compulsiveness characterize earlier stages of problem shopping. In their view,

Addiction to spending occurs progressively, starting with the recreational buyer, who may occasionally shop and spend as an escape.... A crisis causing anxiety overload then triggers the individual to buy compulsively.... Experiencing progressively less relief with each spending spree, the person requires “re-dosing” and comes to depend on shopping and spending as the primarily means of coping with anxiety.... Compulsive buying may be considered a progression from normal to impulsive spending, to a means of escape from stress and anxiety, and finally to a gross addiction to the experience.

(DeSarbo and Edwards, 1996, p. 232).

Finally, some researchers contend that obsessive-compulsive disorders, addiction, and impulse-control disorders share more similarities than differences, and that their current status as being categorically separate represents a false dichotomy (Faber and O'Guinn, 1989; Faber, Christenson, de Zwaan & O'Guinn, 1995). Specifically, Faber et. al. (1995) argue that the high rates of co-morbidity between alcoholism, drug addiction, binge eating disorders, and compulsive shopping behaviors may point to an underlying connection between the syndromes. They argue that these disorders might best be united under the category of “disorders of compulsive consumption.”

O'Guinn and Faber (1989) first proposed the argument that compulsive shopping might best fit into the category of “compulsive consumption” in their original investigation

of the phenomenology of compulsive shoppers (O’Guinn and Faber, 1989). Arguing for the establishment of a category of compulsive consumption disorders in the DSM, O’Guinn and Faber (1989) argue that a number of personality and behavioral traits can be found across compulsive consumption syndromes. They argue, for example, that compulsive shoppers and individuals with impulse-control disorders, compulsive behaviors, eating disorders, and addictive behaviors share a number of similar characteristics including “low self-esteem, high levels of depression, and high levels of anxiety reactions and obsessions” (Faber et. al. 1995, p 297). Finally, in terms of etiology, Faber et. al. (1995) argue that individuals with compulsive consumption disorders, including compulsive shoppers, tend to repeatedly turn to self-destructive behaviors (e.g. alcohol, eating, shopping, gambling, or ritualistic behaviors) primarily as a means to manage or distract themselves away from uncomfortable feelings of depression, guilt, or anxiety (Faber et. al., 1995).

The idea of subsuming various disorders characterized by frequently repeated and self-destructive actions under a central category, such as disorders of compulsive consumption disorders, is not currently represented in the DSM. Because of increasing investigations across the field of clinical psychology that link traits that underlie a wide range of disorders, including addiction disorders, obsessive-compulsive disorders, mood-regulation difficulties, and impulse-control disorders, debate about the inadequacies of the current categorical system of classification and the need for a more dimensional system of classification in the DSM-V has emerged. This debate is explored in the next section.

Compulsive Shopping and the DSM-V

While the DSM remains an invaluable tool for researchers and clinical investigators alike, its diagnostic categories sometimes fall short of accounting for empirical and clinical observations. An investigation into the disorder of compulsive shopping provides an illustration of some of the ways in which the DSM's rigid diagnostic categories can appear to stand in the way of richer and more accurate clinical definitions. In this way, debates about where to categorize compulsive shopping disorder are emblematic of broader questions regarding the adequacy of the DSM's diagnostic categories and, more generally, the categorical approach to classifying mental disorders.

Within the broader context of debates about the classification of compulsive shopping, there exist debates about whether disorders currently classified as distinct should instead be re-classified as related in the next DSM. In response to some of these arguments, the chair of the DSM-V task force, Dr. Darrell Regier, has announced the American Psychiatric Association's intention to emphasize more explicit dimensional approaches when establishing diagnostic thresholds in the DSM-V (Regier, 2007).

The consideration of diagnostic thresholds and of how clinical disorders may be developmentally and etiologically related stands as a significant difference between the DSM-V and the DSM-IV-TR. While the current DSM classifies disorders as discrete from one another, the DSM-V is expected to be re-organized into related classes of disorders (Walsh, 2007; Regier, 2007). Although it remains uncertain which specific disorders will be re-classified as related in the DSM-V, there is speculation of at least two newly proposed DSM-V categories (Kupfer, First, and Regier, 2002; Hollander and Allan, 2006) that could, if created, influence conceptualizations of compulsive shopping.

Specifically, the category of obsessive-compulsive-related disorders will possibly be expanded to include obsessive-compulsive personality disorder, hoarding, body dysmorphic disorder, eating disorders, hypochondriasis, Tourette's syndrome, Sydenham's chorea, and pathological grooming disorders such as trichotillomania, skin picking, and nail biting (Hollander and Allen, 2006). A second change that is considered likely for inclusion in the DSM-V is the addition of a non-substance addiction category that expands the definition of addictions to include behavioral addictions such as pathological gambling, pyromania, kleptomania, internet addiction, and excessive sexual behavior, each of which had previously fallen under the category of impulse-control disorders (Potenza, 2006; Hollander and Allan, 2006).

While researching the present paper it was learned that compulsive buying is being considered for inclusion in the second of these two newly proposed categories, the category of non-substance addictions. In a correspondence with Dr. Darrell Regier, vice chair of the DSM-V taskforce, it was asked whether there was any updated information on whether the DSM-V is continuing to consider compulsive shopping disorder in the DSM-V and, if so, what category the disorder might fall under. In reply, an assistant to Dr. Regier, Dr. Emily Kuhl, wrote the following response:

The members of the Substance Use Disorders Work Group are actively discussing non-substance compulsive behaviors, including compulsive shopping.... As you pointed out, there is indeed a growing body of literature in the area of compulsive shopping, and the Substance Use Disorders Work Group is currently analyzing data from the literature to assess symptom overlap and determine whether diagnostic criteria for substance addictions can be similarly applied to non-substance addictions. They are also looking at brain imaging data and biomedical correlates that might inform their decision-making. You may contact Charles O'Brien, MD, PhD, the chair of the work group, and Nancy Petry, PhD, the chair of the non-substance-related addictions subcommittee, but the content of DSM-V work group discussions are kept confidential until final recommendations are made public.

(E. Kuhl, personal communication, November 17, 2008).

As has been discussed, a number of researchers have long argued that the high rates of co-morbidity between alcoholism, drug addiction, and a number of impulse-control disorders would seem to call for a new diagnostic category that might unite these varied, but potentially related, syndromes (Potenza, 2006, Hollander, 1997, Hollander, 2005, Hollander and Allen, 2006; O'Guinn and Faber, 1989; DeSarbo and Edwards, 1996). The creation of a new category of non-substance abuse disorders that might unite some of these varied syndromes could potentially help resolve debates over which diagnostic category compulsive shopping might best belong.

Addressing the question of whether or not the DSM should create a category of non-substance addictions, Potenza (2006) points out that in contrast to other disorders in the DSM, impulse-control disorders have long been poorly understood and there has long been a need for improved identification, assessment, and treatment of this class of disorders. Moreover, Potenza (2006) argues that because disorders of substance use appear to share so many features to disorders of impulse-control, many disorders of impulse-control might be better conceptualized as disorders of non-substance addiction. In support of his argument,

Potenza (2006) points to findings that individuals with impulse-control disorders and individuals with substance use disorders both score highly on measures of impulsiveness and sensation seeking. Further, in terms of biological predispositions, he argues that individuals with both substance use disorders and a number of impulse-control disorders (including pathological gambling) are characterized by low levels of the serotonin metabolite 5-hydroxy-indole-acetic acid and diminished activation of the brain region vmPFC.

In summary, while investigations into impulsivity and compulsivity continue, the ways in which impulse-control and non-substance addiction disorders might relate to compulsive spectrum disorders and other disorders such as binge eating and obsessive-compulsive disorders remains largely untested. Overlap between proposed categories of obsessive-compulsive (or impulsivity/compulsivity) disorders and non-substance addiction (impulsivity/addiction) disorders leaves room for debate on how impulsivity disorders relate to addictions on the one hand, and compulsions on the other.

The outcome of debates regarding how addiction disorders, obsessive-compulsive disorders, and impulse-control disorders might relate and be re-classified in the DSM-V will likely influence future directions of research in the area of compulsive shopping disorder. In turn, investigations into compulsive shopping disorder contain the potential to inform our understanding of some of the ways in which addiction disorders, obsessive-compulsive disorders, and impulse-control disorders might relate.

CHAPTER 4

ASSESSMENT OF COMPULSIVE SHOPPING DISORDER

In the early 1990's researchers began proposing screening measures that might be used to differentiate clinically significant compulsive shoppers from the rest of the population. While a number of screening measures have been proposed, only two scales have been based upon empirical research: the Compulsive Buying Scale (CBS) (Faber and O'Guinn, 1992), and the Edwards Compulsive Buying Scale (ECBS) (Edwards, 1993).

The vast majority of compulsive shopping disorder studies use the CBS to identify compulsive shoppers (Black, 2008; Manolis, Roberts, Kashyap, 2008; Benson, 2000). Accordingly, the profile of compulsive shoppers that has emerged from the literature is based largely on studies using the CBS (Manolis & Roberts, 2007; Roberts, Manolis, & Tanner, 2003). However, since some researchers argue for the superiority of the ECBS over the CBS (Manolis & Roberts, 2007; Roberts, Manolis, & Tanner, 2003), a description of both scales is worthy of elucidation.

The Compulsive Buying Scale

In drawing upon data from their 1989 study, Faber and O'Guinn (1992) proposed a clinical screening questionnaire titled, "The Compulsive Buying Scale" (CBS) to differentiate compulsive shoppers from typical spenders. In their study, Faber and O'Guinn (1992) recruited 388 individuals who sought to participate in a self-help group for individuals with compulsive buying problems, but who had not yet received help. A comparison sample

was comprised of 292 randomly chosen adult respondents who were contacted via a mass mailing requesting volunteers. According to the authors, an initial pool of 29 Likert-scaled screening items was created based upon interviews with compulsive shoppers and a review of empirical literature on compulsive shopping disorder (Faber and O'Guinn, 1992). The initial pool of sample items included in their screener consisted of items designed to measure motivations for spending, perceived value of money, and emotional states experienced during and after shopping episodes.

To refine their initial 29 item pilot questionnaire, Faber and O'Guinn (1992) took a somewhat exploratory approach to item development. The researchers entered all 29 items they had created into a logistical regression to see which items were most highly correlated with the dependent measure in the regression. The dependant measure was dichotomously divided between the sampled problem shopper population and the random population sample. The final scale consisted of seven items whose contribution to the model was significant at the $P < .05$ level in the logistical regression (using the Wald Statistic X^2). If an individual's total score on the refined seven-item measure fell two standard deviations above the normal population mean (which was estimated to yield a 70% probability level of being a member of the compulsive shopping sample) the individual was said to qualify as a compulsive shopper.

The authors argue for the scale's sensitivity and generalizability by pointing out that among the self-identified problem spenders, 85.3% met criteria for compulsive shopping on the CBS according to the two standard deviations above the mean cut-off criteria. In contrast, less than 11% of the general population sampled was likely to screen positive for compulsive shopping on the CBS using the scale's diagnostic cut-off score.

The final items included in the CBS are presented in Table 2, below:

Table 2: The Compulsive Buying Scale (1992)

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

To assess the criterion validity of their scale, Faber and O'Guinn (1992) compared responses to the CBS and 12 other correlates and outcomes across 22 self-identified compulsive shoppers, 22 individuals who qualified for compulsive shopping according to the CBS, and a comparison group of 22 non-problem spenders. Criterion measures included measures of obsessive-compulsiveness (five items), self-esteem (five items), fantasizing (three items), materialism (24 items), envy (four items), object attachment (three items), emotional lift (three items), remorse (one item), number of credit cards owned (1 item), credit cards paid in full each month (one item), credit cards within \$100.00 of their limit (one item), and percent of monthly income going to debt (one item). On all but two sets of measures (both having to do with credit card debt), the self-identified compulsive shoppers and those who were diagnosed with compulsive shopping disorder by the CBS had highly correlated responses which were, taken together, significantly different than responses from the 22 non-problem spenders.

Faber and O'Guinn (1992) argued that their criterion validity findings were consistent with their own research on compulsive shoppers as fitting within a larger pattern of compulsive consumption behaviors (O'Guinn and Faber, 1989). Specifically, they stipulated

that, in comparison to the general population, compulsive shoppers are more compulsive, have lower self-esteem, a greater ability to fantasize, are more materialistic, gain a greater emotional lift from shopping, are more envious of the possessions of others, and are more attached to objects they own than are non-compulsive shoppers.

Criticisms

While the CBS has become widely adopted by researchers interested in compulsive shopping, a few criticisms of the scale are worth noting. One criticism involves the scale's construction. The CBS was constructed using a seemingly atheoretical approach. Final items were selected based on how good of a statistical fit they were with the dependant measure ipso facto, rather than whether they theoretically captured important features of compulsive shopping. Thus, the compulsive buying scale is not specifically designed to correspond with proposed diagnostic criteria for compulsive shopping or even with Faber and O'Guinn's (1989) original theoretical argument for core features that define compulsive shopping. As such, the scale itself does not measure pre-occupation with buying, frequency of impulse buys, negative emotions that might contribute to buying, or feelings of guilt and/or anxiety that were hypothesized by Faber and O'Guinn (1989) to follow purchases among compulsive shoppers (Faber and O'Guinn 1989).

Instead, the authors argue for the scale's relationship to the definition of compulsive shopping by stating that because a high number of individuals who screened positive for compulsive shopping on the CBS also scored high on the battery of measures hypothesized to be generally related to compulsive shopping, it is likely that their scale is capturing individuals with core features of compulsive shopping. Faber and O'Guinn's (1992) arguments about the criterion validity of their scale is undermined, moreover, by the small

sample size of all the three comparison groups (22 members in each group) upon which they base these assertions. Finally, their findings have not been replicated by other researchers.

A more general criticism of the CBS scale is that, based on face value alone, several items included would appear more apt to capture individuals with financial difficulties than those with compulsive shopping problems, per se. This criticism has been noted by several investigators (Koran et al, 2006; Manolis & Roberts, 2008). Specifically, four of the seven questions listed on the screener appear more reflective of financial difficulties or financial management difficulties than with compulsive shopping difficulties. These four questions include: (1) Bought things even though I couldn't afford them; (2) Wrote a check when I knew I didn't have enough money in the bank to cover it; (3) If I have any money left at the end of the pay period, I just have to spend it, and; (4) Made only the minimum payments on my credit cards.

In today's strapped financial times, it is easy to see how many shoppers might strongly endorse the above four items, even though they might not meet criteria for a compulsive shopping disorder. Thus, although Faber and O'Guinn (1992) have found that 87% of self-identified problem-shoppers included in their study also met criteria for compulsive shopping based on the CBS's cut-off criteria, it is unclear whether this group might truly qualify for a diagnosis of compulsive shopping disorder based on the proposed DSM criteria.

Overall, the assertion that the CBS is capturing individuals who meet criteria for compulsive shopping and, more broadly, compulsive consumption tendencies, lacks statistical power. Moreover, the CBS was constructed using a seemingly atheoretical approach. Thus, the compulsive buying scale is not specifically designed to correspond with

proposed diagnostic criteria for compulsive shopping or even upon Faber and O'Guinn's original theoretical argument for core features that define compulsive shopping.

The Edwards Compulsive Buying Scale

A second scale that screens for compulsive shoppers that has been empirically tested was created by Elizabeth Edwards (1993). While this scale is far less utilized in the literature on compulsive shopping disorder, it is worth examining because it arguable improves on the CBS. While the CBS sets up a dichotomous categorization between compulsive and non-compulsive shoppers, the Edwards Compulsive Buying Scale (ECBS) (1993) allows for a more graduated approach and identifies individuals along a spectrum of problem shopping behaviors that range from individuals who shop recreationally, to occasional compulsive shoppers, to chronic and "addictive" over-spenders.

Another essential difference between the CBS and the ECBS is that unlike Faber and O'Guinn (1992), Edwards (1993) started from a theoretical conception of CSD and then intentionally designed her scale to measure shopping in relation to her theory. More specifically, the ECBS was designed to measure five aspects of the compulsive shopping experience based upon a review of empirical literature related to stages of addictive disorders and upon the proposed definition of compulsive shopping put forward by McElroy et al. (1994a). The five factors measured by the ECBS include: (1) tendencies to spend (i.e. frequency of buying episodes) (2) compulsion/drive to spend (to include items measuring preoccupation, compulsion, and impulsiveness in shopping and spending patterns) (2) joy experienced while shopping and spending, (3) dysfunctional spending (designed to measure dysfunction surrounding and resulting from shopping behavior), and, (5) post-purchase guilt. Ironically, while the CBS might be criticized for not including items thought to be core to

compulsive shopping disorder, the five factors in the ECBS are designed to correspond to the four-step cycle of “compulsive consumption” that O’Guinn and Faber argue characterize the compulsive shopping experience (O’Guinn and Faber, 1989).

In testing an original pool of 29 Likert-scale items designed to measure the five factors embedded in her scale, Edwards (1993) recruited 104 compulsive shoppers through support groups advertising help for individuals with shopping compulsions and through financial counselors, tax attorneys, and counselors who specialize in helping compulsive spenders overcome their excessive spending and borrowing habits. The responses of this compulsive shopping group were then compared to 101 individuals who were randomly recruited via a randomized mass mailing.

Based on tests of internal reliability and validity using an exploratory factor analyses and Cronbach alpha tests of reliability, Edwards (1993) boiled her final scale down to 13 items. The scale is reproduced in Table 3, below.

Table 3: Edwards Compulsive Buying Scale

The questions below ask about your attitudes toward shopping. For each item indicate the degree to which you agree or disagree.

< 1 -----2-----3-----4-----5-----6>

Strongly Disagree	Disagree Somewhat	Neutral	Agree Somewhat	Strongly Agree
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1. I feel driven to shop and spend, even when I don't have the time or the money.
2. I get little or no pleasure from shopping.
3. I hate to go shopping.
4. I go on buying binges.
5. I feel “high” when I go on a buying spree.
6. I buy things even when I don't need anything.
7. I go on a buying binge when I'm upset, disappointed, depressed, or angry.
8. I worry about my spending habits but still go out and shop and spend money.
9. I feel anxious after I go on a buying binge.
10. I buy things even though I cannot afford them.
11. I feel guilty or ashamed after I go on a buying binge.
12. I buy things I don't need or won't use.
13. I sometimes feel compelled to go shopping.

Criticisms

Edwards' (1993) final 13 item ECBS scale was demonstrated to have good internal consistency using Cronbach's alpha (range .76-.91). In addition, a confirmatory factor analysis supported the scale's five factor structure (χ^2 value of 451.26, with 265 degrees of freedom; $p=.000$; a goodness of fit index of .766; AGFI=.713 and RMR of .079). However, while the ECBS would seem to contain several improvements over the CBS, Edwards failed to adequately test the scale's construct validity through tests of divergent and convergent correlations, nor did she test the convergent and divergent validity of any of the five aspects that the ECBS was designed to measure. A final major criticism of the scale is that Edwards failed to establish cut of scores for a diagnosis of compulsive shopping, thus limiting the scale's ability to serve as a screening device to identify compulsive shoppers.

CBS/ECBS Comparisons

The only study know to directly compare the validity and reliability of the CBS (Faber and O'Guinn, 1992) to the ECBS (Edwards,1996), was recently conducted by Manolis and Roberts (2008). In their study, Manolis and Roberts (2008) administered both compulsive buying screeners to a sample of 406 college students (48 % female and 52% male), along with four scales known to be associated with compulsive buying and designed to measure attitudes toward money, status consumption, credit card misuse, and materialism. In an effort to further evaluate the internal validity and reliability of the two scales, the authors conducted a confirmatory factor analysis on both scales. As expected, the authors found that each of the seven items in the CBS scale loaded onto a single factor, ($\alpha = .77$). This finding was thought to lend support to the construct validity of the CBS as a measure of one factor, compulsive buying. Similarly, in assessing the internal validity of the ECBS, a

confirmatory factor analysis measurement model with five first-order latent variables/factors produced a good fit for the 13 items in ECBS scale, as expected. This was taken to provide further support for the five factor structure of the ECBS scale.

Manolis and Roberts (2008) did, however, find some unexpected results. When they tested the construct validity of the two scales, they found that although the two scales were significantly and positively correlated to one another ($r = .59, p < .000$), they each correlated with a different set of scales used to assess for the criterion validity. Specifically, when tested as a mediating variable between materialism and credit card misuse, the ECBS was found to be positively impacted by the endorsement of high materialistic value orientations, which, in turn, positively impacted credit card misuse. In comparison, the CBS was not positively impacted by the endorsement of high materialistic value orientations. Further, while both scales significantly correlated with status consumption (i.e. buying to accrue goods that bolster one's status), only the CBS was significantly correlated with a scale measuring the tendencies to view money as a source of security and power. Based on these findings, the authors concluded that the Faber and O'Guinn (1992) and Edwards (1993) compulsive buying scales were capturing either separate constructs or different dimensions of the same compulsive buying construct.

Gaps in the Research and Testing of Both Scales

Neither scale has, to date, been directly compared to proposed diagnostic criteria for compulsive shopping disorder. As such, the degree to which there is agreement between proposed diagnostic criteria for compulsive shopping disorder and scales used to screen for the disorder has not yet been adequately established. Therefore, neither the CBS nor the ECBS provide convincing evidence that there will not be individuals who meet criteria for

compulsive shopping according to the screeners, but who do not actually meet clinical criteria for compulsive shopping disorder according to the proposed DSM definition of the disorder (McElroy et. al., 1994).

A broader issue is the lack of demonstrated correspondence between clinical definitions of compulsive shopping disorder, measurements for the disorder, and predictable correlates postulated to be associated with the disorder. This would seem to pose a major roadblock to the establishment of compulsive shopping disorder as a syndrome worthy of consideration in the field of clinical studies. Until there is such agreement between measures and definition of a disorder, on what grounds can the disorder be said to truly exist? In order for the field of compulsive shopping studies to advance, it would seem that studies to investigate such linkages must first be better established.

Summary

In summary, while two measures for compulsive shopping now exist, the construct validity of both scales remains questionable because neither scale has been demonstrated to have adequate criterion or discriminant validity. While the CBS scale underwent some tests for convergent validity, the sample sizes used to conduct these tests during the scale's development were too small to render conclusive findings and no tests of discriminant validity were performed. The ECBS, on the other hand, did not undergo any tests of convergent or discriminant validity as part of its initial creation and validation. Additionally, in the only study to comparatively assess the construct validity of both the CBS and the ECBS (Manolis and Roberts, 2008), each scale was shown to correlate with different measures thought to relate to compulsive shopping disorder, indicating that both measures appear to be tapping different constructs. Finally, neither the CBS nor the ECBS has been directly

compared to proposed criteria for compulsive buying, making it unclear whether either truly captures individuals who would meet criteria for a diagnosis of compulsive shopping disorder based upon criteria being put forth for consideration in the next edition of the DSM.

A valid measure of compulsive buying is essential for researchers and clinicians to more accurately identify individuals who suffer from compulsive shopping disorder, estimate the magnitude of the problem, address the antecedents and consequences of shopping behavior, and design treatments. The study presented in the following chapter attempts to fill in some of these gaps.

CHAPTER 5

A COMPARITIVE EVALUATION OF TWO MEASURES OF COMPULSIVE SHOPPING DISORDER

An important step in advancing compulsive shopping disorder as a true disorder that potentially merits inclusion in the DSM is the firm establishment of clinical measures that reliably capture individuals with the disorder. With this in mind, the intent of the present study is twofold. To gain a better evaluate the proposed DSM definition of compulsive shopping disorder. And to comparatively evaluate the utility of two existing measures of compulsive buying disorder.

To achieve these objectives, the present study will be comprised of several aims. First, the CBS and ECBS scales will be compared to one another to assess the degree to which they correlate. Second, because neither the CBS or the ECBS has been directly compared to clinical criteria for compulsive shopping disorder, these two scales will be compared to a scale that directly converts the clinical criteria for compulsive shopping proposed by McElroy et. al.(1994) into questions instead of statements (the SBM). Third, in order to help test the criterion validity of the CBS and the ECBS as well as the DSM description of compulsive shopping (as measured by the SBM), the three scales will be compared to six measures known to be associated or correlated with compulsive shopping. These six constructs include low self esteem, anxiety, depression, desire for social approval, impulsivity, and obsessive-compulsive traits. It is expected that scales that capture

compulsive shoppers will positively and significantly correlate with scales measuring these six constructs.

In addition to testing the criterion validity of existing scales and the clinical criteria scale, the present study will compare compulsive shopping to other less etiologically related disorders. Such tests have thus far been absent in the literature, but are a necessary in determining the validity of the CBS, the ECBS, and the SBM. A test developed to test math anxiety, for example, must first show that it is not a general anxiety test or that it is not simply capturing adolescent angst, neither of which has to do with math. Similarly, a screeners used to identify compulsive shoppers must first be shown to be identifying shoppers as opposed to individuals who are just generally compulsive or impulsive across behaviors. Therefore, the present study will aim to compare the CBS and ECBS and the SBM to measures used to identify other clinical disorders that are thought to differ from compulsive shopping disorder, but share impulsive and compulsive behavioral features. Specifically, It is hypothesized that measures of compulsive shopping disorder will not significantly correlate with measures designed to assess for eating disorders and alcohol and drug addictions.

Study I

Specific Aim and Hypotheses

Despite widespread adoption of the CBS as the screener of choice for compulsive shopping, the content validity of the scale would appear questionable as the measure contains several items that appear to confuse financial hardship or financial irresponsibility with compulsive shopping as it is clinically defined. Therefore, it is hypothesized that the CBS will have a moderate to mild relationship to diagnostic criteria for compulsive shopping

disorder and that responses to the CBS will correlate only moderately, at best, to diagnostic criteria for compulsive shopping disorder. In contrast to the CBS, the ECBS would appear to contain a greater number of items considered core to the definition of compulsive shopping. As such, it is hypothesized that the ECBS will have a strong positive relationship to proposed DSM clinical criteria for compulsive shopping disorder. In addition, it is hypothesized that the proposed DSM clinical criteria for compulsive shopping disorder, as represented by the clinical criteria scale (the SBM), will correlate significantly more highly with the ECBS than with the CBS.

In addition to assessing the degree to which measures of compulsive shopping disorder relate to proposed criteria for the disorder, the ECBS and CBS measures of compulsive shopping disorder will be compared to each other to examine the degree to which they correlate. It is argued that these tests of convergent validity will help test the construct validity of both measures and provide an additional assessment of their utility as diagnostic screening devices. It is argued that if all scales are measuring the same phenomenon, then they will not only significantly correlate with clinical definitions of the disorder of compulsive shopping, but also with one another.

An additional aim of the present study is to help assess the criterion validity of the the CBS, the ECBS, as well as the clinical criteria scale (the SBM). In alignment with past research on compulsive shopping, is hypothesized that all three scales will correlate more positively and significantly to measures of obsessive-compulsive symptoms and impulsivity than to measures used to assess other clinical disorders. In addition, it is hypothesized that compulsive shopping disorder will be moderately related to clinical syndromes which are thought to fuel compulsive spending episodes. Specifically, because feelings of depression,

anxiety, and low self-esteem are thought to drive the cycle of compulsive spending among compulsive shoppers (O'Guinn and Faber, 1989; Faber et. al, 1995; Hollander and Allan, 2006), it is hypothesized that individuals who score highly on the CBS, the ECBS, and on the clinical criteria scale will also be more likely to score highly on measures of depression, anxiety, and low-self-esteem.

To assess the discriminant validity of the three scales, because compulsive shopping has been hypothesized to bear etiological features in common with substance abuse and eating disorders (Faber et. al, 1995) it is hypothesized that compulsive shopping will not be significantly correlated, only mildly related, to alcohol and drug abuse and eating disorders (bulimia and anorexia). Measures selected to assess for addiction and eating disorders ask about rates of substance use and food intake, whereas it is believed that compulsive shoppers are more likely to turn to shopping as their consumptive article of choice.

Method

Participants and Procedures

A sample of 412 undergraduate students at the University of North Carolina, Chapel Hill, as well as of a community sample of 29 individuals was used. The community sample included a sub-sample of 19 self-reported compulsive shoppers who were recruited from a 12-step self-help group for compulsive shoppers in the Chapel Hill, NC area. The undergraduate sample consisted of 256 women and 156 men between the ages of (18-22). The mean average annual income reported for this sample was \$18,000. The community sample consisted of 16 women and 13 men between the ages of 19-51 (median age =37). The average annual income reported for this sample consisted of \$67,000.

Undergraduate participants volunteered to take part in the study in exchange for 2 hours of experiment-participation credit to go toward the fulfillment of Introduction to Psychology course.

The community sample of compulsive shoppers was randomly recruited through an online classified ad requesting volunteers to participate in a study about “Why we shop.” The volunteer request was posted on a classified advertisements website, www.craigslist.com. The Craig’s List website-user demographic includes individuals from a wide range of age groups and income levels from locations all across the United States. While 119 volunteers from the community sample participated in the present study, most of the data from these individuals was unusable due to repeated responses (i.e. checking the same response across all questionnaires), or due to incomplete responses. Data from only 10 individuals (7 women and 3 men) were used from the community sample. In addition to the community and undergraduate samples, a sub-sample of self-reported compulsive shoppers was recruited through two Debtors Anonymous (DA) organizations located in North Carolina (N=19). Volunteer participants from the community samples were not offered any rewards in exchange for participation. Participants were told that their responses would go toward better understanding the disorder of compulsive shopping. Participants were also told that they would be mailed copies of the final report (with de-identified data) in exchange for participation upon completion of the study if they wished to separately email the present author requesting a copy of study results.

All participants in both the community and undergraduate samples were asked to provide responses to a number of self-report measures online. Prior to participating in the study, all participants were informed of the confidentiality of their responses and their right

to withdraw from the study at any time without incurring any penalties. Each participant filled out a brief demographic survey before completing the study. The demographic survey included questions about age, gender, ethnicity, average income, and a question about prior mental health diagnosis. Participants with mania, bipolar disorder, or cyclothymia were pre-screened and excluded from the study.

Measures

Individuals from all sample groups accessed each of the screening measures online via the website www.shopping-study.com.

Comparing the measures to one another. All participants were asked to complete three self-report scales:

1. The Compulsive Buying Scale (CBS)
2. Edwards Compulsive Buying Scale (ECBS)
3. The Shopping Behavior Measure (SBM): The SBM was created for the purpose of the present study. It is a 6-item behavioral measure of compulsive shopping derived directly from the McElroy et. al. (1994) proposed diagnostic criteria for compulsive shopping. Items presented in the SBM adhere strictly to diagnostic criteria proposed and have been only slightly altered so that they appear in the form of questions instead of diagnostic statements. A presentation of the clinical screening criteria for compulsive shopping (McElroy et. al. (1994) and the SBM is presented below in Tables 4 and 5 for the purpose of comparison.

Table 4: Diagnostic Criteria for Compulsive Buying

-
- 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 preoccupation 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 preoccupations, 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.
-

Table 5: The Shopping Behavior Measure

For each item indicate the degree to which you agree or disagree.

<1 -----2 ----- 3 ----- 4 ----- 5-----6>

Strongly Disagree Neutral Agree Strongly
Disagree Somewhat Somewhat Agree

- 1. I engage in impulses to buy that are experienced as irresistible, intrusive, and/or senseless.
 - 2. I engage in preoccupations with buying that are experienced as irresistible, intrusive, and/or senseless.
 - 3. I tend to buy more than I can afford.
 - 4. I tend to buy items I have no need for.
 - 5. I tend to shop for longer periods of time than intended.
 - 6. My shopping behavior causes marked distress, is time-consuming, and significantly interferes with social or occupational functioning, and/or results in financial problems (e.g. indebtedness or bankruptcy).
-

Measures to test convergent and divergent validity. In addition to completing questionnaires that concerned compulsive shopping, all participants filled out eight additional scales to test the divergent and convergent validity of the three measures of compulsive shopping listed above. The eight scales included:

- 1. Substance Abuse Subtle Screening Inventory-III (SASSI-III): The SASSI-III is a 26-item widely used, psychometrically sound self-administered screening questionnaire used to assess problem drinking and problem drug use. (White &

Labouvie, 1989).

2. Eating Disorders Examination Questionnaire, version 4 (EDE-Q4): The EDE-Q4 is a 23-item widely used, psychometrically sound self-report screening questionnaire used for assessing bulimia and anorexia (Mitchell, et. al.1985).

3. The Barratt Impulsiveness Scale (BIS): The BIS is a 30-item self-report scale used to identify the degree to which individuals tend to engage in impulsive, rapid, or unplanned actions without regard to the negative consequences (Barratt, 1959; Patton et. al., 1995).

4. Brown ADD Scale (adult) (BADD): The BADD is a widely used, psychometrically sound 40-item self-report scale used to help determine a diagnosis of attention deficit disorder (Brown, 1996).

5. Beck Depression Inventory (BDI): The BDI is a widely used, 21-item psychometrically sound questionnaire used to measure cognitive, affective, and somatic states commonly associated with depression. (Beck, Ward, Mendelsohn, Morch, & Earlbach, 1961).

6. Beck Anxiety Inventory (BAI): The BAI is a 21-item psychometrically sound questionnaire used to measure physiological, affective, and cognitive states commonly associated with anxiety. (Beck, Epstein, Brown, & Steer, 1988).

7. Obsessive-Compulsive Inventory-Revised: The OCI-R is an 18 item, psychometrically sound self-report scale used to assess the frequency and distress associated with behaviors and experiences often associated with OCD. (Foa et. al. , 2002). Specifically, the OCI-R measures the frequency and distress associated with washing, checking, ordering, obsessing, hoarding, and neutralizing behaviors.

8. The Rosenberg Self Esteem (RSE) scale is a 10-item self-report measure used to assess global feelings of self-worth or self-acceptance. (Rosenberg, 1965).

Proposed Analyses

Tests of internal validity and reliability. In an effort to assess the internal validity of the DSM criteria for the SBM, the scale was first subjected to an exploratory factor analyses (EFA). Ideally, an EFA on the SBM scale would show scale items loading on only a single dimension that represents a single latent variable – compulsive shopping.

Reliabilities of the ECBS, the CBS, and the new SBM scale were assessed using Cronbach alpha. Specifically, it was assumed that a scale is likely to have good internal consistency, or reliability, when items analyzed using Cronbach alpha are above 0.6 (Nunnally, 1978).

Comparing the scales to one another. Responses to the SBM were correlated with responses to the CBS and ECBS using the Pearson r correlation. Specific hypothesis were as follows:

Hypothesis 1: It was hypothesized that because the CBS contains a number of items that appear to relate more closely to general financial health than to clinical characteristics of compulsive shopping outlined in the literature, the CBS would only moderately correlate with the proposed-DSM measure of compulsive shopping (the SBM). To measure this hypothesis, it was predicted that responses to the SBM and to the CBS would moderately and positively correlate, and that the moderate correlation would be at least as large as Cohen's (1988) medium correlation effect size of 0.3 (medium correlations are taken to range from 0.3-0.5), but no larger than Cohen's effect size of 0.5.

Hypothesis 2: It was hypothesized that the Edwards Compulsive Buying Scale (ECBS) (1993) would be strongly related to the SBM. To measure this hypothesis, it was predicted that responses to the Edwards scale would correlate highly with responses to the SBM. Specifically, it was hypothesized that the correlation between the two measures would be positive and would be at least as large as Cohen's (1988) large correlation effect size of 0.50 (.50-1.0).

Hypothesis 3: It was hypothesized that the CBS and ECBS would measure moderately related constructs and that the two scales would moderately correlate with one another, but not strongly correlate. Specifically, it was hypothesized that a moderate positive correlation between the two scales would be at least as large as Cohen's (1988) medium correlation effect size of 0.3. To test this hypothesis, it was predicted that responses to the CBS and to the ECBS would moderately and positively correlate and that the moderate correlation would be at least as large as Cohen's (1988) medium correlation effect size of 0.3, but no larger than Cohen's effect size of 0.5.

Tests of discriminant validity. To test the discriminant validity of the three compulsive shopping scales, it was hypothesized that each of the three compulsive shopping measures would have no larger than Cohen's (1988) medium correlation effect size of 0.30 with scales used to measure alcohol abuse, drug abuse and eating disorders (anorexia and bulimia). Specifically, it was expected that each of the three compulsive shopping scales would have low correlations with the SASSI-III- alcohol and the SASSI-III- drug use measures, and with the EDE-Q.

Tests of criterion validity. To assess the criterion validity of the three measures of compulsive shopping, it was hypothesized that each of the three measures of compulsive

shopping would significantly and positively (meaning correlations as least as high as .30) relate to low self esteem (as measured by the RSES), anxiety (as measured by the BAI), depression (as measured by the BDI), impulsivity (as measured by the BIS), and obsessive-compulsive traits (as measured by the OCI-R). However, because the SBM and the ECBS were thought to be more accurate measures of compulsive shopping, it was hypothesized that these two scales would correlate with all six measures of criterion validity to a significantly higher degree than would the CBS.

Power analysis. At $\alpha=.05$, the sample size required to achieve a power of .95 in detecting differences between Cohen's (1988) large and medium effect sizes is $N=111$. The current study's sample size of $N=441$ indicates more than adequate power to detect these medium to large effect size differences needed to run the proposed analyses. The hypotheses test will be one-tailed because it is hypothesized that the convergent validity will be larger than the largest of the divergent validities—as opposed to the validities merely being different. At the alpha level of 0.05, the sample size required to achieve power of 0.80 in detecting differences between Cohen's (1988) “large” and “medium” effect sizes is $N=242$. The present study is anticipated to have substantially more than 80% power.

Results

Tests of Internal Validity and Reliability.

SBM Exploratory Factor Analysis Results

1. The scree plot findings indicated a break between the first and second factors.

Accordingly, a single factor was extracted. The percentage of variance explained by the single factor was 60.62%.

2. The factor loadings of the six items are shown below in Table 6.

3. Cronbach's alpha for the whole scale was moderate ($\alpha = .85$).

Table 6: Factor Loadings for Shopping Behavior Measure (SBM) Items (N = 441)

Item	1
SBM1	.79
SBM2	.86
SBM3	.77
SBM4	.68
SBM5	.56
SBM6	.69

Confirmatory Factor Analysis Results

1. A first-order CFA was conducted using the LISREL 8.8 version. The item with the highest inter-item correlation (in the Reliability Analysis) was fixed to 1.0.
2. Findings in Table 7 indicate that the model fit the data well. Although the RMSEA value was high, the CFI was high at .94 and the SRMR was acceptable at .06.
3. As shown in Table 8 all items loaded highly and significantly onto the sole construct.

Table 7: Chi-square and Goodness of Fit Indices for the First-Order CFA of the SBM

Index	Value
Minimum fit function chi-square	102.64
Degrees of freedom	9
Sig.	.00
Comparative fit index (CFI)	.94
Root mean squared error (RMSEA)	.18
Lower bound 95% interval	.15
Upper bound 95% interval	.20
Standardized root mean square residual (SRMR)	.06

Table 8: Maximum Likelihood Estimates for the Indicator Variables for the First -Order CFA of the SBM

Path	B	S.E.	C.R.
Compulsive shopping to:			
SBM 1	.97	.04	22.12
SBM 2	1.00		
SBM 3	.79	.05	16.14
SBM 4	.76	.06	13.71
SBM 5	.68	.07	10.28
SBM 6	.64	.04	14.22

Cronbach alpha results

To measure the overall internal reliability of each of the three compulsive shopping scales, a test of Cronbach's alpha was first computed on each scale to assess each scale's internal validity. Cronbach's alpha for the six item SBM measure was .8457. This finding indicates that the SBM scale contains strong internal consistency, or interrelatedness, between items. Cronbach's alpha for the seven item CBS scale was .8296, also indicating strong internal consistency among items. Finally, Cronbach's alpha for the 13 item Edward's Compulsive Buying Scale (ECBS) was .8770, indicating a strong relationship between scale items. Further, Cronbach's's alpha for the ECBS are reported below.

Table 9: Cronbachs' Alpha fo rthe Subscales of the ECBS

ECBS Subscales	Items	Alpha
Tendency to Spend	4, 5, 6, 7, 12	.8264
Compulsion/Drive to Spend	1	n/a
Feelings About Shopping and Spending	2, 3	.8489
Dysfunctional Spending	8, 10	.7540
Post-Purchase Guilt	9, 11	.8488

Results of Gender Differences:

Table 10: Means and Standard Deviations for Females and Males

Measure	Females (N = 258)		Males (N = 155)	
	Mean	SD	Mean	SD
Shopping behavior measure (SBM)	13.36	5.17	11.18	4.95
Edwards compulsive buying scale (ECBS)	19.47	5.59	15.57	5.12
Compulsive buying screener (CBS)	29.59	4.52	30.59	5.02

Comparing the Scales to One Another

1. It was hypothesized that the SBM would be moderately correlated to the CBS.
Instead, it was found that the SBM was strongly correlated to the CBS ($r = -.55$, $p < .01$). This indicates that the SBM and CBS reflect strongly related constructs.
2. It was hypothesized that the SBM would be strongly correlated to the ECBS. The findings indicate support for this hypothesis ($r = .64$, $p < .01$).
3. It was hypothesized that the CBS would only be moderately correlated to the ECBS.
Instead, the CBS was found to be strongly correlated with the ECBS ($r = -.59$, $p < .01$). See Table 11 below for a summary of these comparisons.

Table 11: Pearson Correlations Between Measures (N=441)

Measure	SBM	ECBS
Shopping behavior measure (SBM)		
Edwards compulsive buying scale (ECBS)	.64 **	
Compulsive buying screener (CBS)	-.55 **	-.59 **

* $p < .05$; ** $p < .01$.

Note. High scores on the SBM and ECBS indicate greater compulsive behavior; low scores on the CBS indicate greater compulsive behavior.

Tests of Discriminant Validity

It was hypothesized that the SBM would have low to moderate correlations with the substance abuse measures (SASSI- alcohol and SASSI-Drugs), and the eating disorder measure (the EDE-Q). The findings in Table 12 indicate support for these hypotheses (i.e., Pearson correlations ranged from .15 to .21).

Tests of Criterion Validity

It was hypothesized that the SBM and the ECBS would have at least moderate correlations with the Obsessive-Compulsive Inventory, the Brown ADD scale, the Rosenberg Self-Esteem Scale, the Barratt Impulsiveness Scale, the Beck Anxiety Inventory, and the Beck Depression Inventory, and the Obsessive-Compulsive Inventory. The findings in Table 12 indicate support for these hypotheses (i.e. Pearson correlations ranged from -.31 to .49, $p < .01$). It was hypothesized that the SBM would have a moderate and negative correlation with RSES. The findings also support this hypothesis ($r = -.28$, $p < .01$).

Table 12: Pearson Correlations between Measures (N=441)

Measure	CBS	ECBS	SBM
Alcohol Abuse (SASSI)	.33**	.17	.21
Drug Abuse (SASSI)	.25	.13	.15
Eating Disorders (EDE-Q)	.08	.16	.18
Impulsivity (BIS)	.38**	.30**	.33**
Anxiety (BAI)	.36**	.33**	.31**
Depression (BDI)	.10	.28	.33**
OCD (OCI-R)	.18	.39**	.43**
Impulsivity (BADD)	.34**	.36**	.39**
self-esteem scale (RSES)	-.10	-.28	-.31**

Discussion/Conclusions

The present study's finding that the two existing measures of compulsive shopping correlate highly with existing diagnostic criteria for the disorder strengthens the argument that measures for compulsive shopping are able to capture individuals who meet diagnostic criteria. However, while both the CBS and ECBS measures were found to strongly correlate with one another and to clinical criteria for compulsive shopping disorder, results of the present study indicate that the ECBS significantly more strongly correlates to definitional criteria for compulsive shopping than does the CBS. This finding indicates that despite the CBS's more frequent use, the ECBS may be a more accurate screening measure.

Another finding from the present study that supports moving away from the CBS is that the CBS did not consistently correlate with constructs thought to be associated with compulsive shopping (i.e. low self esteem, anxiety, depression, impulsivity and obsessive-compulsive traits). This was not surprising as the CBS's scale had appeared to be constructed using a seemingly atheoretical approach. More specifically, because the CBS was not specifically designed to correspond with core features that define compulsive shopping disorder, it is not taken as surprising that the scale itself did not appear to predictably correspond to constructs thought to be highly associated with compulsive shopping.

In contrast to the CBS, the SBM and the ECBS were significantly and moderately correlated with constructs thought to be related to compulsive shopping disorder. Specifically, as predicted, both measures were significantly related to the Obsessive-Compulsive Inventory, the Brown ADD scale, the Rosenberg Self-Esteem Scale, the Barratt Impulsiveness Scale, the Beck Anxiety Inventory, the Beck Depression Inventory, and the Obsessive-Compulsive Inventory-Revised. Correlations between the SBM and most of these

scales were slightly higher than Cohen's cut-off for a medium-sized correlation, indicating that compulsive shopping has more features in common with features of these disorders than with other disorders, but that it is not the same as these disorders and is not adequately captured by any one of them.

The present findings are thought to be consistent with O'Guinn and Faber's (1989) findings that individuals with compulsive shopping disorder are more prone to have low self-esteem, negative mood states such as depression and anxiety, and tendencies toward impulsivity (as evinced by moderate correlations between the SBI and the ADD scale) and obsessive-compulsive behavior. Overall, the results of the present study seem to point in support of O'Guinn and Faber's (1989) definition of compulsive shopping as a consumption disorder characterized by "chronic, repetitive purchasing that becomes a primary response to negative events or feelings, becomes very difficult to stop, and that ultimately results in harmful consequences" (O'Guinn and Faber, 1989, p. 155). The ECBS was overall a bit less correlated with clinical screeners and hence slightly more distinct from clinical disorders than the SBM. This indicates that the ECBS might, in some ways, be better at differentiating compulsive shoppers from non-compulsive shoppers than even diagnostic criteria for the disorder, as measured by the SBM.

The finding from the present study that the SBM and the ECBS correlated least highly with scales to measure alcohol abuse, drug abuse, and eating disorders (to include bulimia and anorexia) was also consistent with hypotheses. Although compulsive shopping disorder has been speculated to share features of addictive and consumptive disorders because of an underlying tendency to turn to an external source for relief from negative emotions, the disorders are different in terms of the form of addiction. While individuals with

eating disorders turn to food to cope with negative emotions and low self-esteem and individuals with substance abuse difficulties turn to drugs or alcohol to receive relief, individuals with compulsive shopping difficulties seem to turn to shopping as their primary means of coping with negative mood states and low self-esteem.

Results of the current study, moreover, would seem to support arguments that compulsive shopping might best be characterized as a sub-type of “non-substance addictions,” in that findings support that while compulsive shoppers tend to score higher than average on measures of compulsivity, impulsivity, and anxiety and depression, they may be more prone to using shopping, in favor of substances or food, as a way to manage these negative emotions and to channel their impulsive/compulsive drives.

Finally, in terms of gender differences, with the exception of the CBS, which is argued to be a problematic measure of compulsive shopping, results of the present study indicate that women are more likely to engage in compulsive shopping behavior than men. This finding lends support to previous studies that conclude women are more likely to develop a compulsive shopping disorder (Black, 1994; McElroy, Keck, & Pope, 1994; Faber & O'Guinn, 1992). It is possible that biologically based differences as well as differences in socially approved behavior help account for the predominance of female compulsive shoppers (i.e. women may be more likely to see shopping as a socially approved behavior than men). More broadly, investigations into gender differences found in compulsive shopping disorder as well as into other disorders that have been characterized by uncontrollable and repetitive behaviors are likely to lend important insight into the etiology of these disorders. Teasing out precisely why, for example, men are more prone to compulsive gambling and substance abuse, while women are more prone to eating disorders,

kleptomania, and compulsive shopping, may help inform our understanding of how these various disorders might relate, how they might differ, and how they might be re-classified in the DSM-V. Given the presence of significant life problems as a result of this variety of impulsive behaviors in men and women studies into the combination of biological and environmental origins of these problems in men and women are clearly indicated.

Several limitations to the present study's findings, however, stand in the way of being able to assert that adequate measures of compulsive shopping exist, therefore rendering present results tentative. First, the ECBS has not yet been tested to determine useful cut of scores for making a determination of whether or not an individual might qualify for a diagnosis of compulsive shopping disorder. Therefore, it cannot yet be considered a useful measure for identifying individuals with compulsive shopping disorder. While such rigorous psychometric testing goes beyond the scope and intent of the present paper, the present study indicates that further testing of normative data to determine cut off scores for the ECBS might be worthwhile. Among other things, ECBS may allow researchers to more accurately estimate the number of individuals affected by compulsive shopping disorder. In addition, the ECBS's ability to measure degrees of problem severity and to differentiate compulsive and addictive ends of the problem-shopping spectrum may prove to be useful to efforts to help establish what category of disorder compulsive shopping might best fall under.

Reevaluating the Clinical Criteria for Compulsive Shopping Disorder

Another obstacle to the assertion that adequate measures of compulsive shopping exist is that there remains the possibility that the proposed diagnostic criteria for compulsive shopping disorder may, in themselves, be in need of further refinement. While it was hypothesized that the DSM scale and the CBS would be only moderately related because the

CBS appeared to contain items that seemed to be more related to financial health than to characteristics of compulsive shopping disorder, per se, the finding that the two scales turned out, in fact, to be highly related might indicate that either proposed clinical criteria for compulsive shopping is not specific enough or that it too contains items that are more reflective of financial health than of identified characteristics of compulsive shoppers.

One way to explain the high degree of overlap between the CBS and diagnostic criteria for compulsive shopping disorder, in other words, may be that proposed diagnostic criteria for compulsive shopping disorder may not yet be sensitive or specific enough to adequately differentiate individuals with financial difficulties from true compulsive shoppers.

A closer look at DSM criteria for compulsive shopping does, in fact, reveal one item that potentially confounds financial hardship with compulsive shopping disorder. Specifically the item, “[f]requent buying of more than can be afforded, frequent buying of items that are not needed, or shopping for longer periods of time than intended,” could, conceivably, be endorsed by individuals who simply have limited finances or financial management difficulties. Thus, it is possible that while proposed diagnostic criteria for compulsive shopping disorder may capture some individuals with compulsive shopping difficulties, the diagnostic criteria may be too broad. In other words, the criteria may capture not only individuals with compulsive shopping problems, but also individuals with general financial problems.

It is likely that proposed diagnostic criteria for compulsive shopping disorder could be refined and re-designed to eliminate individuals with financial hardship and to include more items that capture characteristics of the disorder that are considered core to compulsive shopping disorder. For example, items might be added that assess emotions experienced

before and after shopping, such as an increase in negative emotions (like low self-esteem or anxiety) after shopping, or positive emotions experienced during shopping (such as feelings of intoxication, pleasure, or relief). In addition, instead of asking about the frequency of shopping episodes or the time spent shopping, the DSM criteria might do better to ask specifically about frequency of impulsively driven shopping behaviors .

Summary

In summary, it is stipulated that while scales used to diagnose individuals with compulsive shopping disorder are useful at identifying individuals who experience compulsive shopping episodes, they may also be capturing individuals who do not necessarily fit into the compulsive buying pattern thought to be characteristic of compulsive shoppers. These scales may also capture individuals that are simply experiencing financial hardship. The present study's findings indicate that both existing scales used to diagnose compulsive shoppers as well as clinical criteria itself might be over-inclusive. As such, though existing measures are not entirely without usefulness at identifying individuals with compulsive shopping difficulties, the present study suggests that compulsive shopping disorder may require more refined diagnostic criteria and more accurate measures.

CHAPTER 6

CHARACTERISTICS OF COMPULSIVE SHOPPERS

A number of researchers have argued that individuals with compulsive shopping disorder, binge eating disorder, addictive behaviors, and impulsive and compulsive behaviors all share a proclivity to repetitiously engage in maladaptive behaviors that are largely experienced as being outside of their rational control (O'Guinn and Faber, 1989; McElroy et al. 1994b; Potenza, 2006; Hollander and Allan, 2006). While a variety of well-defined emotional, cognitive, biological, and social risk factors mediate the relationship between individual proclivities to experience one type of disorder over another, comparatively little research still exists to help define why compulsive shoppers are prone to shop despite adverse consequences.

This Chapter surveys theories and studies explaining what drives people, including compulsive shoppers, to shop. It then briefly surveys other maladaptive behaviors potentially related to compulsive shopping disorder and posits a new theory that jettisons rigid categorizations for the more dimensional approach potentially favored by the DSM-V. This Chapter concludes with a new screener, the Shopping Motivations Inventory, that seeks to assess for a broader range of motivations and emotions that are stipulated to contribute to compulsive shopping than previous scales are able to identify. The primary objective for creating the screener is to allow for richer and more accurate investigations of compulsive shopping disorder that might help shed light on existing debates.

Shopping as a Coping Mechanism

Psychologist Linda Furby (1978b) drew upon empirically-grounded studies in anthropology and child development to arrive at a theory explaining why individuals at various stages of human development are motivated to acquire non-utilitarian, luxury possessions. Furby's (1978b) investigation led her to the simple theory that individuals turn to possessions primarily to gain a sense of mastery and control over various aspects of their lives that they feel they lack control over, are seeking to develop, or are insecure about. Her early study into why we value possessions spawned other important work suggesting that individuals shop to cope with social, emotional and esteem concerns.

Furby (1978b) asked 420 participants (270 American and 150 Israeli) from 6 age groupings (kindergarten, second, fifth, eighth, and eleventh grades, college undergraduates, and 40-50 year old adults) a simple question, "what motivates your desire for possessions?" Analyzing response patterns, Furby (1978b) broadly asserted that the desire to acquire seemingly non-utilitarian possessions is, at root, driven by a perception that the objects one seeks to acquire will bring about enhanced feelings of mastery and control over areas of psychological and developmental importance. As Furby states, "the germ of acquisitive behavior is an `innate impulse to grasp and handle all those objects which, in some manner or other, serve to satisfy the fundamental needs" (Furby, 316). While Furby's (1978b) theory is intriguing, she did not, unfortunately, explicitly state what types of "fundamental needs" possessions serve to satisfy, nor did she directly tackle the issue of compulsive shopping.

In 1996, Jennifer Dyl and Seymour Wapner (1996) conducted a study to advance testing of Furby's philosophically interesting ideas. In their study, Dyl and Wapner (1996) concluded that most individuals value their possessions because they tend to serve one of

four broad psychological functions. The researchers maintained that across age groups and genders, possessions tended to be valued because they functioned as aids to: (1) self-identity development (i.e. possession serve to connect individuals to personal-interest domains, to phases in their past, or to remind them of their ideals or goals); (2) social development (i.e. possessions serve as a means of “fitting-in,” “practicing for,” “getting closer to,” or reminding oneself of imagined audiences or significant others); (3) emotional development (i.e. possessions serve as tools for helping manage emotions or escape from negative emotions); and (4) play (i.e. possessions were used for the purpose of exercising imagination or practicing activities that advance motor and sensory development).

Dyl and Wapner’s (1996) conclusion that possessions appear to serve as broad aids to social, emotional, and identity development (not to mention sensory, motor, and imagination development) across various stages of childhood and adolescence is noteworthy because it was among the first that investigated the ways in which we might turn to possessions to cope or manage psychological concerns. An obvious limitation to the Dyl and Wapner (1996) study, however, is that its analyses were applied only to possessions, leaving open the question of how, or if, shopping might relate to the management of psychological needs.

While the Dyle and Wapner (1996) study is concerned with possessions, British researcher Helga Dittmar (2000) set to investigate how shopping urges might similarly relate to attempts to cope or manage areas of social, emotional, or self-esteem concern. In a series of three studies that have been summarized in the chapter, *The Role of Self Image in Compulsive Buying*, Dittmar (2000) mailed an open ended survey to both a random population sample (N=236) and to a group of compulsive shoppers identified using the CBS (N=95). In the questionnaire, individuals were asked to list items recently purchased on

impulse, as well as to describe what motivated recent impulse shopping decisions. Across both groups, Dittmar (2000) found that both compulsive and non-compulsive shoppers frequently mentioned purchasing impulse items not only because of their usefulness (48%), but because the item was perceived to provide mood improvement (20%) and enhance self-image (52%) (Dittmar, 2000).

Moreover, Dittmar (2000) found that while both compulsive and non-compulsive shoppers tended to purchase items for the three reasons stated above, compulsive shoppers were significantly more likely to report buying items because of the mood improvement and self-image improvement features promised by products than were non-compulsive shoppers. Dittmar's (2000) research is valuable because it serves to bridge investigations that consider the psychological functions of possessions to an understanding of what motivates shopping behavior.

In summation, researchers have long come to a general understanding of some of the ways that objects function to help individuals cope or manage emotional, social, or self-identity and self-image concerns. However, they are just beginning to examine some of the ways that compulsive shopping might relate to these domains. Together, these studies, which report similar findings across culture and age ranges, suggest that there may be something primary about tendencies to look to goods and products to help manage social, emotional and identity concerns. Some of the specific ways that shopping episodes may be used to help manage these domains of importance are presented below.

Emotion Management

In their 1989 comparison of self-identified compulsive versus non-compulsive buyers, O'Guinn and Faber found that compulsive shoppers were more likely to experience three negative mood states before shopping than were the comparison group. Specifically, O'Guinn and Faber (1989) found that a third of the 386 self-identified compulsive shoppers interviewed reported experiencing boredom (47.8%), sadness or depression (39.1%), and anxiousness (34.8%) preceding spending sprees. Further, when asked about moods during shopping, the researchers found that compulsive shoppers reported a greater range of positive emotions while shopping than did controls. Specifically, during shopping episodes, compulsive shoppers more frequently reported feeling happy (91.7%), excited (91.7%), and powerful (73.9%). In comparison, significantly fewer non-compulsive shoppers reported feeling any positive emotions while shopping. Of these, only 51% reported feeling happy.

In addition to findings concerning emotions experienced directly before or during shopping sprees, a number of studies indicate that compulsive shoppers are more likely to chronically suffer from a range of sub-clinical negative mood states. Specifically, a number of researchers have found that compared to typical consumers, compulsive shoppers score higher on measures of loneliness, anger, and irritability (Christenson, Faber, and de Zwann, 1994; Kottler 1999; and Scherhorn, Reisch, & Raab, 1990; Valence, d'Astous and Fortier, 1988), display higher levels of anxiety (O'Guinn and Faber, 1989; Scherhorn et al., 1990), and exhibit more obsessive-compulsive traits on the MMPI (O'Guinn and Faber, 1989). Taken together, this research suggests that compulsive may be more likely to chronically suffer from a range of negative emotions and to experience greater pleasure while shopping than the average shopper.

In seeking a model to explain how negative mood states might relate to compulsive shopping episodes, O’Guinn and Faber (1989) argue that the “compulsive buying cycle” may be, at root, related to broader difficulties with mood regulation. Similarly, some research suggests that compulsive shoppers may be impaired in their ability to self-regulate their emotions and tend to increase their impulsive buying tendencies when under stress and when their coping abilities have been taxed (Faber & Vohls, 2004). In support of this connection, a number of studies indicate that anti-depressants and anti-anxiety drugs used to treat OCD have been effective in the treatment of compulsive shopping disorder (Black, Gabel, and Schlosser, 1997a; Black, Monahan, and Gabel, 1997b; McElroy et. al., 1994b; Lejoyeux, et. al, 1997). Such studies support the idea that difficulties with regulating emotions underlie compulsive shopping episodes and that compulsive shoppers may be turning to shopping, principally, as a way to regulate emotional distress. Finally, that shopping urges as well as shopping episodes appear to decrease with anti-depressant drug use is taken by some to indicate a biological association between shopping urges and anxious or depressive traits, even though some compulsive shopping patients may not experience anxiety or depression symptoms at clinically significant levels (Black, Gabel, and Schlosser, 1997a; Black, Monahan, and Gabel, 1997b; McElroy et. al., 1994b, Lejoyeux, et. al, 1997).

In addition to possibly being biologically prone to experiences of negative affect, researcher suggest that compulsive shoppers use shopping as a way to manage negative emotions in a number of ways. Specifically, shopping experiences may serve as a means of reducing feelings of loneliness (O’Guinn and Faber, 1989), as a way to escape from negative mood states (O’Guinn and Faber, 1989; Miltengerger et al., 2003; Christenson et. al., 1994),

or to temporarily enhance or boost one's mood (McElroy et. al, 1994a; DeSarbo and Edwards, 1996).

In summary, although no research exists to explore how emotional needs directly relate to compulsive shopping behavior, studies suggest that compulsive shoppers may be both biologically prone to experience negative mood states and prone to turn to shopping as a way to manage, or cope with, negative emotions.

Self-Esteem Management

In the early 1900's Sigmund Freud hypothesized that anxiety and desire arise when we feel a gap between what we are, our ego, and where we want to be - our ideal or "super ego" (Freud, 1923). Although Freud's theories have since been contested, marketing strategists seek to create desire by trying to amplify anxieties between who people are and who they desire to be (Michael, 1984; Schudson, 1984). As one marketing researcher states, "[a]dvertising may make people believe they are inadequate without Product X and that Product X will satisfactorily manage their inadequacies. More likely, it may remind them of inadequacies they have already felt and may lead them, once at least, to try a new product that just might help, even though they are well aware that it probably will not" (Schudson, 1984).

While advertising strategists may seek to exacerbate feelings of low self-esteem, a number of studies from many countries including the United States (O'Guinn and Faber, 1989), Canada (Valence, d'Astous, and Fortier, 1988), Germany (Scherhorn, Reisch and Raab, 1990), and the United Kingdom (Thompson, Locander and Pollio, 1990; Elliott, 1995; Baumeister, Heatherton and Tice, 1994) have found that compulsive shoppers appear to be

characterized by pervasive and chronic feelings of low self-esteem, and experience an above-average need for experiences of control.

In attempting to explain the coupling of low self-esteem and high need for control among compulsive shoppers, a number of investigators have hypothesized that compulsive shoppers may be more likely than non-compulsive shoppers to feel that they lack control over important aspects of their lives, and to use shopping as a way to achieve temporary experiences of mastery and accomplishment (d' Astous, Maltais, and Roberge, 1990; Thompson, Locander and Pollio, 1990; Elliott, 1995; Kottler, 1999). Researchers Thompson, Locander and Pollio (1990), and Elliott (1995), have separately maintained that compulsive shoppers (identified by the CBS) are more likely than controls to perceive themselves as having little control over many aspects of their everyday lives. Reasons for feeling diminished control were varied, but were reported to include: (1) living with an overly-dominant partner; (2) being unemployed or under-employed; (3) marital dissolution; or (3) suffering long term health complications (Thompson, Locander and Pollio, 1990; Elliott, 1995).

In attempting to link low self-esteem and shopping impulses, a number of researchers have hypothesized that individuals with compulsive shopping disorder may be more likely to obtain craved-for experiences of control through their shopping experiences. Some studies, for example, have found that compulsive shoppers are more likely than controls to experience feelings of empowerment and rebellion through their shopping experiences, (Scherhorn, Reisch and Raab, 1990; Baumeister, Heatherton and Tice, 1994; Elliot, 2005). In addition, compulsive shoppers are more prone to comment on feelings of being “in-control” of social situations with sales people while shopping (O'Guinn and Faber, 1989;

Scherhorn, Reisch and Raab, 1990; Baumeister, Heatherton and Tice, 1994). In interviews with 20 compulsive shoppers, Elliot (2005) found that after-shopping rituals such as sorting and paying credit card bills, organizing purchases, or hiding goods and receipts gave compulsive shoppers temporary feelings of empowerment and accomplishment.

Moreover, Dittmar (2000) conducted several studies, comparing a random population sample (N=236) and to a group of compulsive shoppers identified using the CBS (N=95), to examine whether one's sense of self-concept might influence shopping behavior. Dittmar (2000) concluded that while both ordinary and compulsive shoppers periodically turn to shopping to bolster their sense of self image, compulsive shoppers are significantly more likely to turn to shopping to do so. Specifically, Dittmar's (2000), found that compulsive shoppers were more likely to draw on the symbolic meanings of products in an attempt to bridge gaps between the way they see themselves, the way they wish to be, and the way they wish to be seen. This finding was taken to indicate that compulsive shoppers are significantly more likely than ordinary shoppers to believe that consumer goods were an important route to success, identity, and happiness (Dittmar, 2000). Dittmar's (2000) finding appears to shed light on previously-discussed research reporting a robust connection between low-self esteem and urges to shop (O'Guinn and Faber, 1989; Scherhorn, Reisch and Raab, 1990; Baumeister, Heatherton and Tice, 1994; d'Astous, Maltais, and Roberge, 1990; Thompson, Locander and Pollio, 1990; Elliott, 1995; Kottler, 1999).

Together studies suggest that although both typical and compulsive shoppers may rely on purchases to manage or enhance self-concept, compulsive shoppers may be more prone not only to feelings of low self-esteem and negative self-image, but also to use experiences gained from shopping and the symbolic properties of products purchased, to bolster their sense of self-efficacy as well as their self-image.

Social Management

In the early 1970's, developmental theorist Donald W. Winnicott asserted that in childhood, playing with toys serves to mediate the relationship between the self and the larger social realm. Winnicott posited a direct correlation from playing with toys (such as baby blankets or a favorite stuffed toy), to shared playing that centers around a toy or object, to shared language and shared cultural experiences (Winnicott, 1957). He concluded that in childhood relationships are initially established through mutual attending to and admiring of possessions, while in adulthood social ties continue to be strengthened through acts of object sharing and gift giving (Winnicott, 1957)

A number of studies have indicated that compulsive shoppers tend to be more motivated by approval seeking than are non-compulsive shoppers. Studies hypothesize that the desire to obtain approval from others might prompt compulsive shoppers to go on shopping binges partially to obtain positive approval from salespeople (O'Guinn and Faber, 1989; Edwards, 1992, DeSarbo & Edwards, 1996). Additionally, in interviews with 386 self-identified compulsive buyers, O'Guinn and Faber's (1989) found that a number of compulsive buyers bought items almost entirely for others. When asked about motivations for gift-buying, the participants reported that they viewed gifts as a means to maintaining or deepening their relationships.

Some studies also focus on the types of items compulsive shoppers tend to purchase. In an early study, Faber and O'Guinn (1989) concluded that compulsive buyers did not tend to have much interest in items once purchased, citing that compulsive shoppers frequently neglect to take products out of their original bags following a shopping episode. This observation led researchers to conclude that compulsive shoppers were not particularly interested in goods purchased, but were, instead, primarily motivated by the positive emotions felt during actual shopping experiences (Benson, 2000). More recent studies, however, have brought these early conclusions into question.

Dittmar (2000) studied the types of objects consumed by 95 compulsive shoppers and reported that a significant majority bought clothing and jewelry during impulse shopping episodes. On the basis of these findings, Dittmar (2000) argued that shopping impulses among female compulsive shoppers were, in large part, driven by the perception that items purchased might help one gain greater control over personal attractiveness and their social images. Dittmar (2000) concluded that because purchase patterns among compulsive shoppers do not appear to be random, investigators would benefit from examining ways that the meanings and symbolic values tied to the types of items purchased also help compulsive shoppers to feel more "in control" over various social domains of their lives.

A final finding regarding characteristics of compulsive shoppers is the degree to which compulsive shoppers appear to value materialism. In their early study of compulsive shoppers, O'Guinn and Faber (1989) administered the Belk Materialism Scale (Belk, 1985), to a group of 386 self-identified compulsive shoppers and their comparison group of 250 non-compulsive shoppers and found that the compulsive shoppers scored significantly higher on items measuring materialistic value orientations. When examining responses to the Belk

sub-scales (possessiveness, non-generosity, and envy), compulsive shoppers were shown to endorse more feelings of envy than were controls.

While it is still unclear to what extent materialistic value orientations might contribute to compulsive shopping episodes, a number of studies have found that people who appear to value materialism highly (as measured by the Belk Materialism Scale), are more concerned with social comparisons and are more likely to have buying habits influenced by wanting others to approve of their purchases than individuals who do not value materialism highly (Sirgy, 1998, Srivastava, Locke, & Bortol, 2001, Schroeder & Dugal, 1995). In a study by Ahuvia and Wong (2002), the researchers conclude that “materialists are more likely to engage in relational coding, with possession-related information forming the primary nexus, than are less materialistic people” (p. 74). Finally, a study by Kasser and Ryan (2001) indicates that love relationships and friendships of people with high materialistic value orientations are more likely to be characterized by emotional extremes and conflict than by trust and happiness.

Although these studies do not address the compulsive shopping population directly, investigating the degree to which compulsive shoppers may similarly make purchases to influence relationships points to a potentially fruitful avenue for future investigations. Indeed, some studies of compulsive shopping point to findings that parallel investigations into characteristics of individuals with high materialistic values. For example, studies using the CBS have shown compulsive buying to be positively associated with social preoccupations (Faber and O’Guinn, 1995). Correspondingly, two studies using the CBS found a positive association between compulsive shopping and proneness toward using money as a tool to influence and impress others and to symbolize success in a sample of

Mexican adults ($r=.51$) and U.S. college students ($r=.31$) (Roberts & Sepulveda, 1999; Roberts & Jones, 2001).

Summary and Conclusions

In conclusion, while several researchers suggest that shoppers turn to shopping as a way to manage and feel more in-control of negative emotions, feelings of low-self-esteem, and social domains, no study has yet explicitly tested this as an integrated model. Further, few studies address the growing possibility that, while similarities exist among compulsive shoppers, there may be several sub-types of compulsive shoppers that may, or may not, be understood as representing different stages in the progression of compulsive buying disorder.

The study presented in the next chapter is designed to test the hypothesis that everyone, to varying degrees, turns to shopping to gain enhanced control over a variety of social, emotional, and identity concerns, but that compulsive shoppers disproportionately turn to product acquisition to fulfill these basic psychological needs. Rather than offering an integrated theoretical model for understanding shopping behavior, the testing instrument presented in the next chapter is designed to help advance testing of existing explanatory models of compulsive shopping disorder and to help resolve debates about what class of disorder compulsive shopping is best suited to fall under.

CHAPTER 7

THE SHOPPING MOTIVATIONS INVENTORY: A PROPOSED SCALE FOR MEASURING COMPULSIVE SHOPPING DISORDER

This chapter proposes and tests a new screener, the Shopping Motivations Inventory, which seeks to assess a broader range of motivations and emotions speculated to contribute to compulsive shopping behavior. The present study posits that for compulsive shoppers, shopping is primarily performed as a means to feel more in control of a range of social, esteem, and emotional states. In contrast to categorical approaches to understanding and screening the disorder, the present scale is more adaptable to dimensional frameworks for understanding compulsive shopping urges, which is more consistent with the proposed dimensional-orientation of the DSM-V. Moreover, rather than testing a singular model for understanding shopping behavior, the proposed testing instrument is designed to advance testing of a variety of models that have been put forth to explain the etiology and categorization of compulsive shopping behaviors.

Study II. Specific Aims

While Study I in the present investigation was concerned with helping test the validity of clinical criteria and measures for compulsive shopping disorder, Study II is concerned with testing an explanatory model for compulsive shopping. A number of researchers have made the argument that individuals with compulsive shopping disorder, eating disorders, addictive behaviors, and impulsive and compulsive behaviors may share tendencies to be prone to feelings of anxiety and depression, low self-esteem, social anxiety,

feelings of social inadequacy, and reduce negative affect through repetitively engaging in maladaptive behaviors (i.e. drugs, shopping, eating, etc.) (O’Guinn and Faber, 1989; Faber et. al, 1995). While the DSM-IV currently views eating disorders, addictions, and a range of obsessive-compulsive and impulse-control disorders as separate, there are indications that the DSM-V is considering relationships between these disorders with the aim of potentially creating a new category of “non-substance addiction.” This new category would include a range of disorders currently thought of as separate, such as impulse-control behavior, NOS, pathological gambling, pyromania, kleptomania, internet addiction, excessive sexual behavior, and compulsive shopping. It is being debated whether such a category should also include binge eating behaviors and some obsessive-compulsive types of behaviors. While there can be no doubt that each of the disorders being considered for inclusion in the category “non-substance addictions” in DSM-V contain their own very important etiological factors and unique characteristics that remain essential to definitions of the disorder, the present study adopts the framework that compulsive shopping is likely best described as a form of non-substance addiction.

Specifically, the present study posits that coping habits might partially mediate the relationship between one’s tendencies to experience one type of maladaptive coping strategy over another. While past investigations into compulsive shopping have stipulated that compulsive shopping is a negative “cycle” in which individuals with negative affect, low self-esteem, and/or social concerns turn to shopping as a way to control or manage these negative feelings (O’Guinn and Faber, 1989; McElroy et. al, 1994a), no study has yet directly tested the model posited by the present study. The present study posits that compulsive shopping episodes are largely fueled by social, esteem, and emotional concerns, and that

compulsive shoppers are more prone to turn to shopping, as opposed to other coping strategies, as a way to manage these concerns.

To test this explanatory model, the present study seeks to establish a psychometrically valid and reliable screening questionnaire, the Shopping Motivations Inventory (SMI), to test the theory that individuals with compulsive shopping disorder turn to shopping as a means of coping with negative mood, social concerns, and feelings of low self-worth. In addition, the questionnaire will be used to test the hypothesis that compulsive shoppers generally attempt to meet the same emotional, social, and identity needs as non-compulsive shoppers through their shopping behavior, but tend to significantly over-rely on the acquisition of goods to manage these basic needs.

Pilot data

Item Development

As an initial step towards creating the Shopping Motivations Inventory, an initial pool of 228 items was generated to reflect the three primary motivational facets hypothesized to contribute to spending impulses in both typical shoppers and compulsive shoppers (i.e. social management, emotional management, and identity management). Items generated for the scale came from research in compulsive shopping and from input from compulsive shoppers contacted through a Debtor's Anonymous (DA) support group in Chapel Hill, North Carolina.

On two occasions volunteers recruited from a local D.A. group directly contributed to items included in the scale. In the first meeting, eight volunteers were asked to anonymously submit 10 items which they thought reflected reasons underlying shopping urges. In the second meeting, 7 volunteers reviewed and rated a comprehensive list of scale items for

clarity and offered suggestions about additional types of items that might be added to the three primary motivation categories. In addition, a control group of 3 non-compulsive shoppers recruited from the University of North Carolina, Chapel Hill was asked to review the scale, provide feedback on clarity of items, and to offer suggestions about the types of items or item categories that should be included in the scale, but that did not appear represented. Based on patterns of response generated for each of the three primary motivational facets of interest (i.e. social management, emotional management, and identity management), items were grouped into 20 sub-categories (8 social management categories, 6 emotion management categories, and 6 identity management categories). Each grouped sub-category was then given a definition based on characteristics of items. These definitions included:

Social management:

1. Image Management: shop to affect how viewed by others.
2. Social Competition/Comparison: shop to establish rank or status relative to others; shop out of a sense of competition with others.
3. Affiliation: shop as a means of signaling membership in a group, or as a means of getting closer to others.
4. Attention Seeking: items purchased or shopping itself draws attention to self.
5. Emulation: shop to feel closer to, or more like, admired or popular figure.
6. Rebellion: shop out of a sense of revenge, or shopping elicits feelings of rebellion.
7. Attraction: shop to make self feel more attractive, or to make self more appealing to the opposite sex.

8. Social Compensation: shop to make-up for feeling deprived of things others had growing up.

Emotion management:

1. Control Anxiety: shop to increase confidence, or to manage anxiety that results from social situations.
2. Avoidance/Escape: shop to avoid emotions, responsibilities, or “daily self.”
3. Reward: shop as a way to reward self.
4. Safety: shop for items that provide a sense of safety or protection; act of shopping itself provides sense of protection from danger or harm.
5. Mood Boost: items purchased provide sense of optimism or mood enhancement; or act of shopping itself provides mood enhancement.
6. Fill Empty Space: shop to fill empty space in room, or to fill internal sense of emptiness.

Self-image management

1. Transformation/Elevation: shop for items that make person feel better about themselves, or that make person feel closer to, or more like, ideal self or ideal future.
2. Self-Esteem Compensation: shop to alleviate feeling disappointed with self, or to alleviate negative self-view.
3. Distinction: shop to establish a sense of uniqueness or distinction from others.
4. Nostalgia: shop to feel closer to, or to be reminded of, significant people, places, eras, or events from the past.
5. Crisis/Search for Self-Definition: shop during times of upheaval, change, or crisis as a means of creating a “new self.”

6. Immortality: shop as a way of ensuring being remembered after death, or as a way to control how one will be remembered.

The content validity of items was subsequently assessed by providing four independent raters with each of the above definitions of the 20 dimensions represented in the scale. The raters were asked to allocate each of the questionnaire items into one of the 20 categories provided, or to a “not applicable” category. After eliminating items that did not receive agreement by three out of four judges, 171 items remained. Each item was formatted into a five-point (strongly agree to strongly disagree) Likert response scale. Specifically, item responses ranged from 1) strongly agree, 2) agree somewhat, 3) Neutral, 4) Disagree somewhat, 5=strongly disagree. Items were sequenced randomly in the shopping motivations inventory.

Item Refinement

One hundred and sixty-nine undergraduate students (79 males, and 90 females) enrolled in an introduction to psychology course were recruited via an online recruitment pool and were administered the remaining 171 scale items comprising the pilot version of the SMI. The remaining 171 scale items were then grouped into facet scales and subjected to two psychometric tests. In the first procedure, each item of each facet in the scale was correlated with the corrected facet-to-scale score. In other words, each item was correlated with an independent scale score obtained by summing all other items in the scale. Items with corrected item-to-total subscale correlations lower than .20 were flagged and, in most cases, eliminated. Specifically, 20 flagged items were reviewed and in six cases it was decided that the items covered important aspects of the facet being measured and should not be deleted, leaving a total of 157 remaining scale items. Also, for each item, the coefficient alpha that

would result if that item was deleted was computed. Items were flagged if the corrected item-total correlation were below .20, or if the coefficient alpha would rise by more than .05 if the item were deleted. These two procedures yielded the same results, and no additional items were deleted as a result of the second procedure.

A summary of the results from these scale purification procedures can be found in Appendix A along with a table summarizing results of the inter-correlation calculations for the twenty facet scales. The entries on the main diagonal are the coefficient alpha reliability estimates. It will be noticed that the majority of the correlations were positive and relatively substantial

After items were deleted as a result of tests of internal consistency, the remaining 157 scale items were submitted to a separate panel of three judges who were supplied with the 20 facet definitions and asked to rate each item statement as being clearly representative, somewhat representative, or not representative of the 20 facet dimensions to which it belonged. Items that were rated as clearly representative by all three raters were retained. This process eliminated 15 items. Finally, the remaining 142 items were reviewed for redundancy with other items in their facet, and items considered at face value to be too similar to other items in their facet were deleted, leaving a final scale comprised of 121 items (See Appendix A).

After original scale items were refined, a decision was made to convert the 121 item questionnaire into the form of questions to assess for shopping behaviors. Because many of the original items did not easily translate into behavioral questions, the revised scale was comprised of only 80 items, categorized into 18 sub-scale categories. As with the previous scale, these questions were broadly conceptualized as falling into three primary factors —

social management, emotion management, and identity management. Items were again grouped into the above 18 categories based on content, but two categories were dropped as a result of translating the scale into a behavioral measurement. These categories included the category of “social compensation” under the category of social management, and “crisis/self-redefinition” under the category of identity/esteem management. The revised pilot version of this SMI questionnaire can be found in Appendix B.

Testing the SMI

The goal of this study was to further refine items in the Shopping Motivation Inventory scale by presenting the refined behavioral version of the questionnaire to a larger data sample, augmented by a heterogeneous community sample and self-reported compulsive shoppers recruited from a Debtor’s Anonymous self-help group in North Carolina. To achieve this goal, the method for measurement development adhered to consisted of two primary steps: (1) initial internal validity and reliability estimates for the Shopping Motivations Inventory scale and the three main subfacets (i.e. emotion management, social management, and esteem management); and (2) tests of convergent and discriminant validity of the Shopping Motivations Inventory and the three previously- mentioned main subfacets.

Method

Participants and procedures. The same participants and procedures that were used in Study I of the present dissertation were used in the present study.

Measures. Individuals from all sample groups accessed each of the screening measures they were asked to complete online via the website www.shopping-study.com.

Comparing compulsive shopping scales to one another. Based on results of pilot data, all participants were asked complete the 80-item Shopping Motivations Inventory (see

Appedix B). In addition, for the purpose of comparison, all participants completed three other scales discussed in Study I of the present dissertation. These measures were:

1. The Compulsive Buying Scale (CBS)
2. The Edwards Compulsive Buying Scale (ECBS)
3. The Shopping Behavior Measure (SBM)

Measures to test convergent and divergent validity. In addition to completing questionnaires that assessed for compulsive shopping, all participants filled out eight additional scales to test the convergent and divergent validity of the SMI and its three main sub-facets. These scales included:

1. The Marlowe-Crowne Social Desirability Scale (CMSDS). The CMSDS is a 33-item self-report measure commonly used to assess an individual's need for approval (Strahan & Gerbasi, 1972).
2. The Barratt Impulsiveness Scale (BIS): The BIS is a 30-item self-report scale used to identify the degree to which individuals tend to engage in impulsive, rapid, or unplanned actions without regard to the negative consequences (Barratt, 1959; Patton et. al., 1995).
3. Brown ADD Scale (adult) (BADD): The BADD is a widely used, psychometrically sound 40-item self-report scale used to help diagnose attention deficit disorder (Brown, 1996).
4. Beck Depression Inventory (BDI): The BDI is a widely used, 21-item psychometrically sound questionnaire used to measure cognitive, affective, and somatic states commonly associated with depression. (Beck, Ward, Mendelsohn, Morch, & Earlbach, 1961).

5. Beck Anxiety Inventory (BAI): The BAI is a 21-item psychometrically sound questionnaire used to measure physiological, affective, and cognitive states commonly associated with anxiety. (Beck, Epstein, Brown, & Steer, 1988).
6. Obsessive-Compulsive Inventory-Revised: The OCI-R is an 18 item, psychometrically sound self-report scale used to assess the frequency and distress associated with behaviors and experiences often associated with OCD. (Foa et. al. , 2002). Specifically, the OCI-R measures the frequency and distress associated with washing, checking, ordering, obsessing, hoarding, and neutralizing behaviors.
7. The Rosenberg Self Esteem (RSE) scale: The RSE is a 10-item self-report measure used to assess global feelings of self-worth or self-acceptance. (Rosenberg, 1965).
8. Substance Abuse Subtle Screening Inventory-III (SASSI-III): The SASSI-III is a 26-item widely used, psychometrically sound self-administered screening questionnaire used to assess problem drinking and problem drug use. (White & Labouvie, 1989).
9. Eating Disorders Examination Questionnaire, version 4 (EDE-Q4): The EDE-Q4 is a 23-item widely used, psychometrically sound self-report screening questionnaire used for assessing bulimia and anorexia (Mitchell, et. al.1985).

Proposed Analyses

Tests of internal validity and reliability. In an effort to assess the internal validity of the SMI and its three broad sub-scales, the scale was first subjected to an exploratory factor analyses (EFA). Ideally, an EFA on the SMI scale would show scale items loading on only three dimensions that represents three latent variables.

A second method employed for assessing the internal validity of the SMI was a confirmatory factor analyses (CFA), using LISREL software version 8. Given the 82 SMI

items designed to measure compulsive shopping behavior, it was assumed that a confirmatory factor analysis would confirm that the underlying relationship between shopping, and three latent factors of social management, emotion management and esteem management could account for the intercorrelations among the items. The intent of the CFA, in other words, was used to assess the goodness of fit between the 82 items in the SMI and the latent structural model implied by the above literature review and questionnaire design. The fit of the model was determined using the same methods used for evaluating LISREL models (Joreskog and Sorbom, 1989).

Specifically, it was hypothesized that three broad domains influence shopping behavior: social management; emotional management; and identity management. CFI values greater than .90 were taken to indicate a good model fit while values of .95 and higher indicate excellent fit (Hu & Bentler, 1999). RMSEA values less than .06 indicate good fit (Hu & Bentler, 1999) while values ranging from .08 to .10 indicate mediocre fit and those greater than .10 indicate poor fit (Byrne, 2001). SRMR values closer to 0 indicate good fit while those closer to .10 indicate poor fit (Kline, 2005).

It should be noted that while emotion management, self-esteem management, and social management were tested via the EFA and CFA in the present study, the 18 sub facets identified in the pilot version of the Shopping Motivations Inventory were NOT directly tested. These sub-facets remain embedded in the scale and include items designed to assess for: image management, social competition/comparison, affiliation, attention seeking, emulation, rebellion, attraction, anxiety regulation, avoidance/escape, reward, safety/security, mood boost, fill empty space, transformation/elevation:, self-esteem compensation, distinction, nostalgia, and immortality.

The above 18 sub-facets of the scale were not tested in the present study, because it was considered important to first firmly establish the construct validity of the three main over-arching facets of the scale (i.e. social management, emotion management, and esteem management). Testing each of the 18 facets of the SMI would also have required a substantially larger sample than was available for the present study.

Reliabilities of the SMI scale were assessed using Cronbach alpha. It was assumed that the scale is likely to have good internal consistency or reliability when items analyzed using Cronbach alpha are above 0.6 (Nunnally, 1978).

Predicted Correlations between SMI Overall Score and Other Measures

Responses to the SMI were correlated with three other scales used to measure compulsive shopping (the SBM, the ECBS, and the CBS), and to other scales to which compulsive shopping is thought to be related. The specific hypothesis were as follows:

1. It was hypothesized that the SMI would be highly and positively correlated (Cohen's 0.50 or higher) to the SBM and ECBS measures and that the SMI would be highly and negatively correlated to the CBS.
2. As a test of discriminant validity, it was hypothesized that the SMI would have low to moderate correlations (not larger than 0.30) with the SASSI-alcohol, the SASSI-drugs, and the EDE-Q.

Predicted Correlations between SMI Social Subscale and Measures

1. It was hypothesized that the SMI Social subscale would be strongly correlated to the measure designed to assess the degree to which an individual is driven by desires for social approval (the CMSDS), as this construct has been hypothesized to relate to the social management function of compulsive shopping.

2. As a test of discriminant validity, it was hypothesized that the SMI Social subscale would have low and non-significant correlations with the RSES, the BDI, and the BAI.

Predicted Correlations Between SMI Emotion Subscale and Measures

1. It was hypothesized the SMI Emotion subscale would be moderately and positively correlated (Cohen's 0.30 to 0.50) to a measure of anxiety (the BAI), to a measure of depression (the BDI), to measures of impulsivity (the BIS, and BADD), and to a measure of obsessive-compulsive traits (the OCD-I), as these constructs have been hypothesized to relate to the emotion management function of compulsive shopping.
2. As a test of discriminant validity for the emotion management subscale, it was hypothesized that the SMI Identity subscale would have low and non-significant correlations with the CMSDS and the RSES.

Predicted Correlations Between SMI Esteem Subscale and Measures

1. It was hypothesized that the SMI Esteem subscale would at least moderately and negatively correlate to a measure designed to assess one's sense of self-worth and self-esteem (the RSES) as low self-esteem has been hypothesized to relate to the esteem management function for compulsive shopping.
2. As a test of discriminate validity, it was hypothesized that the SMI esteem subscale would have low and non-significant correlations with the CMSDS.

Table 13 below represents proposed tests of convergent and discriminant validity for the SMI and its three primary facet sub-scales.

Table 13: Proposed Tests of Convergent and Discriminant Validity for SMI

	Convergent Relationship	Divergent Relationship
SMI Overall Score	CBS, ECBS, SBM,	SASSI, and EDE-Q
SMI Social	CMDS	RSE, BDI, and BAI
SMI Emotional	OCI, BAI, BIS, BADD	CMSDS, RSES
SMI Esteem	RSE	CMSDS

Normative information. A final goal was to compare scores on the SMI scale and its subscales across a compulsive buying group (identified using the SBM) and the general population. It was hypothesized that individuals with compulsive shopping disorder would score significantly higher on the overall SMI scale the three sub-scales than would the general population. In order to test this hypothesis, the SBM was used to identify a sub-sample of compulsive shoppers and a multivariate analysis of variance (MANOVA) was used to determine if mean scale scores on the SMI and the social, emotional, and esteem facets of the scale differed significantly across compulsive and non-compulsive shoppers.

Results

Item Refinement

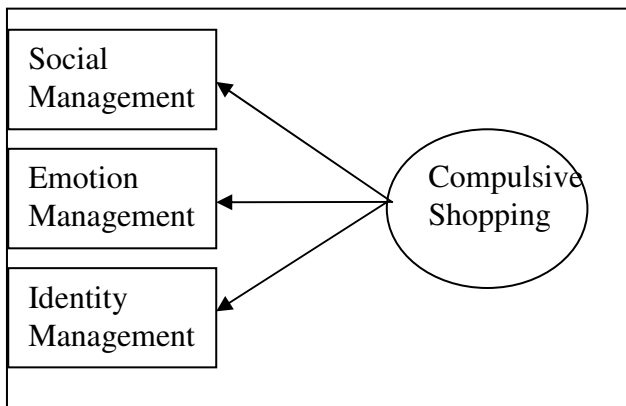
Exploratory Factor Analysis Results

1. The scree plot findings indicated a break between the third and fourth factors. Accordingly, three factors were rotated. The percentage of variance explained by the three factors was 55.83%.
2. The factor loadings of the 80 items are shown in Appendix C.
3. Eighteen out of the 63 items either had low factor loadings (i.e., less than .40) or cross-loaded onto one or two other factors. Accordingly, these items were deleted: 8, 10, 11, 18, 20, 22, 23, 28, 31, 38, 44, 49, 50, 54, 57, 64, 65, 75, and 81.

4. The following items loaded onto the first factor: 1, 13, 14, 16, 25, 27, 29, 30, 32, 33, 37, 39, 40, 42, 46, 47, 51, 53, 55, 56, 58, 59, 60, 67, 72, 76, 78, 79, and 80. This factor was labeled Identity Management. Cronbach's alpha was high ($\alpha = .97$).
 5. The following items loaded onto the second factor: 2, 3, 4, 5, 6, 7, 9, 15, 24, 34, 36, 41, 43, 45, 61, 66, 68, 69, 70, 71, 73, 74, 77, and 82. Thus, this factor was labeled Emotional Management. Cronbach's alpha for this scale was high ($\alpha = .96$).
 6. The following items loaded onto the third factor: 12, 17, 19, 21, 26, 35, 48, 52, 62, and 63. Thus, this factor was labeled Social Management ($\alpha = .94$).
- Cronbach's alpha for the whole scale was high ($\alpha = .98$).

Model Testing

To test that the Shopping Motivations Inventory is best defined by three broad subscales (i.e. social management, emotion management, and self-image management), a confirmatory factor analysis model was used to confirm the structure of the Shopping Motivations Inventory. The software package LISREL was used to fit the model shown in figure 1 below:



Results for the Second-Order Confirmatory Factor Analysis (CFA)

1. A second-order CFA was conducted using the LISREL 8.8 version. The items with the highest inter-item correlation (in the Reliability Analysis) were fixed to 1.0.

2. The findings in Table 14 indicate that the model fit the data well. Although the RMSEA and SRMR values were mediocre, the CFI was high at .95.
3. As shown in Table 15 (see APPENDIX C), all items loaded highly and significantly onto their respective constructs.
4. Further, the findings in Table 16 indicate that all first-order constructs were significantly related to the second-order construct.

Table 14: Chi-square and Goodness of Fit Indices for the Second-Order CFA

Index	Value
Minimum fit function chi-square	7478.35
Degrees of freedom	1887
Sig.	.00
Comparative fit index (CFI)	.95
Root mean squared error (RMSEA)	.10
Lower bound 95% interval	.09
Upper bound 95% interval	.10
Standardized root mean square residual (SRMR)	.08

Table 15: Maximum Likelihood Estimates for First Order Factors

Path	B	S.E.	C.R.
Compulsive shopping to:			
Identity management	.70	.05	13.96
Emotion management	.71	.05	13.34
Social management	.98	.05	18.07

Internal reliability. Internal reliability of the 82 items in the SMI in relation to each of the three main sub-facets of the scale (emotion management, self-esteem management, and social management), were assessed using Cronbach alphas (Carmines & Zeller, 1979). Specifically, it was assumed that a scale is likely to have good internal consistency, or reliability, when alphas for the entire scale and the three main subscales are above 0.6 (Nunnally, 1978). No items were deleted as a result of these checks.

Tests of Divergent and Convergent Validity

Results of correlations between SMI overall score and measures

1. It was hypothesized that the SMI would be strongly correlated (Cohen's 0.50 or higher) to the CBS and ECBS measures. The findings in Table 16 indicate that overall SMI was moderately correlated ($r = -.39, p < .01$) with the CBS and highly correlated with the ECBS ($r = .66, p < .01$), and the SBM ($r = .62, p < .01$)
2. It was hypothesized the SMI would be moderately and positively correlated (Cohen's 0.30 to 0.50) to the BIS, BADD, the OCD-I and the BAI, and moderately and negatively correlated to the RSES.
3. It was hypothesized that the SMI would have low to moderate correlations (not larger than 0.30) with the SASSI-alcohol, the SASSI-drugs, and the EDE-Q. As shown in Table 15, this hypothesis was supported (i.e., correlations ranged from .26 to .29).

Table 16: Pearson Correlations between the SMI and Other CBD Measures (N=441)

Measure	SMI Total
Compulsive buying screener (CBS)	-.39 *
Edwards compulsive buying scale (ECBS)	.66**
Shopping Behavior Measure (SBM)	.62**
Substance Abuse – alcohol and drugs (SASSI)	.29
Eating Disorders Examination Questionnaire	.26

* $p < .05$; ** $p < .01$

Results of correlations between SMI social subscale and measures

1. It was hypothesized that the SMI Social subscale would be strongly correlated to the CMSE. As shown in Table 16, this hypothesis was supported ($r = .46, p < .01$).
2. As a tests of discriminant validity, it was hypothesized that the SMI Social subscale would have low and non-significant correlations with the RSES, the BDI, and the BAI. As shown in Table 16, this hypothesis was supported (i.e., correlations ranged from $r = -.18$ to $r = .26$).

Table 17: Pearson Correlations between Measures (N=441)

Measure	Social
Rosenberg self-esteem scale (RSE)	-.18
Crown-Marlowe social desirability scale (CMSDS)	.46 **
Beck depression inventory (BDI)	.13
Beck anxiety inventory (BAI)	.26

* $p < .05$; ** $p < .01$.

Results of correlations between SMI emotion management subscale and measures

1. It was hypothesized that the SMI Emotions subscale would be at least moderately correlated to the BDI, the BAI, the OCD-I, the BIS, and the BADD. Contrary to prediction, the findings in Table 17 indicate that the SMI Emotion subscale was only mildly correlated with the BDI ($r = .25$) and the BAI ($r = .27$), and to the Brown ADD scale ($r = .21$). As predicted, however, the SMI Emotions subscale did positively and moderately correlate with the OCI ($r = .34, p < .01$) and BIS ($r = .32, p < .01$) scales.
2. It was hypothesized that the SMI Emotions subscale would have low to moderate correlations with the CMSDS and the RSE. As shown in Table 17, this hypothesis was supported (i.e., correlations ranged from $-.23$ to $.03$).

Table 18: Pearson Correlations between Measures (N=441)

Measure	Emotions
Beck depression inventory (BDI)	.25
Beck anxiety inventory (BAI)	.27
Obsessive-Compulsive Inventory (OCI)	.34**
Baratt Impulsivity Scale (BIS)	.32**
Brown ADD Scale (BADD)	.21
Crown Marlow Social Desirability Scale (CMSDS)	.03
Rosenberg Self Esteem Scale	-.23

* $p < .05$; ** $p < .01$.

Results of correlations between SMI esteem subscale and measures

1. It was hypothesized that the SMI Esteem subscale would be strongly correlated to the BDI and BAI. The findings in Table 18 indicate that the SMI Emotion subscale was moderately correlated with the BDI ($r = .25, p < .01$) and the BAI ($r = .27, p < .01$).
2. It was hypothesized that the SMI Identity subscale would have low to moderate correlations with the CMSDS and the RSE. As shown in Table 18, this hypothesis was supported (i.e., correlations ranged from $-.23$ to $.30$).

Table 19: Pearson Correlations between Measures (N=441)

Measure	Identity
Beck depression inventory (BDI)	.25 **
Beck anxiety inventory (BAI)	.27 **
Crown-Marlowe social desirability scale (CMSDS)	.30 **
Rosenberg self-esteem scale (RSE)	-.33 **

* $p < .05$; ** $p < .01$.

Results of correlations between SMI social subscale and measures

1. It was hypothesized that the SMI Social subscale would be strongly correlated to the CMSDS. The findings in Table 19 indicate that the SMI Social subscale was moderately correlated to the CMSDS ($r = .36, p < .01$).
2. It was hypothesized that the SMI Social subscale would have low to moderate correlations with the RSE, BDI, and the BAI. As shown in Table 19, this hypothesis was supported (i.e., correlations ranged from $-.18$ to $.26$).

Table 20: Pearson Correlations Between Measures (N=441)

Measure	Emotional
Crown-Marlowe social desirability scale (CMSDS)	.36 **
Rosenberg self-esteem scale (RSE)	-.18 **
Beck depression inventory (BDI)	.17 *
Beck anxiety inventory (BAI)	.26 **

* $p < .05$; ** $p < .01$.

Predicted correlations between SMI esteem subscale and measures.

1. It was hypothesized that the SMI Esteem subscale would at least moderately and negatively correlate with the RSES. The findings in Table 20 indicate that the SMI Esteem subscale was mildly correlated with the RSES ($r = -.23$).
2. As a test of discriminate validity, it was hypothesized that the SMI esteem subscale would have low and non-significant correlation with the CMSDS. The findings in Table 20 provide support for this hypothesis and indicate that the SMI Esteem subscale was mildly correlated with the RSES ($r = .19$).

Table 21: Pearson Correlations between Measures (N=441)

Measure	Esteem
Crown-Marlowe social desirability scale (CMSDS)	.19
Rosenberg self-esteem scale (RSES)	-.23

* $p < .05$; ** $p < .01$.

Profile Analysis

In order to test the hypothesis that compulsive shoppers generally attempt to manage basic social, emotional, and self-identity concerns as non-compulsive shoppers through their shopping behavior, but tend to significantly over-rely upon the acquisition of goods to

manage these basic psychological needs it was hypothesized that compulsive shoppers would score significantly higher than the sample population on overall SMI scores as well as score significantly higher on each of the three SMI sub-scales.

Results for Group Comparisons (using the SBM)

1. The sample was divided into two groups; respondents who scored two standard deviations above the SBM mean ($M = 12.53$; $SD = 5.19$) were assigned to the Compulsive Shopper group while all other respondents were assigned to the Non-Compulsive Shopper group.
2. A multivariate analysis of variance (MANOVA) was conducted to determine whether the two groups would differ significantly in the three subscales of the SMI.
3. The findings indicate that the two groups varied significantly across the three measures ($F(3,437) = 6.39, p < .001$). The univariate findings displayed in Tables 21 and 22 reveal that compulsive shoppers had significantly higher Identity ($F(1,440) = 18.54, p < .001$), Emotional ($F(1,440) = 9.49, p < .01$), and Social ($F(1,440) = 12.84, p < .001$) subscale scores than non-compulsive shoppers.

Table 22: Means and Standard Deviations for SMI Subscale Scores

SMI Subscale	Group			
	Compulsive Shopper (N = 17)		Non-Compulsive Shopper (N = 396)	
	Mean	SD	Mean	SD
Identity	81.71	24.08	57.15	22.98
Emotional	90.00	11.81	73.40	22.06
Social	32.53	9.31	23.99	9.63

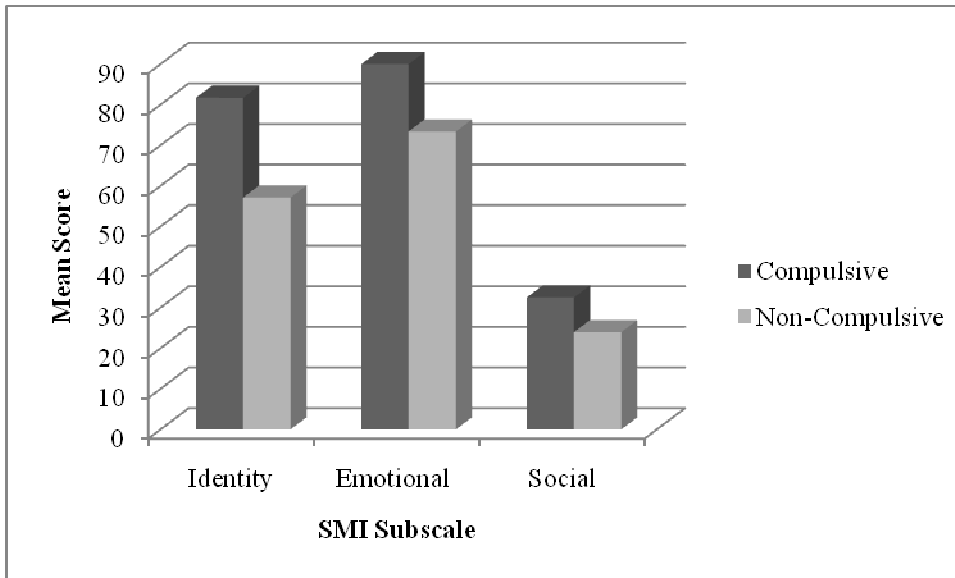


Figure 2. Mean SMI subscale scores for compulsive and non-compulsive shoppers.

Table 23: ANOVA Results for SMI Subscale Scores for Compulsive and Non-Compulsive Shoppers (N = 441)

SMI Subscale	df	F
Identity	1	18.54 ***
Emotional	1	9.49 **
Social	1	12.84 ***
Error	411	

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 24: Mean Facet Scale Score Profiles for Compulsive Shoppers and Non-Compulsive Shoppers

	Non-compulsive Shoppers	Compulsive Shoppers	F	df	p-value
Image Management	3.4	3.0	7.19	1.163	.01
Social Competition/Comparison	3.5	3.2	7.67	1.163	.01
Affiliation	3.4	3.2	4.46	1.163	.05
Attention Seeking	2.7	2.7	0.01	1.163	<i>ns</i>
Emulation	3.4	3.2	3.55	1.163	.10
Rebellion	3.9	3.5	10.76	1.163	.01
Attraction	3.5	3.1	6.82	1.163	.05
Social Compensation	3.6	3.3	4.16	1.163	.05
Control Anxiety	3.3	2.8	12.27	1.163	.01
Avoidance/Escape	3.9	3.3	20.86	1.163	.01
Reward	3.3	3.0	7.38	1.163	.01
Safety	4.1	3.5	20.40	1.163	.01
Mood Boost	3.6	3.0	9.30	1.163	.01
Fill Empty Space	3.7	3.1	20.05	1.163	.01
Transformation/Elevation	3.8	3.2	15.85	1.163	.01
Self-Esteem Compensation	4.0	3.2	29.54	1.163	.01
Distinction	3.0	2.7	3.85	1.163	.10
Past Self	3.2	3.0	2.90	1.163	.10
Immortality	4.1	3.6	17.27	1.163	.01

Note: Entries in the table are facet scale means expressed on a five-point scale.

Conclusion Study II

The purpose of the present study was to develop a scale for measuring compulsive shopping that could be used to assess a variety of motives that have been speculated to contribute to compulsive shopping. Specifically, the SMI was constructed to test the theory that compulsive shoppers disproportionately turn to shopping to manage a variety of social, emotional, and esteem related needs.

The results of the present study indicate that, overall, the SMI scale is an internally reliable and internally valid screener with fairly good convergent and divergent validity that may be used to help differentiate compulsive from non-compulsive shoppers. The overall SMI and its three primary subscales were shown to possess reasonably high reliabilities as estimated by Cronbach's alpha. In addition, construct validity of the SMI as defined by three primary factors (social management, emotion management, and esteem management) was somewhat supported by the adequate goodness-of-fit measures, and by the correlations among the three factors in the confirmatory factor analysis.

It will be noted, however, that the CFA of the three factor structure of the SMI scale was not as strong as was expected. It is puzzling why the CFA model did not turn out to show stronger support for the three factor structure, but one reason may be because some of the 18 sub-factors of the scale might be better re-organized into other categories. For example some items in the esteem management subscale, such as those under the sub-facet category of "distinction," might also prove to correlate to social management. Further, some of the categories in the sub-scale, identity management might also serve to relate to emotion management functions (such as items found in the sub-facet "esteem compensation," or transformation/elevation.") As such, future testing to validate and test the 18 factor structure embedded in the SMI may prove to be worthwhile, as it may lend prove to yield a more structurally sound scale model than simply the simple three factor model tested in the present study.

While the finding that the SMI only moderately, rather than strongly, correlated with the compulsive buying scale (CBS) was contrary to expectation, this was not too surprising given findings from Study I that the CBS scale appears to confuse compulsive shopping

behavior with financial hardship and appears to be a questionable measurement for identifying individuals who might truly exhibit behaviors and psychological profiles that are central to the disorder.

In terms of the sub-facets of the SMI, the tests of convergence and divergence of the social management and esteem management subscales fit the expected pattern, thus lending support to the construct validity of these sub-scales. In contrast, the SMI emotion management subscale was shown to be somewhat unpredictably correlated with the emotion measures it was predicted to correlate with. While the emotion management subscale did demonstrate the expected discriminant validity relationships, it was less predictably correlated with other emotion measures used to test for the sub-scale's convergent validity. Specifically, while the emotion management sub-scale did, as predicted, correlate moderately with a measure of impulsivity and obsessive-compulsive traits, it did not correlate significantly with a second measure of impulsivity and it only mildly correlated with depression and anxiety, two emotional states thought to be central to the compulsive buying cycle outlined by Faber and O'Guinn (1989).

One explanation for the unexpected finding may be that the construct validity of the emotion management facet of the SMI may have better been measured by using a broad measure of negative emotionality, as opposed to using such a wide range of measures used to assess for emotional distress.

It is also considered likely that tests of criterion validity to the emotion facet of the SMI subscale might have been better demonstrated if measures designed to assess for anxiety, depression, obsessive-compulsive, and impulsive scales were matched up to complimentary facet categories from the 18 sub-facets embedded in the scale. For example,

the anxiety measure (the BAI) might have yielded higher correlations if it had been compared to just the anxiety regulation facet of the scale; the obsessive-compulsive measure (the OCI) might have yielded higher correlations if directly compared to the anxiety regulation and safety facets of the scale, the depression measure (the BDI) might have been better compared to the mood enhancement sub-facet, and perhaps the impulsivity measures (the BIS and BADD) might have been better compared to some of the particular items in the mood enhancement facet as well as the attention-seeking facets of the SMI scale. In other words, examining these emotional scales to the various sub-facets of the SMI scale that they are intended to correlate would likely have yielded more positive findings.

Finally, a comparison of mean scores across compulsive and non-compulsive shoppers on the overall SMI scale and on the emotion, social and esteem management sub-scales would appear to lend some preliminary support to the hypothesis that compulsive shoppers tend to rely significantly more on the acquisition of goods to manage these basic psychological needs. The generalizability of this finding is very limited, however, due to the small number of compulsive shoppers identified (N=17) for this comparison, and due to a current lack of a reliable screening device for identifying compulsive shoppers. While the SBM was used to identify compulsive shoppers in the present study, it is recognized that the cut-off diagnostic criteria for identify compulsive shoppers defined as two standard deviations above the mean was somewhat arbitrarily arrived at, and that this criteria has not yet been established as a valid indicator for identifying compulsive shoppers.

Limitations/Future Directions for Research

It is recognized that the findings and conclusions of the present study could have been made stronger by sampling the Shopping Motivations Inventory on a larger and more heterogeneous sample. While an attempt was made to recruit a heterogeneous sample for the present study through advertisements for volunteers broadcast to a diverse online community, www.craigslist.com, few of these responses were usable due to incomplete responses to questionnaire items or due to obvious outlier respondents (e.g. respondents who answered the same Likert-response rating to every item presented). Further, while a number of self-reported compulsive shoppers were also recruited for the present study, these individuals were already enrolled in a self-help group for compulsive shoppers. As such, a cursory examination of their responses to the Shopping Motivations Inventory revealed that, as a group, their range of responses was not remarkably different from those in the larger sample. This was likely due to the fact that many of the compulsive shoppers recruited from the support group likely no longer meet criteria for compulsive shopping disorder because they have been working to correct their spending habits.

It will also be noted that while the Shopping Motivations Inventory was originally designed to measure 18 constructs thought to contribute to compulsive shopping episodes, the current study examines only three constructs, namely social management, emotion management, and esteem management. While the intent was to present a first step towards validating the SMI scale by first establishing the psychometric soundness of the three primary factors thought to be related to compulsive shopping, it is believed that further analyses to examine the 18 constructs embedded in the SMI scale may be a worthwhile and provide fruitful directions for future research.

It is ultimately hoped that the SMI might be used in future investigations of compulsive shopping to help determine true characteristics of the disorder and patterns of buying that can, in turn, help determine what sub-type of disorder compulsive shopping might best fall under. As has been demonstrated, for example, some hypothesize that compulsive shoppers are primarily driven to shop to escape anxiety and negative emotions (a view that corresponds with the compulsive model), and others argue that the positive emotions and thrill experienced while shopping might be the primary drive behind compulsive shopping episodes (a view that corresponds more with the impulsivity or addictive model of compulsive shopping). However, no measure yet exists to help determine what drives may be primary for specific compulsive shoppers, nor whether all compulsive shoppers who might meet criteria for compulsive shopping disorder tend to be driven to shop for the same reasons.

In summary, while the psychometrically testing the 18 sub-facets of the present scale went beyond the scope of the present study, validating these sub-scales might be worthwhile because they might be used to help answer some of the debates over what category compulsive shopping disorder might best fit into, as well as help inform a richer understanding of the motivations and drives that appear to fuel compulsive shopping episodes.

CHAPTER 8

DISCUSSION/CONCLUSIONS: IS COMPULSIVE SHOPPING A REAL DISORDER, AND SHOULD IT BE INCLUDED IN THE DSM?

Researchers and clinicians have begun to lobby the American Psychiatric Association to include a description of compulsive shopping disorder, also referred to as compulsive buying disorder, in the next version of the Diagnostic and Statistical Manual (DSM) (Koran et. al., 2006, Koran et. al. 2002, Faber, et. al., 1987; McElroy, et. al., 1994a; McElroy et. al., 1991; Kraepelin, E., 1915). Opponents, however, argue that the idea of considering compulsive shopping a real clinical disorder branches into the absurd. After all, if we allow a description of compulsive shopping to be included in the DSM, why not compulsive email-checking, obsessive pre-occupation with sports, or chronic text messaging? Many individuals regularly engage in activities or behaviors that may seem somewhat excessive and irrational to some. These compulsive habits prompt a broader question: How do new ailments make it into the Diagnostic and Statistical Manual and on what basis do we decide whether a set of behaviors and psychological experiences qualify as a real clinical disorder?

In considering compulsive shopping as a mental health disorder, it is useful to look at what evaluation criteria are slated for the next version of the DSM (the DSM-V), due out in 2012. The DSM makes diagnostic determinations through one of several task force committees whose members have been appointed by the American Psychiatric Association (Regier, 2007). The exact criteria that the DSM-V task forces will employ have not been explicitly written, nor codified by the American Psychiatric Association, nor have internal task-force guidelines been

made public by the APA. However, according to the chairs of the DSM-V oversight committee, David Kupfer, M.D. and Darrel Regier, M.D, the DSM-V is generally expected to focus upon where along a spectrum of related mental health abnormalities a specific disorder may fall (Walsh, 2007; Regier, 2007) . The consideration of diagnostic thresholds and of the developmental spectrum of disorders stands as a significant difference between the DSM-V and the current DSM-IV-TR.

In the DSM-IV-TR, disorders and diagnostic criteria are classified as discrete from one another and categorical cut-off scores differentiate abnormality from normality (Walsh, 2007; Regier, 2007). In the words of the DSM-V vice chair, Dr. Darrel Regier, the next DSM will include:

[a] premium on clear syndrome descriptions with explicit diagnostic criteria and a concern for the practical utility of the diagnoses for clinicians. What may well be emphasized over previous editions is the need for more explicit dimensional approaches for establishing diagnostic thresholds that will permit clinicians to accurately describe severity and treatment response.

(Regier, 2007, p. 13).

While formal criteria for evaluating compulsive shopping as a disorder have not been made publicly available, email correspondence with Dr. Regier on the topics of the DSM-V's potential inclusion of compulsive shopping disorder elicited the following response:

Describing the current thought processes on compulsive shopping as a pathological disorder is difficult because there are overarching issues that first need to be resolved before diagnosis-specific decisions can be made. For example, all of the work groups are examining larger issues related to validating diagnostic criteria among disorders, such as underlying etiology, course, symptoms, and treatment response. Before determining inclusion or exclusion, each work group must investigate whether existing criteria are valid and reliable; evaluate commonalities across criteria for the purpose of classification; possibly develop new criteria; and conduct secondary data analyses and field trials to test criteria. Only then will decisions about inclusion and exclusion likely take place. In order for inclusion to occur, the

work group must ensure that the proposed syndrome meets the definition of a mental disorder.

(E. Kuhl, personal communication, November 17, 2008)

Although it was not the primary intent of the present dissertation to help evaluate whether compulsive shopping might be considered worthy of inclusion in the DSM-V, results of the present study would appear to shed light on some of the important issues that stand in the way of compulsive shopping's consideration as a clinical disorder.

In recent decades diagnostic criteria to identify individuals who repeatedly engage in extreme and problematic over-spending have been proposed and the syndrome is now being increasingly investigated by researchers and clinicians. Some investigators have begun to argue that individuals suffering from the disorder are homogeneous enough and numerous enough to merit the syndrome's inclusion in the next version of the DSM.

Study I of the present dissertation sought to evaluate clinical criteria for compulsive shopping disorder and address some of the gaps in evidence needed to evaluate the psychometric soundness of existing measures. It was found that while clinical criteria for compulsive shopping disorder put forward by McElroy et. al. (1994) appear to be a good beginning to establishing a clinical definition of compulsive shopping disorder, it is not specific or elaborate enough to capture core characteristics thought to be common to individuals with the disorder. In addition, it was found that the most often-used and influential measure, the Compulsive Buying Scale, is less psychometrically sound than the Edwards Compulsive Buying Scale, which may be a more valuable tool for identifying individuals with compulsive shopping disorder. Despite this apparent weakness, Study I demonstrated a surprisingly high degree of congruence between the definition of compulsive shopping disorder and the measures used to assess the disorder. A probable outcome of this finding is that the clinical criteria used for compulsive shopping may

itself be flawed – a hypothesis confirmed by closer examination of the clinical criteria. While these findings may seem to bring into question the estimates about the true number of individuals suffering from compulsive shopping disorder, the existing measures and clinical criteria were found to be adequate enough to roughly diagnose the scope of the problem, but are perhaps not accurate enough to diagnose specific numbers.

The aim of the second study in the present dissertation was to introduce a screening instrument, the Shopping Motivations Inventory (SMI), that could be used to both better identify compulsive shoppers and to evaluate commonalities and differences between characteristics of compulsive shoppers and individuals with other disorders that may be related to compulsive shopping. Therefore, the SMI was evaluated to assess whether compulsive shoppers turn to shopping to cope with negative mood, social concerns, and feelings of low self-worth more than non-compulsive shoppers. Preliminary results of this study indicate that compulsive shoppers do display a tendency to over-rely on shopping to cope and manage social, emotional, and esteem concerns. The study also indicated that future testing of the numerous sub-facets of the SMI might help shed more light on debates that surround the etiology of compulsive shopping.

While much is left to discover about compulsive shopping disorder, a review of existing literature would seem to indicate that the disorder appears to be driven by unique psychological and, perhaps, biological components, thus indicating that the affliction cannot be simply explained by culture or the predatory lending times we live in (Koran et al., 2002; Koran et al., 2006). This paper concludes with the assertion that there is something unique and primary about compulsive shopping that qualifies it as a clinical disorder worthy of clinical consideration and of specific mention in the DSM-V. Future investigations are called upon to help refine definitional criteria, refine assessment measures, and test etiological factors drive the disorder.

APPENDIX A: Study II: Results of Pilot Data for the SMI

Means, Standard Deviations, and Intercorrelation of the Facet Scales

Facet Scales	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Image Management	3.31	.72	<i>0.69</i>																			
Social Competition	3.46	.74	0.66	<i>0.77</i>																		
Affiliation	3.39	.58	0.50	0.61	<i>0.42</i>																	
Attention Seeking	2.67	.63	0.44	0.28	0.19	<i>0.65</i>																
Emulation	3.36	.77	0.65	0.68	0.59	0.43	<i>0.73</i>															
Rebellion	3.81	.77	0.40	0.25	0.48	0.03	0.30	<i>0.64</i>														
Attraction	3.42	.78	0.60	0.62	0.61	0.37	0.66	0.40	<i>0.67</i>													
Social Compensation	3.53	.79	0.51	0.46	0.43	0.29	0.47	0.42	0.51	<i>0.66</i>												
Control Anxiety	3.21	.83	0.70	0.63	0.57	0.40	0.64	0.35	0.63	0.47	<i>0.72</i>											
Avoidance/Escape	3.79	.82	0.64	0.50	0.59	0.15	0.53	0.71	0.60	0.53	0.59	<i>0.83</i>										
Reward	3.25	.71	0.49	0.41	0.49	0.31	0.43	0.43	0.50	0.33	0.54	0.56	<i>0.59</i>									
Safety	3.95	.79	0.41	0.36	0.52	-0.07	0.37	0.69	0.45	0.48	0.36	0.69	0.40	<i>0.61</i>								
Mood Boost	3.45	.91	0.60	0.50	0.56	0.33	0.56	0.48	0.57	0.48	0.60	0.70	0.63	0.40	<i>0.75</i>							
Fill Empty Space	3.61	.77	0.61	0.58	0.53	0.32	0.58	0.55	0.55	0.52	0.61	0.66	0.54	0.51	0.64	<i>0.72</i>						
Transformation	3.65	.74	0.66	0.66	0.67	0.29	0.61	0.50	0.73	0.61	0.68	0.69	0.56	0.57	0.66	0.63	<i>0.77</i>					
Esteem Compensation	3.85	.88	0.58	0.52	0.57	0.20	0.52	0.54	0.59	0.50	0.60	0.78	0.54	0.57	0.69	0.61	0.67	<i>0.69</i>				
Distinction	2.93	.78	0.27	0.27	0.23	0.32	0.23	0.18	0.32	0.31	0.41	0.23	0.31	0.22	0.27	0.34	0.28	0.28	<i>0.70</i>			
Past Self	3.17	.61	0.04	0.09	0.19	-0.03	0.16	0.22	0.10	0.12	0.04	0.23	0.16	0.34	0.09	0.21	0.06	0.11	0.08	<i>0.40</i>		
Self-definition	3.52	.84	0.48	0.41	0.45	0.24	0.43	0.45	0.52	0.39	0.51	0.70	0.54	0.47	0.69	0.48	0.58	0.70	0.20	0.10	<i>0.69</i>	
Immortality	4.00	.71	0.40	0.42	0.48	-0.11	0.31	0.52	0.34	0.45	0.36	0.61	0.31	0.69	0.34	0.44	0.48	0.47	0.22	0.27	0.36	<i>0.72</i>

Note: M= Facet scale mean; SD = facet scale standard deviation; italicized entries on the main diagonal are internal consistency reliability estimates

APPENDIX B: Study II: Results of Pilot Data for the SMI

Summary of the purification and shortening of the twenty facet scales (Note: Items in red represent flagged items that were maintained after content review)

Subscale	Purification	Original	Purified	Alpha
Image Management	Reverse scored 121; deleted 158 for poor item-total; deleted 102 & 121 for content reasons	10	7	.69
Social Competition/Comparison	Deleted 141 for content reasons; flagged 168	9	8	.77
Affiliation	Deleted 161 & 181 for poor item-total; Flagged 131 , deleted 46 for content reasons	10	7	.42
Attention Seeking	Flagged 179 , 219 for poor item-total; deleted 41, 54, 146, & 178 for content reasons	13	8	.65
Emulation	Forward scored 210; deleted 21 & 112 for content reasons	8	6	.73
Rebellion	Deleted 1 for content reasons	5	5	.64
Attraction	Deleted 92, 151, & 222 for content reasons	8	5	.67
Social Compensation	Flagged 166 for poor item-total	6	5	.66
Control Anxiety	Deleted 29 for poor item-total; deleted 75 & 88 for content reasons	8	5	.72
Avoidance/Escape	Deleted 73, 114 & 144 for content reasons	11	8	.83
Reward	Deleted 213 & 218 for poor item-total; deleted 199 for content reasons	9	6	.59
Safety	Deleted 203 for poor item-total; deleted 72, 171 for content reasons, Flagged 5	10	7	.61
Mood Boost	Deleted 143 for content reasons	6	5	.75

Fill Empty Space	Deleted 43 for poor item-total	6	5	.72
Transformation/Elevation	Deleted 17, 79, 148, 164 for <i>moderate</i> item-totals.; deleted 12, 27, 31, 79, 82, 94, 106, 120, 164, 184 & 211 for content reasons	21	8	.77
Self-Esteem Compensation	(No change)	4	4	.69
Distinction	Forward coded 34; deleted 200 for content reasons	7	6	.70
Past Self	Deleted 126 for poor item-total; deleted 6 & 182 for content reasons, Flagged 202	8	5	.40
Crisis (self-definition)	(No change)	5	5	.69
Immortality	Deleted 55 for content reasons	7	6	.72

APPENDIX C: Revised SMI Pilot Questionnaire (Grouped by Category) Based on Scale Purification Procedures. (Attitudes version).

Shopping Motivations Inventory

The following items concern why we shop. For each item indicate the degree to which you agree or disagree.

< 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- >
Strongly Disagree Somewhat Neutral Somewhat Strongly agree

*Items in red are reverse scored items.

* starred items were items flagged during tests of internal reliability and consistency.

Social Management

Image Management

1. People often think I earn more than I actually do.
2. My purchases make me feel better about how others see me.
3. If I were to shop less, people would start to view me differently.
5. My purchases determine how others see me.
6. I never buy things that make me seem more successful.
7. Nothing I buy goes towards making an impression on others.

Social Competition/ Comparison

8. I like the feeling of owning more than others.
9. The more I have in comparison with others, the better I feel about myself.
10. I feel like I'm competing with others through my purchases.
11. I feel superior to others when I own something they don't have.
12. The more I have in comparison to others, the more I feel like I've "won."
13. How I feel relative to others is not related to how much I own.
14. I am never jealous when friends own things I don't have.
- *15. I never compare my possessions to those of others.

Affiliation

16. I feel peer pressured into buying things.
17. Purchases help me fit more easily into new social groups.
18. It is comforting to know that I own many of the same items those around me have.
- *19. I love buying gifts for others.
20. When I see something I like, I buy one for someone else.
21. My purchases do not impact how connected I feel to people I care about.

Attention Seeking

22. I enjoy displaying things that get people to "stop and notice."
23. I purposefully buy items that are likely to elicit comments.

24. I like it when people compliment my purchases.
*25. I like the attention I get from sales people when I buy things.
26. I don't enjoy showing off my purchases.
27. People rarely comment on my style or taste.
28. I don't like it when people notice what I own.
29. I avoiding buying items that are likely to attract attention.

Emulation

30. I buy things that remind me of my favorite role model.
31. I feel more successful when I own items successful people have.
32. I feel celebrity-like when I own things celebrities have.
33. I feel more "classy" when I buy items owned by upper class individuals.
34. I am no more likely to buy items that people I admire own.
35. My purchase choices are not influenced by the people I admire.

Rebellion

36. I like feeling like I've gotten away with something when I shop.
37. I shop to get revenge.
38. I live by the phrase, "don't get mad, go shopping."
39. I never feel "naughty" about what I buy or how much I've spent.
40. I never shop out of spite.

Attraction

41. I buy things that make me look more attractive.
42. I buy things to enhance my sex appeal.
43. Money can't buy love.
44. What I own has nothing to do with how attractive I feel.
45. Beauty is something you're born with; it's not something you can buy.

Social Compensation

46. Being of a lower class growing-up, I dreamed of one day being rich.
47. Being of a lower class growing-up, I dreamed of owning expensive things.
48. Purchases were once flaunted in front of me, but I'm the one flaunting now.
49. My purchases remind me that I no longer have to live on hand-me downs.
50. I never had many possessions growing-up, and I don't need many now.

Emotion Management

Control Anxiety

51. I feel more comfortable in public when I'm wearing something new.
52. I shop when I'm anxious about my future.
53. My purchases help me to feel more confident.
54. I feel more confident at social events when I'm wearing something new.
55. New purchases do not alleviate fears that I will be rejected by others.

Avoidance/Escape

- 56. I shop to escape feeling bad about myself.
- 57. When I shop I completely escape into a separate, fantasy world.
- 58. I feel liberated from my “everyday self” when I shop.
- 59. I temporarily escape having to think about problems when I shop.
- 60. Shopping helps me forget my responsibilities.
- 61. I shop to avoid being at home.
- 62. Shopping does not distract me from thinking about my obligations to others.
- 63. I never shop to avoid situations I need to face.

Reward

- 64. I allow myself to charge things when I feel I have worked hard.
- 65. I enjoy going shopping to reward myself for hard work.
- 66. Shopping is the one thing that I do to pamper myself.
- 67. I do not believe in working primarily to buy nice things
- 68. I rarely go overboard when I shop, even to reward myself for a job well done.
- 69. I never reward myself for accomplishments by going shopping.

Safety

- 70. I like the idea of an S.U.V. because it is safer than a smaller car.
- 71 My things protect me from harm.
- 72. When I find something I really like, I feel the need to buy two, just to be safe.
- 73. My purchases somehow help me to feel safe.
- 74. I feel sheltered by my things.
- *75. My family cannot be protected by anything materially acquired.
- 76. Things are useless in the face of disaster.

Mood Boost

- 77. Purchases are a “pick me up” when I am feeling run-down or tired.
- 78. No matter what is going on in my life, I feel high when shopping.
- 79. I never go shopping to lift my spirits.
- 80. Money can’t buy happiness
- 81. When I am feeling run down, shopping is not a “pick me up.”

Fill Empty Space

- 82. I do not like undecorated space.
- 83. Having lots of things somehow makes me feel satisfied.
- 84. I cannot stand emptiness, or empty space.
- 85. I tend to shop more when I feel a sense of emptiness
- 86. An undecorated corner or room does not make me feel anxious.

Self Identity Formation

Transformation/Elevation

- 87. I buy things that reflect the person I want to be.

- 88. New things remind me that a new future is possible.
- 89. New things make me feel like a new person.
- 90. I shop in preparation for success.
- 91. Shopping gives me hope that the future will be better than the past.
- 92. New purchases set the stage for self-improvement.
- 93. New things do not cause me to view myself any differently.
- 94. Purchases can not change how I am.

Self-Esteem Compensation

- 95. I've noticed a greater urge to shop when I feel like a failure.
- 96. When I feel useless, shopping reminds me that I am valuable.
- 97. I shop because I'm worth it!
- 98. I am no more apt to shop when I feel bad about myself than when I feel good.
- 99. My sense of worth is not dependent on what I own.

Distinction

- 100. A unique sense of style is important to me.
- 101. I delight in purchasing items that no one else has.
- 102. Rather than shop for name brands, I prefer unique items.
- 103. I am usually the first to start wearing items that later becomes fashionable.
- 104. I gain satisfaction from owning items no one else owns.
- 105. I hate buying items that later everyone owns.

Memory Management

- 106. I miss my old life, and I buy things that help transport me back to that special time.
- 107. I buy things that remind me of the past.
- 108. I buy things that remind me of childhood.
- 109. I avoid buying things that make me feel nostalgic.
- *110. I never buy items that remind me the past.

Crisis (Self-Redefinition)

- 111. I shop more during times of major upheaval.
- 112. My urge to shop increases when I am undergoing an "identity crisis."
- 113. I do not shop any more than usual when my "sense of self" has been rattled.
- 114. I am no more likely shop after a break-up or divorce.
- 115. I do not shop any more than usual during times of transition.

Immortality

- 116. I hope my descendents will know something of me though my possessions.
- 117. I am comforted by the thought that my belongings will live long after I do.
- 118. My family will remember me primarily though what I leave them.
- 119. I think about how my possessions will be preserved after I die.
- 120. I rarely think about who I want to have my favorite items after I am gone.
- 121. I never think about who will care for my things after I am gone.

APPENDIX D

STUDY II: SHOPPING MOTIVATIONS INVENTORY. FINAL QUESTIONNAIRE BASED ON PILOT DATA

Pilot Shopping Motivations Inventory (behavioral version)

The following items concern shopping behavior. For each item indicate the degree to which you agree or disagree.

< 1 ----- 2 ----- 3 ----- 4 ----- 5 ----->
Strongly Disagree Neutral Agree Strongly
Disagree Somewhat Somewhat agree

I Shop....

Social Management

Image Management

1. So that people will think I earn more than I actually do.
2. To improve how others see me
3. So that people will not start to view me differently.
4. As a way to manage how others see me.
5. To help me seem more successful.
6. To make an impression on others.

Social Competition/ Comparison

7. To have more things or better things than others.
8. To feel better about myself in comparison to others.
9. Out of a sense of competition with others.
10. To feel superior to others
11. Out of a sense of jealousy for what others own.
12. To make myself feel better relative to others.

Affiliation

13. Out of a sense of peer pressure
14. So that I can fit into social groups.
15. For items those around me have.
16. To buy gifts for others.
17. To remind me of or feel connected to people I care about.

Attention Seeking

18. For items that get people to "stop and notice."
19. For items that are likely to elicit comments.
20. For items that are likely to elicit compliment.
21. Because I like the attention I get from sales people when I buy things.

- 22. So that I might showing off my purchases.
- 23. For items that are likely to attract attention.

Emulation

- 24. For things that remind me of my favorite role model.
- 25. For items successful people own.
- 26. To feel more celebrity-like.
- 27. For items upper-class people have.
- 28. For items that people I admire own.

Rebellion

- 29. To feel like I've gotten away with something.
- 30. To get revenge.
- 31. Out of spite.

Attraction

- 32. For items that make me more attractive.
- 33. For things that enhance my appealing qualities.
- 34. For items that help me feel better about how I look.
- 35. For items that disguise parts of my body I do not like.

Emotion Management

Control Anxiety

- 36. For items that help me feel more confident.
- 37. For items that help me feel more secure about the future.
- 38. To feel more confident in social situations
- 39. To feel more confident on a date.
- 40. To alleviate fears that I will be rejected by others.

Avoidance/Escape

- 41. To escape feeling bad about myself.
- 42. To escape into a separate, fantasy world.
- 43. As a way to feel liberated from my everyday self.
- 44. To escape having to think about problems.
- 45. To forget my responsibilities.
- 46. To avoid being at home.

Reward

- 47. When I feel I have worked hard.
- 48. To reward myself for hard work.
- 49. To pamper myself.
- 50. As a way to reward myself.

Safety

- 51. For items that will provide protection from harm.

- 52. For things that help me to feel safe.
- 53. To feel sheltered.
- 54. For things that help fend off disaster.

Mood Boost

- 55. As a way to lift my spirits
- 56. To feel “high”
- 57. To feel happy.

Fill Empty Space

- 58. To fill undecorated space.
- 59. When I feel a sense of emptiness

Self Identity Formation

Transformation/Elevation

- 60. For items that reflect the person I want to be.
- 61. To remind myself that a new future is possible.
- 62. For items that help me feel like a new person.
- 63. For items that prepare me for future success.
- 64. For items that will give me hope that the future will be better than the past.
- 65. For items that help me to view myself differently.
- 66. For items that will help me to change the way I am.

Self-Esteem Compensation

- 67. When I feel like a failure.
- 68. When I feel powerless.
- 69. When I feel disappointed with myself.
- 70. When I feel my self-esteem has been lowered.
- 71. When I feel powerless.

Distinction

- 72. For items that reflect my unique style.
- 73. For items that no one else has.
- 74. for items that help me to distinguish myself from others.
- 75. I hate buying items that later everyone owns.

Memory Management

- 76. For items that remind me of the past.
- 77. For items that remind me of childhood.
- 78. For items that make me feel nostalgic.
- 79. For items that remind me of people in my past.

Immortality

- 78. So that descendents will have something to remember me by.

79. For items that are likely to live long after I do.

80. For items that my family will enjoy after I am gone.

APPENDIX E

Study II. Results of EFA Factor Loadings for Shopping Motivation Inventory (SMI) Items (N = 441)

Item	1	2	3
SH1	.459	.148	.147
SH2	.200	.711	.058
SH3	.151	.661	.226
SH4	.356	.665	.152
SH5	.246	.545	.457
SH6	.032	.687	.348
SH7	.243	.435	.301
SH8	.522	.398	.256
SH9	.145	.501	.314
SH10	.472	.158	.367
SH11	.537	.332	.352
SH12	.303	.324	.603
SH13	.537	.183	.242
SH14	.644	.011	.252
SH15	.168	.589	.350
SH16	.659	.189	.297
SH17	.229	.242	.588
SH18	.403	.152	.564
SH19	.404	.270	.629

SH20	.500	.070	.583
Item	1	2	3
SH21	.241	.384	.596
SH22	.413	.397	.464
SH23	.362	.382	.481
SH24	.228	.657	.071
SH25	.532	.083	.362
SH26	.425	.330	.645
SH27	.689	.026	.290
SH28	.575	.202	.510
SH29	.702	.196	.234
SH30	.744	.009	.237
SH31	.496	.166	.527
SH32	.633	.094	.160
SH33	.725	.281	.096
SH34	.104	.621	.443
SH35	.301	.347	.661
SH36	.171	.725	.095
SH37	.600	.098	.386
SH38	.466	.284	.493
SH39	.607	.435	.218
SH40	.658	.111	.192

SH41	.134	.646	.406
SH42	.776	.200	.198
Item	1	2	3
SH43	.231	.563	.345
SH44	.485	.276	.605
SH45	.189	.563	.334
SH46	.674	.429	.153
SH47	.690	.060	.200
SH48	.298	.366	.608
SH49	.336	.461	.538
SH50	.574	.498	.270
SH51	.586	.335	.009
SH52	.286	.303	.694
SH53	.740	.306	.157
SH54	.250	.504	.561
SH55	.763	.266	.206
SH56	.785	.263	.205
SH57	.489	.262	.618
SH58	.651	.075	.327
SH59	.644	.277	.355
SH60	.736	.283	.170
SH61	.202	.748	.082

SH62	.435	.390	.600
SH63	.273	.319	.664
SH64	.363	.379	.345
<hr/>			
Item	1	2	3
<hr/>			
SH65	.518	.320	.433
SH66	.434	.684	.055
SH67	.591	.293	.420
SH68	.216	.578	.232
SH69	.024	.547	.004
SH70	.129	.697	.373
SH71	.169	.681	.005
SH72	.638	.424	.118
SH73	.278	.634	.278
SH74	.040	.702	.393
SH75	.395	.596	.382
SH76	.538	.284	.349
SH77	.045	.709	.303
SH78	.685	.056	.248
SH79	.755	.040	.180
SH80	.733	.248	.087
SH81	.183	.569	.470
SH82	.072	.713	.307

APPENDIX F

Study II. Results of CFA: Factor Loadings

Maximum Likelihood Estimates for the Indicator Variables

Path	B	S.E.	C.R.
Identity management to:			
SMI 1	.48	.05	9.07
SMI 13	.58	.05	11.89
SMI 14	.66	.05	13.69
SMI 16	.78	.05	17.06
SMI 25	.62	.05	12.84
SMI 27	.70	.04	16.17
SMI 29	.85	.05	17.91
SMI 30	.71	.04	17.37
SMI 32	.66	.05	13.15
SMI 33	.83	.05	18.33
SMI 37	.71	.05	14.63
SMI 39	.91	.05	17.29
SMI 40	.73	.05	14.37
SMI 42	.90	.04	21.27
SMI 46	.92	.05	19.20
SMI 47	.72	.05	15.51
SMI 51	.76	.06	13.29
SMI 53	.87	.04	20.64

Path	B	S.E.	C.R.
SMI 55	.93	.04	22.19
Identity management to:			
SMI 56	1.00		
SMI 58	.80	.05	15.80
SMI 59	.88	.05	18.37
SMI 60	.94	.05	19.91
SMI 67	.82	.05	17.49
SMI 72	.91	.05	17.68
SMI 76	.76	.05	14.37
SMI 78	.73	.05	15.90
SMI 79	.67	.04	17.47
SMI 80	.81	.04	18.52
Emotional management to:			
SMI 2	.81	.06	13.38
SMI 3	.80	.06	14.10
SMI 4	.89	.06	14.80
SMI 5	.90	.06	15.24
SMI 6	.90	.06	15.33
SMI 7	.70	.07	10.35
SMI 9	.62	.06	10.53
SMI 15	.84	.06	14.86

Path	B	S.E.	C.R.
SMI 24	.77	.06	12.27
SMI 34	.90	.06	14.96
Emotional management to:			
SMI 36	.85	.06	13.98
SMI 41	.95	.06	15.65
SMI 43	.86	.06	14.57
SMI 45	.79	.06	12.73
SMI 61	.88	.06	14.58
SMI 66	.93	.06	14.75
SMI 68	.81	.06	12.88
SMI 69	.45	.06	7.69
SMI 70	1.00		
SMI 71	.73	.06	12.35
SMI 73	.97	.06	15.92
SMI 74	.96	.06	16.10
SMI 77	.91	.06	15.20
SMI 82	.90	.06	15.41
Social management to:			
SMI 12	.87	.06	15.78
SMI 17	.72	.05	13.31
SMI 19	.92	.05	17.60

Path	B	S.E.	C.R.
SMI 21	.85	.06	15.22
SMI 26	1.00		
SMI 35	.96	.05	17.97
Social management to:			
SMI 48	.91	.05	17.12
SMI 52	1.00	.05	18.26
SMI 62	1.04	.05	19.95
SMI 63	.93	.05	17.85

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