THESIS

UNDERSTANDING COLLEGE STUDENTS' COMPULSIVE BUYING TENDENCIES

ACROSS SHOPPING CHANNELS: PSYCHOLOGICAL, AFFECTIVE,

AND SOCIAL PERSPECTIVES

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ABSTRACT

UNDERSTANDING COLLEGE STUDENTS' COMPULSIVE BUYING ACROSS
SHOPPING CHANNELS; PSYCHOLOGICAL, AFFECTIVE, AND SOCIAL
PERSPECTIVES

The concept of compulsive buying is a repetitive behavior that affects many people negatively in terms of emotional and financial well being. The purpose of this study was to analyze compulsive buying among college students across multiple shopping channels. This study considered how various psychological, affective, and social consumer characteristics may influence the likelihood to engage in compulsive buying. The specific psychological characteristics that were analyzed in this study were self-perceived attractiveness and self-esteem. In terms of affective states, the general frequencies of negative and positive forms of affect were considered in relation to compulsive buying. And lastly, perceived parental compulsive buying tendencies and normative conformity were the social variables of interest. A further goal was to identify shopping channel usage frequencies and the types of products that are most commonly sought related to compulsive buying.

An online survey was available to undergraduate students from a variety of majors. Results showed that each of the variables held a significant relationship with compulsive buying tendencies, with the exception of self-esteem. Specifically, self-perceived attractiveness, negative affect, perceived parental buying tendencies, and normative conformity, were all positively related to compulsive buying. Additionally, positive affect was found to be negatively related to compulsive buying. It was demonstrated that participants with greater compulsive buying tendencies were more likely to utilize the various shopping channels with greater

frequencies than participants with lower compulsive buying tendencies. And lastly, a positive relationship was found between compulsive buying and preference to seek hedonic products, while a negative relationship was found between compulsive buying and preference to seek utilitarian products. This research deviates from prior work by simultaneously analyzing variables within the same study that have previously been considered as mutually exclusive concepts. The potential implications of this study are valuable for researchers interested in the field of consumer behavior.

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DEFINITION OF TERMS

Affective States

Affect- Umbrella term for a set of mental processes including emotions, moods, and attitudes; may be considered a general category for mental feeling processes, rather than a particular psychological process (Bagozzi, Gopinath, & Nyer, 1999).

Frequency of Negative Affect- How often an individual experiences negative affect such as irritability, nervousness, sadness, etc. (Deiner, et *al.*, 1985).

Frequency of Positive Affect- How often an individual experiences positive affect such as happiness, pride, confidence, etc. (Deiner et *al.*, 1985).

Negative Affect- A general state of distress that may take the form of a variety of aversive mood states (Watson et *al.*, 1988).

Positive Affect- A general state of feeling enthusiastic, active, or alert (Watson et *al.*, 1988).

Shopping Behaviors

Compulsive Buying- Abnormal form of shopping and spending in which the afflicted consumer has an overpowering, uncontrollable, chronic, and repetitive urge to shop and spend, which may function as a means of alleviating stress or anxiety (Edwards, 1992).

Compulsive Buying Tendencies- A consumer's likelihood to engage in compulsive buying, relative to their level of compulsiveness (Edwards, 1992).

Impulsive Buying- A consumer's likelihood to make unintended, immediate, or spontaneous purchases (Flight, Rountree, & Beatty, 2012).

Mobile Shopping- Form of commerce that takes place via internet enabled mobile phones; can occur regardless of time or location (Lu & Yu-Jen Su, 2009).

Online Shopping- Form of commerce that takes place via visual storefronts located on the Web and accessed by internet enabled computers (Patwardhan & Yang, 2010).

Personal Characteristics

Self-Esteem- One's personal judgment of self worth (Morehead & Morehead, 1995).

Self-Perceived Attractiveness - One's appraisal of their own attractiveness relative to others (Lucas & Koff, 2014).

Product Categories

Hedonic Products- Products consumed primarily for affective or sensory gratification purposes (Kempf, 1999; Woods, 1960).

Utilitarian Products- Products consumed primarily for a functional or cognitively oriented purposes (Kempf, 1999; Woods, 1960).

Social Influences

Normative Conformity-Social pressure to conform to the expectations of another (Deutsch & Gerard, 1955).

Perceived Parental Compulsive Buying Tendencies- The participant's beliefs regarding their own parents' inability to stop buying products or habitual buying of seemingly unnecessary products (D'Astous et *al.*, 1990).

CHAPTER I

INTRODUCTION

Research Problem

Within our largely consumerism based society, there is a strong emphasis placed on individuals to attain material goods. However, when this drive to acquire material possessions becomes too strong and begins to disrupt everyday activities, individuals often experience negative repercussions affecting their mental and financial states. The concept of compulsive buying was first coined by O'Guinn and Faber (1989), defined as "chronic repetitive purchasing that becomes a primary response to negative events or feelings" (p. 155). There has been extensive research previously conducted with regard to compulsive buying. However, there are also several knowledge gaps that leave room for future investigation.

This research deviates from prior work by examining how various psychological, affective, and social characteristics of consumers influence the utilization of different shopping channels regarding compulsive buying. The specific personal psychological characteristics that were analyzed in the present study are self-perceived attractiveness and self-esteem. In terms of affective states, negative and positive forms of affect were each considered in terms of frequency in relation to compulsive buying. And lastly, perceived parental compulsive buying tendencies and normative conformity served as the social variables of interest.

To the best of the researcher's knowledge, this study was the first to analyze each of the specific variables used in this study simultaneously. Through the current literature, it has been demonstrated that there is room for further research pertaining to the relationships to each of

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these variables with compulsive buying. The available research related to each of the psychological variables has shown inconclusive findings.

Two potential relationships held with compulsive buying that are of particular interest include self-perceived attractiveness and self-esteem. Given the seemingly natural positive relationship held between self-perceived attractiveness and self-esteem, it appears logical to assume that each of the concepts would hold relationships with compulsive buying of similar directions. However, there is evidence to suggest that self-perceived attractiveness and self-esteem may actually demonstrate opposing relationships with compulsive buying. It has been repeatedly suggested through prior research that self-esteem and compulsive buying hold a negative relationship (Roberts & Pirog, 2004; Tommasi & Busonera, 2011). While self-perceived attractiveness has yet to be studied specifically in a context regarding compulsive buying, it has been analyzed in relation to impulse buying by Lucas and Koff (2013). Through their study, a positive relationship between self-perceived attractiveness and the likelihood to engage in impulse buying was demonstrated.

The topic of affect in relation to compulsive buying has also generated inconsistent findings. Many studies have suggested that both positive and negative forms of affect may influence compulsive buying tendencies (Faber & Christenson, 1996; Miltenberger et *al*., 2003). Although some studies strongly suggest that it is negative affect that primarily influences compulsive buying, studies such as that of Schlosser, Black, Repertinger & Freet (1994) have demonstrated that positive affect, such as feeling happy or elated, can precede compulsive buying as well. In their study, a sample of participants with existing compulsive buying tendencies reported feelings commonly felt before, during, and after the buying experience (Schlosser et *al.,* 1994).

It was not a goal of this study to analyze affective states specifically before, during, or after a compulsive buying episode, rather the study considered participant affect from an overall, general day-to-day basis. Affect frequency among college students has been studied by Diener, Larsen, Levine, and Emmons (1985), however, their study focused on investigating personal subjective well-being and was not related to compulsive buying, as this study is. To the best of the researcher's knowledge, affect frequency has not been studied in this manner relative to compulsive buying, which makes this study an important contribution to the field. Previous studies have primarily focused on the relationship between compulsive buying and affect within specific time frames in relation to engagement in compulsive buying (Flight, Rountree, & Beatty, 2012; Muller et *al*., 2012). Further, these studies measured momentary affect rather than an overall sense of affect. One study by Faber and Christenson (1996) assessed affect frequency in relation to compulsive buying, however was limited to specifically immediately before and during the compulsive buying episode.

The social variables of interest have been demonstrated through the literature to have been studied less in relation to compulsive buying than the psychological and affective variables. Several studies have suggested the important role parents play in socializing children and adolescents to be future consumers (D'Astous, Maltais, & Roberge, 1990; DeSarbo & Edwards, 1996). However, the literature in regard to perceived parental compulsive buying could be considered outdated and in need of updating (Roberts, 1998). Also, it has been demonstrated that in addition to the social influence parents may serve, peers can also serve to influence consumer purchases (Meyer & Anderson, 2000), which suggests that it is important to continue research on the social influence of others.

These social influences relate to the notion of consumer conformity. While not widely studied within the compulsive buying context, the concept of conformity as a social construct has been suggested to play an influential role in compulsive buying tendencies. The studies pertaining specifically to compulsive buying and conformity are lacking in number and the findings that are available have been contradictory. For instance, while Lee and Park (2008) did not find a significant relationship between normative conformity and online compulsive buying, a more recent study conducted by Prete, Guido, and Pichierri (2013) did indeed suggest a positive relationship between conformity and compulsive buying in a brick-and-mortar shopping context. Due to the suggested inconsistent relationships between conformity and compulsive buying, further research is needed to firmly understand how conformity may influence compulsive buying.

The current study also considers in-store and online channels together, whereas many former compulsive buying studies have not specified the shopping channel or have focused exclusively on either in-store or online channels (Telci, 2012; Wang & Yang, 2008). In addition, even more novel to the field of compulsive buying, is the study of compulsive buying via mobile phones. With the rise of mobile activities such as shopping being so recent, to the researcher's knowledge, there is no available literature examining how compulsive buying tendencies may impact the likelihood to utilize mobile shopping channels. There is research available though to suggest that mobile shopping can offer a different experience to shopping while providing several advantages. The technological advancements of modern society have spurred a growth in shopping via a new channel (Yang, 2010). The most readily apparent difference between online and mobile shopping is that mobile cell phones are often even more readily accessible than computers in everyday life. Despite this, among other convenience advantages that mobile

shopping can offer, Lu and Yu-Jen Se (2009) assert that research regarding mobile shopping is still in its infancy and needs to be studied more because some consumers may still be hesitant to adopt the channel as a reliable mode of shopping. The current study is different from prior work because it sheds light to the adoption of mobile shopping among individuals who experience different levels of compulsive buying tendencies. Expanding on the available research regarding mobile shopping is one contribution this study provides to the field of compulsive buying across channels.

The study also aimed to analyze the types of products that are sought to buy among individuals experiencing compulsive buying tendencies. Prior studies have also considered the types of products commonly bought during a compulsive buying episode, however have mainly taken a descriptive approach at analyzing the products (Lo & Harvey, 2014; Schlosser, Black, Repertinger, & Freet, 1994). A further goal of this study was to analyze the products bought in terms of hedonic versus utilitarian values. This brings theoretical depth to the study, which is important as it also provides new information to the field.

In addition to investigating variables that have not been explored together within the same study, the present research also furthers the knowledge related to compulsive buying tendencies among college students. The estimated prevalence of individuals who engage in compulsive buying has been found to have some discrepancies. In 2006, a survey revealed that 5.8% of the general U.S. population exhibited compulsive buying tendencies (Koran et *al.,* 2006). Whereas more recently among a sample of college students, it was found that only 3.6% of individuals met the criteria for compulsive buying (Harvanko et *al*., 2013). This contrast in prevalence findings is interesting because it has been thought that collegiate samples are highly reflective of the general population (Yurchisin & Johnson, 2004). Furthermore, it has also been

suggested that the rates of compulsive buying are increasing with each generation (Roberts &

Pirog, 2004). This study expands on the current knowledge available related to compulsive

buying by examining compulsive buying tendencies among college students in addition to

analyzing how various psychological, affective, and social consumer characteristics affect

compulsive buying behaviors.

Purpose of Study

The overall purpose of this study was to understand tendencies of university students who

engage in compulsive buying, and to investigate how consumer psychological characteristics,

affective states, and social variables may influence the outcome of compulsive buying tendency

(CBT) across shopping channels. This study utilized Edward (1992)'s definition of compulsive

buying as an abnormal form of shopping and spending in which the afflicted consumer has an

overpowering, uncontrollable, chronic, and repetitive urge to shop and spend, which may

function as a means of alleviating stress or anxiety. CBT may refer to a consumer's likelihood to

engage in compulsive buying, relative to their level of compulsiveness (Edwards, 1992). One

specific aim of this study was to identify how psychological characteristics (self-perceived

attractiveness and self-esteem), affective states (positive and negative affect), and social

variables (perceived parental compulsive buying and normative conformity) may influence the

propensity of compulsive buying which could in turn impact their compulsive buying behaviors

through various shopping channels. The three modes of shopping that were studied included

brick-and-mortar stores, online websites, and mobile shopping apps. In addition, the types of

products compulsively bought were also assessed in terms of their hedonic or utilitarian value.

Undergraduate college students served as the population of this study because it has been

suggested that compulsive buying prevalence within the collegiate population is highly reflective

of the compulsive buying prevalence that exists in the larger general population (Yurchisin &

Johnson, 2004). In addition, it has been suggested that there is a need to study compulsive

buying among individuals early in their adulthood (Koran et *al.*, 2006) as well as a suggested

trend that rates of compulsive buying behavior steadily have been increasing with each

generation (Roberts & Pirog, 2004). Undergraduate college students included any individual

enrolled as an undergraduate at a specified state university and who is also at least 18 years of

age or older.

This research differed from prior work by examining relations among psychological,

affective, and social variables that have not been previously explored within the same study.

Also, it has been suggested that there is a further need to study compulsive buying among the

collegiate population (Harvanko et *al.*, 2013). Examining compulsive buying among college

students and analyzing which shopping channels are most typically utilized as well as if hedonic

products or utilitarian products are most often compulsively bought is a primary focal point of

the study.

Theoretical Framework

Through reviewing the extant literature surrounding compulsive buying and the various

psychological, affective, and social variables, it was possible to hypothesize potential

relationships relative to compulsive buying tendencies (CBT). The definition of CBT remains

constant throughout the study in the sense that it considers tendencies as a consumer's likelihood

to engage in compulsive buying, relative to their level of compulsiveness (Edwards, 1992). The

psychological variables may demonstrate contradicting relationships with compulsive buying

tendencies, with self-perceived attractiveness holding a positive relationship and self-esteem

holding a negative relationship. It was also predicted that negative affect holds a positive

relationship with compulsive buying tendencies, while positive affect demonstrates a negative relationship. Further, perceived parental compulsive buying tendencies as well as normative conformity can each be assumed to hold positive relationships with compulsive buying tendencies.

The proposed behavioral outcomes of CBT that the study considered included the utilized shopping channels and product preference (hedonic or utilitarian). It was hypothesized that CBT holds a positive relationship with usage frequency of each of the shopping channels, including brick-and-mortar, online, and mobile shopping. However, it was thought that CBT may hold opposing relationships with preference to seek hedonic products and preference to seek utilitarian products. It is assumed that CBT holds a positive relationship with hedonic product preference, while also demonstrating a negative relationship with utilitarian products.

The theoretical framework for this study is demonstrated below. The model assumed that there are three main categories of consumer characteristics that may have predictive value in relation to the likelihood to engage in compulsive buying among university students. In this sense, the goal was to investigate specifically the role that self-perceived attractiveness, self-esteem, negative and positive affect, perceived parental compulsive buying tendencies, and normative conformity played in regard to the likelihood to engage in compulsive buying. Self-perceived attractiveness is defined as one's appraisal of their own attractiveness relative to others (Lucas & Koff, 2014). Self-esteem can be defined as one's judgment of worth regarding themselves (Morehead & Morehead, 1995). As defined by Watson, Clark, and Tellegen (1988), negative affect can be thought of as a general feeling of distress that may take the form of a variety of aversive mood states, whereas positive affect refers to the state of feeling enthusiastic, active, or alert. Frequency of negative affect can be thought of as how often an individual

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experiences negative affect such as irritability, nervousness, or sadness. Likewise, positive affect is conceptualized as how often an individual experiences positive affect such as happiness, pride, or confidence (Deiner et *al.*, 1985). Perceptions of parental compulsive buying tendencies consist of participant's beliefs regarding their own parents' inability to stop buying products or habitual buying of seemingly unnecessary products (D'Astous et *al.*, 1990). And lastly, the present study defines normative conformity as the social pressure to conform to the expectation of another (Deutsch & Gerard, 1955). The outcomes of the compulsive buying tendencies that have been studied are the chosen shopping channels and the types of product(s) bought. The shopping channels of interest consist of in-store shopping, online shopping, and mobile shopping. Refer to Figure 1 regarding further information related to directional hypothesis development.
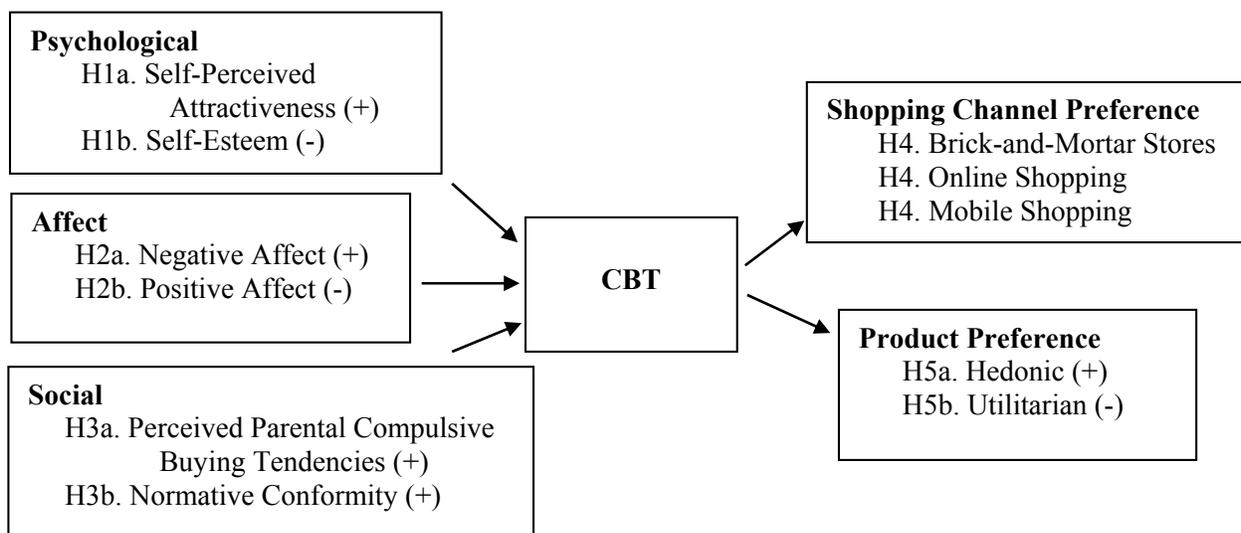
Figure 1.Consumer characteristics and compulsive buying tendency behavioral outcomes

There are several reasons why undertaking a study pertaining to compulsive buying is valuable. Through understanding abnormal purchasing patterns such as compulsive buying, the field of consumer behavior will be able to better evaluate what constitutes normative behaviors in terms of consumerism (O'Guinn & Faber, 1989). Within the field of consumer behavior, it has

typically been more common to study functional behaviors, but considering negative aspects of consumer behavior as well is equally important yet less prevalent; thus, the topic of analysis is incomplete (Faber & O'Guinn, 1992). Becoming more familiar with the contributing factors influencing compulsive buying can enable practitioners to provide improved treatment to the individuals experiencing compulsive buying. More specifically in regards to the role of affect in relation to compulsive buying, further research could facilitate a greater understanding of how to regulate affective states, which could potentially in turn decrease CBT.

Findings from this study are potentially useful for future researchers interested in a variety of topics related to compulsive buying. For example, consumer behaviorists, social psychologists, and communication marketers alike may take interest in findings pertaining to consumer characteristics that influence shopping channel preference. Also of interest for future research may be the intersection of compulsive buying with other psychological, affective, or behavioral concepts in order to further advance the field of study.

CHAPTER II

LITERATURE REVIEW

As with any research, it is important to survey the current available literature regarding the topic before moving on to conduct an empirical study. The study of compulsive buying within the field of consumer behavior is still relatively new, with the first landmark study occurring in the late 1980s (O'Guinn & Faber, 1989). However, since the establishment of compulsive buying within the research realm, the topic has gained significant popularity. The evolution of the study of compulsive buying has contributed to a better understanding of consumers, as well as compulsive behavioral disorders in general. The following discussion's focus will begin with considering the act of compulsive buying in general. Further in the literature review, compulsive buying tendencies will be referenced. The specification of compulsive buying tendencies will refer to a consumer's likelihood to engage in compulsive buying.

Background Research on Compulsive Buying

The founding work on the phenomenon of compulsive buying was completed by O'Guinn and Faber (1989). Their exploratory study examined personality factors, motivations, and consequences related to compulsive buying. The researchers analyzed compulsive buying prior to the development of an official measurement scale to distinguish compulsive buyers from non-compulsive consumers. Due to the fact that there were not yet standardized means of assessing compulsive buying, the sample of compulsive buyers within the O'Guinn and Faber (1989) study consisted of individuals who were professionally or self- identified as 'problem buyers'. Findings from this landmark study indicated that the self-identified problem buyers, also referred to as compulsive buyers, showed higher obsessive-compulsive scores, lower scores of

self-esteem, and higher fantasy-imaginative levels in comparison to consumers within the general population who did not identify as problem buyers.

Evidence from this original study also demonstrated that the compulsive buyers suffer from negative financial and emotional consequences as a result of their buying behaviors. Further, findings suggest that the compulsive buyers did not actually have any greater desire to keep or possess items that were obsessively acquired than non-compulsive consumers (O'Guinn & Faber, 1989). Similar findings were confirmed in a study by Lo and Harvey (2014) that compared compulsive buying, referred to as obsessive acquisition, and collecting. The concept of collecting was defined as selectively and passionately possessing items, which are removed from ordinary use and perceived as unique pieces of a set. Collecting differs from obsessive acquisition, described as a need to actively obtain items rather than keep or possess the items (Lo & Harvey, 2014). Further discussion of the act of collecting items is interesting, although outside the scope of this paper. What is important to realize from the Lo and Harvey (2014) study is that the strong desire to actively acquire items rather than to collect and keep items is consistent with the original findings produced by O'Guinn & Faber's (1989) study.

There have been many studies that have analyzed compulsive buying from the perspective of different personality traits or characteristics. Anxiety and depression have been found to play mediating roles within individuals engaging in compulsive buying (Harvanko, et al., 2013; Koran et al.,2006; Otero-Lopez & Villardefrancos, 2013). The personality trait neuroticism has been found in high levels within samples of compulsive buyers (Otero-Lopez & Villardefrancos, 2013; Tommasi & Busonera, 2012). Other traits, contentiousness and agreeableness have been found to be low in this group compared to non-compulsive buyers (Otero-Lopez & Villardefrancos, 2013). The demonstrated relationship between compulsive

buying and the personality trait of depression seems to be the most prominent, however (Monahan, Black, & Gabel, 1996; Mueller et *al*., 2011; Rodriguez-Villarino et *al*., 2006).

It is interesting and worth noting that there also may be gender differences regarding the relationship between personality characteristics and compulsive buying. As shown by Mueller et *al*., (2011), only males were found to have an association between depression and compulsive buying. In comparison, anxiety and low effortful control were found to be predictors of compulsive buying among females (Mueller et *al.*, 2011).

Personal Characteristics and Compulsive Buying

As demonstrated, there have been a multitude of traits to be studied in relation to compulsive buying since its development as a specific subfield of research within the larger field of consumer behavior. It is important for the current research to build upon former work. The two specific personal characteristics that are analyzed in relation to compulsive buying in the present study are self-perceived attractiveness and self-esteem. There has been little prior research to consider the relationship between the specific concept of self-perceived attractiveness and compulsive buying. While the relationship between self-esteem and compulsive buying has been more widely studied, there is still demonstrated evidence that there is room for further investigation. For instance, the inconsistent relationships found to be held between self-perceived attractiveness and self-esteem with compulsive buying should be considered of interest in research further. It is assumed that there is a positive relationship between self-perceived attractiveness and self-esteem, which should imply that the relationships each of the concepts hold with compulsive buying should be held in similar directions. However, studies to support this line of thinking are far and few.

Self-Perceived Attractiveness. The notion of self-perceived attractiveness is defined as one's appraisal of his or her own attractiveness relative to others (Lucas & Koff, 2014). Self-perceived attractiveness could be thought of as closely aligning with the self-perceived body image that an individual holds about themselves (Fisher, 1968). In a sample of patients with eating disorders, a lifetime prevalence of compulsive buying was found in 10% of the participants. Compulsive buying was also found to be significantly related to drive for thinness and bulimia in particular (Claes, et *al.*, 2011). Studying compulsive buying among a sample of patients with eating disorders is relevant to body image because it can be assumed that this is a population of individuals who have endured ongoing struggles with body image satisfaction. There are a variety of aspects that contribute overall to one's level of self-perceived attractiveness and self-perceived body image. It may be beneficial to study how levels of self-perceived attractiveness correlate with compulsive buying behaviors in a larger general population.

In comparison to Claes et *al.*'s (2011) study examining compulsive buying in relation to low body image satisfaction, Lucas and Koff (2013) explored how inclined individuals with high levels of self-perceived attractiveness were to engage in impulse buying. Specifically, high levels of self-perceived attractiveness were shown to be associated with a lack of premeditation of impulse buying (Lucas & Koff, 2013). Although it has been suggested that the two behaviors are motivated by different forms of affective states, impulse buying in general is similar to compulsive buying, except that impulse buying lacks the repetition and significant impairing consequences as seen in compulsive buying (Faber & O'Guinn, 1992). To the best of the researcher's knowledge, the concept of self-perceived attractiveness specifically has not yet been researched in relation to compulsive buying. Lucas and Koff (2013)'s study would be interesting

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to build from by considering the relationship of self-perceived attractiveness with compulsive buying as a key variable, rather than impulse buying. Although the behaviors of compulsive buying and impulse buying are similar, potential findings may yield different results between the two contexts.

One characteristic that self-perceived attractiveness may be related to is narcissism. There has been previous research to suggest that the trait narcissism may be related to compulsive buying (Muller, Mitchell, & de Zwaan, 2015). Specifically, in a study conducted by Rose (2007), narcissism among college students was shown to be positively related to compulsive buying. Furthermore, their research also suggested that compulsive buying and narcissism are similar in the sense that both concepts have demonstrated positive relationships with materialism and negative relationships with impulse control. In a more recent study, it was found that among individuals with high narcissism scores, irrational beliefs were associated with and predicted compulsive buying. Irrational beliefs were defined as faulty cognitive processes in which external events are perceived and interpreted in a negatively distorted or self-defeating way (Harnish & Bridges, 2014). Although there has not yet been research to analyze self-perceived attractiveness relative to compulsive buying, it may be possible to assume that similar to narcissism, self-perceived attractiveness may also maintain a positive relationship with compulsive buying. That is, individuals with high self-perceived attractiveness scores may also score high on narcissism, suggesting that both concepts would hold positive relationships with compulsive buying as well.

Further, the concept of self-perceived attractiveness may also closely align to the importance of appearance goals. Roberts and Pirog (2004), demonstrated a positive relationship between appearance importance goals and likelihood of engaging in compulsive buying. In their

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study, appearance related goals were one dimension of several extrinsic goals, which are goals that are contingent upon the approval of others, to be included (Roberts & Pirog, 2004). It can be reasoned that self-perceived attractiveness and the importance of appearance goals are closely related because individuals with high levels of self-perceived attractiveness may also consider appearance goals to be important. Also, it was suggested in Lucas and Koff's (2013) that women who have high levels of compulsive buying may engage in the behavior in order to obtain attractiveness-enhancing products, hence suggesting a strong importance placed on appearance goals. Therefore, the first hypothesis is stated as follows.

Hypothesis 1a: Self-perceived attractiveness will have a positive relationship with compulsive buying tendency.

     Self-Esteem. The concept of self-perceived attractiveness closely relates to the level of self-esteem, which can be thought of as the judgment of worth an individual holds about him or herself (Morehead & Morehead, 1995). Several studies have shown a significant negative relationship between self-esteem and compulsive buying (Roberts, 1998; Yurchisin & Johnson, 2004). It has been previously found that individuals with low self-esteem were more likely to use compulsive buying as a means of escape or avoidance (Rodriguez-Villarino, Gonzalez-Lorenzo, Fernandez-Gonzalez, Lameiras-Fernandez, & Foltz, 2006). Similarly, in another study by Tommasi and Busonera (2012), individuals yielding high scores on three separate scales measuring compulsive buying also produced low scores of self-esteem. The findings of these studies all coincide with the original suggested negative relationship of self-esteem and compulsive buying as demonstrated in the founding work of Faber and O'Guinn (1989).

However, one interesting study by Lee, Lennon, and Rudd (2000) prompts further investigation into the relationship between self-esteem and compulsive buying. In a sample of

identified television channel shoppers, among the 10.2% who qualified as compulsive buyers, there were demonstrated significant relationships with binge-eating, television shopping channel exposure, and age. The only variable of interest in the study that did not demonstrate a significant relationship with compulsive buying was self-esteem (Lee, Lennon, & Rudd, 2000). Although self-esteem has been previously studied before to a great extent, this study brings insight to the field that there may still be reason to further investigate the relationship between self-esteem and compulsive buying, especially when examining it in the context of different shopping channels.

Humanistic theory suggests that individuals have inherent psychological needs that must be fulfilled in order for well-being to occur, which are achieved through striving for either intrinsic or extrinsic goals (Roberts & Pirog, 2004). Intrinsic goals are aimed at attaining higher order psychological needs such as autonomy, growth, and community; whereas extrinsic goals pertain to achieving lower order psychological needs such as financial success and appearance (Otero-Lopez & Villardefrancos, 2015). Humanistic theory assumes that individuals who are focused on achieving intrinsic goals rather than extrinsic goals should experience greater personal well-being (Roberts & Pirog, 2004). From the perspective of humanistic theory, the phenomenon of compulsive buying could be considered as an example of striving for extrinsic goals if individuals engage in the behavior as a means of increasing their own popularity or perceived attractiveness through purchasing material goods. Individuals who are more intrinsically goal oriented should then in theory display less of a need to reinforce one's self-worth through acquiring material possessions. Therefore, taking this approach it is not surprising that individuals who engage in compulsive buying as a mean of achieving extrinsic goals would

likely experience lower overall personal well-being, including possible issues with self-esteem. Thus, H1b is stated as follows.

Hypothesis 1b: Self-esteem will have a negative relationship with compulsive buying tendency.

Affective States

Affect may be often used to describe various mental processes such as emotion, mood, or attitude (Bagozzi et *al.*, 1999). The present study considers affect as any general positive or negative feelings. Of importance to this study will be participants' overall feelings related to positive or negative affect proceeding compulsive buying. Specifically, the study will consider frequency of these affective states felt in daily life relative to engagement in compulsive buying. The topic of affect frequency has previously been considered by Diener et *al.* (1985) who proposed that subjective well-being is partially composed of the frequency of positive versus negative affect experienced. It was found that frequency and intensity of affective states were independent processes, but worked together to make up average levels of affect (Diener et *al.*, 1985). It is important to further the understanding of how the frequency of affective states experienced by an individual may influence CBT. Results may suggest how overall affect may play a role in CBT, which may promote further study into affect regulation as a method of reducing CBT.

The topic of affect within the field of consumer behavior has long been studied and considered important to understand. Richins (1997) produced a thorough study measuring the emotions felt during the consumption process. This study did not analyze emotions in regard to compulsive buying specifically, but serves as a good background study in understanding the role of emotion in the general shopping context. The final refined list of measured emotions that pertained to consumers during the consumption process included anger, discontent, worry,

sadness, fear, shame, envy, loneliness, romance, love, peacefulness, contentment, and optimism. In addition, Richins (1997) also found relationships between specific emotions and certain types of products bought, which will be discussed in further detail later. Understanding the role of affective states in non-compulsive consumers could be considered foundational before examining emotions felt during the consumption process by compulsive buyers. When elaborating on room for future research, Richins (1997) suggested exploring relationships between emotions and both compulsive and impulsive buying, a suggestion that was eventually addressed by Flight et *al.*, (2012) over a decade later.

Through examining the current and past literature pertaining to compulsive buying, it may seem accepted that negative and positive affect can play a role in tendencies to engage in compulsive buying behavior. A previous study performed by Dittmar, Long, and Bond (2007) investigated emotion and identity related motives for engaging in compulsive buying online and found that both identity and emotion motives were indeed significant and independent predictors of compulsive buying online. Interestingly though, the emotion related motives were found to be even stronger predictors of the behavior than the identity related motives. Dittmar et *al.* (2007) posited that these emotion related motives consisted of shopping to enhance one's emotions or to regulate one's mood. These findings strongly suggested that compulsive buying may share a relationship with specific affective states in the sense that the act of purchasing goods may alleviate negative affect, or likewise, elicit positive affect.

Negative Affect. Seeing that it has been previously shown that affective states play a pertinent role in the consumption process for both compulsive buyers as well as non-compulsive buyers, it is worth taking a closer look to see how affect during consumption may differ between the two consumer groups. This is precisely what Faber and Christenson (1996) looked to answer

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in their study analyzing the specific moods reported by compulsive and non-compulsive consumers prior to and during a shopping experience. The predominant findings suggested that the presence of negative affect may be characteristic for compulsive buying regarding the shopping experience, but not for non-compulsive buyers. Negative affect can be thought of as a general state of distress that may take the form of a variety of aversive mood states (Watson et *al.*, 1988). For the non-compulsive buyers, moods that precede buying often included feeling happy or excited. In comparison, compulsive buyers often felt bored, sad, or anxious. During the shopping experience, compulsive buyers typically reported negative emotions of irritability and sadness, as well as positive emotions of happiness, excitement, and power. These emotions exhibited show greater variety than that of the emotions felt by non-compulsive buyers during the shopping experience which were happiness and excitement. Further, of the participants who engaged in compulsive buying, the majority indicated that their mood immediately improved upon making a purchase. However, several of those participants went on to admit that this positive mood lastly only briefly and then they soon transitioned back into a negative feelings, potentially even worse than those felt prior to the buying episode (Faber & Christenson, 1996).

Miltenberger et *al.*, (2003) conducted a similar study to Faber and Christenson's (1996), however it looked exclusively at consumers engaging in compulsive buying behavior, and also examined specific emotions felt before, during, and after the consumption experience. This work extends the work of Faber and Christenson (1996) because it analyzed specific moods felt after the buying episode, as well as before and during. Results from Miltenberger et *al*., (2003)'s study suggested that compulsive buyers typically felt sad, anxious, or bored before a shopping experience. Responses regarding emotions during consumption included euphoria, relief, relaxed, and happy. Conversely, feelings reported after shopping were guilt, sadness, bored, and

happiness. Overall, these findings provided a clearer and more thorough picture of the range of emotions felt by compulsive buyers before, during, and after the shopping experience than the results of Faber and Christenson (1996). The emotions found in their study resemble an inverted U-shape, with emotions typically ranging from negative to positive and back to negative. This means that if the reported emotions during the overall shopping experience were plotted on a graph, the visual depiction would be that of U-shape turned upside down. In a more recent study by Muller et *al*. (2012), similar results suggested that negative affect increased and positive affect decreased prior to engagement in compulsive buying. However, these findings deviate slightly from former findings because while there was a demonstrated decrease in negative affect after the compulsive buying episode, positive affect levels were shown to be unaffected after engaging in compulsive buying (Muller et *al*., 2012).

The results of these empirical studies regarding emotions experienced by compulsive buyers during the consumption process can be theoretically expanded upon by coping theory. Passive coping can be described as any avoidance or escape technique employed to distract from stress produced by negative feelings or events (Rodriguez-Villarino et *al*., 2006). There is research to support that compulsive buying often occurs as a reaction to stress and the action of compulsively spending serves as a relief to the anxiety caused as a result of the source of stress (Harvanko et *al.*, 2013; Edwards, 1993). These acts imply that this is the individual's way of coping with their everyday stressors. One study has empirically shown a strong association between passive coping attempts with compulsive buying behaviors (Rodriguez-Villarino et *al.*, 2006). Even O'Guinn and Faber's (1989) original definition of compulsive buying suggested individuals engage in the behavior as a means of alleviating negative feelings. Personality

characteristics and coping strategies largely play a role in how an individual will choose to deal with stressors.

Buyer's remorse is often described as a negative result of compulsive buying. Regret of action has been shown to be associated with material good purchases, such as a new pair of shoes, jewelry, or home décor (Rosenzweig & Gilovich, 2012). The regret of action theory applies closely to compulsive buying because the products sought amidst a compulsive buying episode are typically material good purchases instead of experiential purchases (Lo & Harvey, 2014). The regret of action theory closely relates to Humanistic theory. The compulsive buyer begins by seeking out extrinsic goals in the form of material possessions in order to reaffirm self-worth. These material purchases compulsively bought often in turn produce feelings that represent regret of action. The negative feelings produced may eventually lead to another compulsive buy in order to temporarily relieve stress (Rodriguez-Villarino et *al*., 2006).

Considering frequency of overall negative affect in relation CBT may yield further insight into exactly how feelings of negativity potentially contribute to engagement in compulsive buying. Previous studies have suggested that negative affect may encourage or even perpetuate CBT (Harvanko et *al.*, 2013; Rodriguez-Villarino et *al*., 2006). Studying the frequency of negative affect is important because it may be presumed that an individual experiencing a higher frequency of negative affect may also experience higher levels of CBT. That is, H2a is stated as follows.

Hypothesis 2a: Negative affect will have a positive relationship with compulsive buying tendencies.

Positive Affect. Although there seems to be a widely available amount of literature that relates compulsive buying to forms of negative affect, there must be a component of positive

affect that is felt by the compulsive consumer as well. Positive affect may refer to a general state of feeling enthusiastic, active, or alert (Watson et *al.*, 1988). The concept of positive affect in relation to compulsive buying has been exhibited by the increase in moods during and after a shopping episode, even if they are sometimes temporary. The emotional enhancement suggested by Dittmar et *al.* (2007) is a notion that other scholars have looked into as well. Schlosser et *al.* (1994) found in their study that among consumers engaging in compulsive buying, the feelings most commonly associated with a buying episode were increased mood, importance, relief, distraction, power, enjoyment of something new, and making others happy. These could all be interpreted as examples of how compulsive buying has a component of positive affect in addition to negative. However, their findings also suggested that moods that caused compulsive buying to be more likely were feeling sad, angry, irritable, lonely, frustrated, hurt, and guilty. Although these findings demonstrate the previously suggested importance of negative affect in compulsive buying, two positive moods did also arise as moods that made compulsive buying more likely, which were feeling happy and elated. This gives way to further investigating the possibility of positive affect preceding compulsive buying.

In an attempt to try to address this possibility, Flight et *al.* (2012) examined the role of affect in preceding both impulsive and compulsive buying. Their study is unique because it compares the affective variables of two similar, yet different, abnormal shopping behaviors. The findings suggest that impulse buying is significantly predicted by positive affect and that compulsive buying is significantly predicted by negative affect. The preceding affect felt by consumers during these similar consumption behaviors was found to be distinctly different in the sense that impulse buying was only predicted by positive affect, whereas compulsive buying was only predicted by negative affect. However, there seems to be room for further investigation of

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positive affect in relation to compulsive buying because there have been prior studies to suggest that some research participants have reported feelings of positive affect as an antecedent of compulsive buying (Faber & Christenson, 1996; Miltenberger et *al.*, 2012). Though this has not been the case for majority of compulsive buyers in past studies, these slight inconsistent findings are worthy of future investigation.

Studying the effect of positive affect on compulsive buying is equally as important as studying the relation to negative affect. Analyzing both forms of affect in terms of frequency will serve as an attempt to better understand affect as a motivating factor for consumers' likelihood to engage in compulsive buying. Opposing hypothesis 2a, it may be predicted that positive affect will hold an inverse relationship to compulsive buying. This may suggest that individuals who experience overall positive affect more frequently may be less likely to engage in CBT.

Hypothesis 2b: Positive affect will have a negative relationship with compulsive buying tendencies.

Social Influences

In this paper thus far, compulsive buying has primarily been reviewed from the perspective of the individual and their own personal characteristics and affective states. However, there is research to support the notion that compulsive buying tendencies may also occur in greater strength under various social conditions (D'Astous et *al.*, 1990; Roberts, 1998). The two specific social influences related to compulsive buying that are investigated in this study are perceived parental compulsive buying tendencies and the notion of normative conformity. According to Ward (1974), parents serve as primary socialization agents. This is one reason why it is of importance to understand if there is a potential relationship between compulsive buyers

and their own parents' compulsive buying behaviors. Normative conformity will take a broader scope and consider one's likelihood to feel pressure to conform to social expectations in general.

Perceived Parental Compulsive Buying Tendencies. Another facet of compulsive buying worth exploring is the influence of families on the behavior. Familial influences that have been explored in relation to compulsive buying include an array of topics such as family communication patterns, use of money as a reward, and presence of various family stressors. One study by Roberts, Manolis, and Tanner (2003) looked closely at the role that family structure (i.e. divorced or intact homes) had on compulsive buying among adolescents. The findings concluded that adolescents coming from divorced homes were more likely to associate happiness with material purchases however these adolescents were not necessarily more likely to engage in compulsive buying. This finding prompts the question of how displayed compulsive buying behaviors among parents may influence adolescents in their own future compulsive buying behaviors.

Most pertinent to the current study at hand, in regard to family influences on compulsive buying, is analyzing how the perception of parental compulsive buying tendencies influences individuals' likelihood to engage in compulsive buying. Perceptions of parental compulsive buying tendencies (PPCBT) is defined as the participants' beliefs regarding their own parents' inability to stop buying products or habitual buying of seemingly unnecessary products (D'Astous et *al.*, 1990). Previous research has analyzed compulsive buying tendencies among adolescents and found that adolescents' compulsion to buy was strongly related to their perceptions of their parents' tendencies toward compulsive buying (D'Astous et *al.*, 1990). Similar studies have found results that suggest consumers who have engaged in compulsive

buying are more likely to have perceived or experienced a parent who displayed compulsive

buying behaviors, as well (DeSarbo & Edwards, 1996; Roberts, 1998).

The current study will differ from that of D'Astous et *al.* (1990) specifically, by sampling

an older demographic, as well as looking at how each of the various consumer characteristics of

study play a role in shopping channel and product preference among college students who may

engage in compulsive buying. In addition, the findings of the above mentioned studies are in

need of updating, and the field could benefit from current research regarding how PPCBT may

influence CBT. The present study provides updated information to the field, which is of

importance considering each of the previous studies to include the variable of PPCBT took place

roughly twenty years ago. This is important in terms of consumer behavior because parents play

a pivotal role in socializing their children, including assisting the development of traits of

characteristics that may in turn affect their consumption habits later in life (Ward, 1974).

Understanding if and how compulsive buying is transmitted through families has important

implications, and parents should be aware that their children may learn these behaviors from

them unintentionally.

Hypothesis 3a: Perceived parental compulsive buying tendencies will have a positive
relationship with compulsive buying tendencies.

Normative Conformity. The social concept of conformity is also highly applicable to

the study of compulsive buying. When discussing conformity, the two forms that are typically

accepted and referenced through literature are informational and normative conformity (Deutsch

& Gerard, 1955). Informational conformity can be defined as the pressure to accept information

from another, as normative conformity can be defined as the social pressure to conform to the

expectations of another (Deutsch & Gerard, 1955). Normative conformity can be seen as more

pertinent to the study of compulsive buying because in a consumption context, it is likely that individuals may feel more pressure to conform to trends or fads, rather than to accept any certain information. Following social trends can be seen as relating to conformity because it assumes an individual may be inclined toward a particular product based on widespread popularity among others.

Often there is even perceived pressure to keep up with products regarded as popular by peers, which is exemplified among adolescents within a study conducted by Meyer and Anderson (2000). Focusing on conformity within the general shopping context, the researchers analyzed the influence of conformity on preadolescents when shopping for apparel. Normative influences were measured by determining how important it was to preadolescents that their peers like their apparel purchases. Both males and females reported it was somewhat or fairly important that their peers liked their purchases. This effect was strongest for the older participants of the sample (11- and 12-year-olds) than the younger participants (8-,9-,and 10-year olds), suggesting that children become more sensitive to normative conformity influences as they get older. A similar age related effect was found regarding desire to buy clothes based on what friends and peers wear (Meyer & Anderson, 2000). Other studies have found that perceived product popularity through consumer reviews has been shown to increase purchase intention among consumers (Lee & Park, 2009: Lee, Park, & Han, 2011). Accepting or selecting products on the basis of popularity relates to normative conformity because essentially peer groups or social masses assert social pressure on individuals to conform to suggested standards. For example, seeking out a particular product because it is perceived as popular may present the opportunity for an individual to feel as if they fit in or belong to a certain group (Meyer & Anderson, 2000).

Taking a closer look at normative conformity in relation to compulsive buying, findings have been inconclusive. Lee and Park (2008) found that normative conformity had a negative relationship with online compulsive buying. The study included a sample of participants who belonged to at least one virtual community. The findings suggested that individuals who were more likely to experience normative conformity were less likely to buy compulsively online. These results are perplexing and have been shown to differ when tested among different shopping channels. For instance, Prete et *al.* (2013) focused on a brick-and-mortar context and used the term interpersonal influences instead of normative conformity. However interpersonal influences was defined as a need to identify with or enhance one's image based on the opinions of others and a willingness to conform to expectations of others regarding purchase decisions. This definition is very similar to that of normative conformity, so it can be assumed that by looking at interpersonal influences, it is a similar construct being measured. It was found that consumers who demonstrated a high susceptibility of interpersonal influences experienced a higher propensity to conform to expectations of others, which closely relates to normative conformity. Specifically, Prete et *al.* (2013) found a positive relationship between interpersonal influences (conformity) and compulsive buying, which opposes the findings from Lee and Park (2008). Further, the sample utilized in the Prete et *al.* (2013) study consisted of Italian individuals, so it would benefit the field to examine this relationship within an American sample in order to further the understanding in different cultural contexts.

In addition, the results of Lee and Park's (2008) study may not be generalizable to a larger population of compulsive buyers because it cannot be assumed that all compulsive buyers feel that they are included in any specific type of communities, such as the virtual communities previously explored. More literature on the effects of normative conformity on compulsive

buying is needed. The available literature regarding normative conformity in the general shopping context is very limited, and literature pertaining to normative conformity and compulsive buying specifically is even sparser. Therefore, this study also advances the field by contributing to compulsive buying literature related to normative conformity.

It is logical to predict a positive relationship between normative conformity and compulsive buying, especially if analyzing compulsive buyers within an in-store shopping context. This is because it may be presumed an in-store setting may allow individuals engaging in compulsive buying to compare themselves and their personal possessions to that of others during their shopping journey. It has been suggested that compulsive buying can serve as a way to bolster self-worth and this may be magnified if the compulsive consumer feels pressure by nearby shoppers to fit a real or imagined materialistic social expectations. Thus, it is hypothesized in this study that normative conformity will demonstrate similar results as those found by Prete et *al.* (2013) and will have a positive relationship in the general compulsive buying context.

Hypothesis 3b: Normative conformity will have a positive relationship with compulsive buying.

Behavioral Responses

Analyzing individual consumer characteristics that influence compulsive buying represents some of the potential preceding factors of the behavior. However, to add further depth to this study, several behavioral responses are included and considered as outcomes of the act of compulsive buying. Specifically, preference of shopping channel and products bought are examined. It is a goal to explore if any of the various individual characteristics hold a potential relationship to preferences held regarding shopping channels or products bought.

Shopping Channels. The degree to which certain individuals are affected by compulsive buying may depend on how the shopping experience is achieved. As the study of compulsive buying has evolved, the two primary shopping channels that have been researched are brick-and-mortar stores and online shopping (Duroy, Gorse, & Lejoyeux, 2014; Telci, 2012). Another less studied form of shopping to be examined is compulsive buying via television shopping channels (Lee, Lennon, & Rudd, 2000). However, a new channel of shopping highly relevant to today's consumers comes in the form of mobile shopping, or shopping through the assistance of internet enabled mobile cell phones (Yang, 2010). Whether and how consumer characteristics may play a role in shopping channel preference during a compulsive buying episode is still unknown. For this study, shopping channel preference will be conceptualized by assessing which shopping channel is most frequently used and how often.

Previous research has been devoted to understanding consumer preferences among different shopping channels. A study by Browne, Durrett, and Wetherbe (2004) utilizing a 'Generation Y' sample found that the majority of participants preferred to shop for products in stores rather than online. These findings are pertinent to the current study because a sample of a similar age range will be used. Further, Yang (2010) asserts that because the study of mobile shopping is still in its infancy, continued research is needed in order to grasp an understanding of the factors that influence consumer adoption of mobile shopping services.

Some consumer characteristics that have been examined within the context of in-store compulsive buying include patronage and suggestibility. In Telci's (2010) study, shopping mall patronage is framed as a personal consumer characteristic relating to compulsive buying. Specific findings include a demonstrated positive relationship between mall patronage and compulsive buying, as well as levels of materialism (Telci, 2010). Also explored by Prete et *al.*

(2013), was the concept of consumer suggestibility due to store atmospherics. This refers to individual differences in response to situational suggestions, in this instance particularly relating to atmospherics that may be employed within brick-and-mortar stores. Specific examples of store atmospherics include music, displayed images, and an overall friendly atmosphere. Although atmospherics were shown to increase suggestibility and the likelihood of making unplanned purchases, it was not shown to significantly influence compulsive buying. These findings may suggest that some individuals are drawn to the overall atmosphere of brick-and-mortar stores and enjoy the experiential aspect of shopping by taking pleasure in the store setting and the process of shopping.

Another widely studied contextual channel of compulsive buying engagement is the online domain. According to Patwardhan and Yang (2003), online shopping activity has been steadily increasing since 2001. Within their study regarding online activities, it was found that consumers had bought an average of eight products in a six month time span. The study did not, however, focus on a compulsive buying context, but instead serves to explain the frequency of online shopping in the general shopping market.

Taking a closer look at online buying specific to compulsive buying, Wang and Yang (2008) found that passion for online shopping was correlated with compulsive buying online. The researchers point out though, that individuals who are passionate about online shopping may also indulge in compulsive buying via brick-and-mortar stores as well; however, accessing internet is quicker and more convenient. It may be possible that individuals experiencing higher levels of CBT may favor instantaneous methods of shopping in order to alleviate stress or anxiety at a given moment. According to DeSarbo and Edwards (1996) individuals with high levels of CBT often use the act of buying as an avoidance coping technique in response to stress.

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Therefore, researching how CBT may influence shopping channel preferences due to more instant relief of anxiety would be beneficial.

In terms of further motivations to engage in online compulsive buying, it has been suggested that identity construction, or the formation and bolstering of personal identity through consumption of goods, as well as emotional enhancement in the form of regulating one's affective state through product consumption may motivate some consumers to engage in compulsive buying online (Dittmar et *al.*, 2007). Additional motivations for choosing to shop online by individuals with compulsive buying tendencies were investigated by Trotzke, Starcke, Muller, and Brand (2015). The researchers found that in addition to greater product variety and availability, consumers with compulsive buying tendencies also appreciated the anonymity and avoidance of social interactions that online shopping offered.

In another recent study, Duroy et *al*. (2014) found that other specific motivations to engage in compulsive buying online included the large variety and availability of items available as well as the sense of immediate positive feelings elicited upon making a purchase. These same findings were also echoed in the study conducted by Trotzke et *al.* (2015). Another compelling aspect regarding Duroy et *al.*'s (2014) study was that, to the researcher's knowledge, their study has been the only to consider mobile shopping as a channel for compulsive buying. However, their study did not differentiate mobile shopping from online shopping, as the present study does. Therefore the current study expands on the information gained from Duroy et *al.* (2014) because it investigates relationships between consumer characteristics and shopping channel preference.

Aside from Duroy et *al.*'s (2014) study, which indirectly considered mobile shopping in relation to compulsive buying, the available literature pertaining to this mobile shopping as a channel for compulsive buying is very limited. This provides an opportunity for the current

research to contribute to the information available to the field regarding compulsive buying via mobile shopping. The act of mobile shopping is similar to online shopping, however can often be even more conveniently accessed via mobile phone, rather than through a computer. In addition, some consumer benefits specific to the mobile shopping channel include customized product recommendation and information, mobile marketing based on consumer preferences and priorities, and allowing for a real-time interaction between consumers and retailers (Yang, 2010). Background research on mobile shopping has found that consumers are more likely to adopt the use of mobile shopping services if they perceive the mobile services as efficient and fun, especially when the degree of effort required from the consumer is low (Yang, 2010). Similar results were also obtained by Lu and Yu-Jen Su (2009), through their study investigating factors affecting purchase intentions on mobile websites. In particular, they found mobile skillfulness decreased mobile shopping anxiety and also increased enjoyment and perception of the usefulness of mobile shopping. Ease of access also positively affected enjoyment and perception of usefulness of mobile shopping. In turn, high ratings of enjoyment and perception of usefulness increased consumer intention to utilize mobile shopping services (Lu & Yu-Jen Su, 2009).

These findings demonstrate why it is important to further explore compulsive buying within the mobile context. If consumers perceive mobile shopping services to be efficient and fun, this may encourage compulsive buying behaviors among this channel. Furthermore, it is important to look at compulsive buying via mobile shopping within an appropriate group of consumers, which is why college students serve as an ideal population, because they are often considered to be more tech-savvy than previous generations, and may have high mobile skillfulness and perceive mobile shopping services to have easy accessibility, therefore requiring low effort on behalf of the consumer. Thus H4 is stated as follows.

Hypothesis 4: Consumers with higher compulsive buying tendencies will utilize the three channels more than those with lower compulsive buying tendencies.

Product Categories. The last behavioral outcome of compulsive buying to be explored in the current study examines the types of products that consumers experiencing compulsive buying seek to buy. Particularly, it is of interest to determine whether products which represent hedonic values or those which represent utilitarian values will be most often sought. As described by Kempf (1999), hedonic products are consumed primarily for affective or sensory gratification purposes while utilitarian products are consumed primarily for functional or cognitively oriented purposes. In an empirical study, Drolet, Williams, and Lau-Gesk (2007) suggested a relationship between hedonic products and affective advertisement preference among both young adult as well as elderly consumers. These findings suggest consumers relate hedonic products with affect, which is worthy of further investigation.

Zheng and Kivetz (2009) suggested that individuals within the general shopping context typically feel a stronger need to justify hedonic purchases rather than utilitarian purchases. In order to strengthen justifications for hedonic purchases, consumers looked to external cues such as sales promotions. While these results are not specific to compulsive buying, they are relevant because they suggested that consumers are susceptible to external justifications when purchasing hedonic products. It can be assumed that this susceptibility may be magnified when individuals with high levels of CBT encounter sales promotions on hedonic items.

Coinciding with Patwardhan and Yang (2003)'s suggested work to look into what kinds of products are commonly bought online, several researchers have considered different factors that may influence the type of products sought to buy. In a general shopping context, Richins (1997) found that in regard to emotion, products purchased could typically be categorized as sentimental, recreational, or vehicles. Specific findings included that sentimental purchases were

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most often associated with feelings of either love or loneliness. Recreational and vehicle purchases were most often associated with excitement. However these purchases also showed moderate associations with feelings of worry or anger. In all three categories joy, pride, and contentment were also experienced (Richins, 1997). These findings are relevant to the current study because emotion plays a strong role in compulsive buying and it will be of interest to examine how affective states will influence products purchased. It may be possible that consumers experiencing higher levels of CBT would be drawn to specific products, and in particular it would be worth examining if those products represent a greater hedonic value or utilitarian value.

More specific to compulsive buying particularly, in a study comparing British and Taiwanese compulsive buyers, it was found that consumers from different cultures showed differences in their preferences of types of items to compulsively buy (Lo & Harvey, 2014). British participants most often bought jewelry, whereas Taiwanese participants most often bought art. Both groups also splurged on electronics and demonstrated a greater preference for simply acquiring the items rather than collecting them. All of the products acquired via compulsive buying in both samples could constitute as hedonic products.

Contrasting results regarding the products sought from Lo and Harvey's (2014) study were found previously by Schlosser et *al.* (1994). In this previous study, it was found that items most typically bought by compulsive buyers included clothes, shoes, CDs, and jewelry (Schlosser et *al.*, 1994). Although these are technically different items, they still however could be considered hedonic products. It is also important to note that there was a two decade time difference between these two studies. It may be that the popular products to seek during a compulsive buying episode may evolve with time.

Another difference is that the study conducted by Schlosser et *al.* (1994) utilized an American sample. The current study expands on the previous work because it updates the available literature and analyze what American college students who exhibit compulsive buying typically purchase. Further, the present study also demonstrates if products sought by American compulsive buyers have changed in the last twenty years. It may be theorized that the products sought by compulsive buyers demonstrate more hedonistic value than utilitarian value, consistent with the previous findings as well as humanistic theory.

It should be noted that one difference between utilizing a collegiate sample versus the general shopping population is that college students often have limited budgets. Considering the findings from Zheng and Kivetz (2009) suggesting that individuals often feel a stronger need to justify hedonic purchases than utilitarian purchases, such as in the instance of a sales promotion, the extent to which college students indulge on hedonic products might be different from that of non-collegiate individuals. It will be interesting to explore the types of products bought by college students exhibiting higher levels of CBT, as well as the values associated with those products.

Hypothesis 5a: Compulsive buying tendencies will have a positive relationship with preference to seek products that represent greater hedonic value.

Hypothesis 5b: Compulsive buying tendencies will have a negative relationship with preference to seek products that represent greater utilitarian value.

Compulsive Buying among College Students

Researchers such as Muller, Mitchell, and de Zwaan (2015) have contended that compulsive buying tendencies are typically inversely related to age. In addition, the researchers also have suggested that rates of compulsive buying have increased within the last 20 years (Muller et *al.*, 2015). However, it has also been argued that university populations are reflective

of general consumers in the United States in many characteristics, such as consumption habits and internet use (Patwardhan & Yang, 2003; Yurchisin & Johnson, 2004). One of the most recent studies to analyze prevalence of compulsive buying among college students was conducted by Duroy et *al.,* (2014). Their study analyzed online compulsive buying among Parisian college students and the prevalence was found to be 16%, with majority of the students being female. This is remarkably high when compared to the findings of another recent study by Harvanko et *al.*, (2013), which utilized an American sample and found the prevalence to be only 3.6%. The differences in these findings may represent a cultural difference, or even a difference in the shopping channel investigated. Duroy et *al.,* (2014) considered online compulsive buying specifically, whereas Harvanko et *al.*, (2013) did not limit compulsive buying to a certain shopping channel.

CHAPTER III

METHOD

Sampling and Procedures

The goal number of participants for the sample was set at a minimum of 250 undergraduate students. College students who were age 18 or above and attended classes at a Western University were recruited as participants for this study. A diverse range of academic course subjects were sought to recruit participants in order to demonstrate the greatest amount of generalizability to the larger undergraduate collegiate population. Professors within different departments on campus were contacted and it was arranged for them to exchange extra credit for survey completion. The last four digits of participant student ID numbers were collected for purposes of assigning extra credit. The survey was accessible online through Qualtrics and the web address was provided to the students via email. Upon one week of the survey's activation date, the participating professors were prompted to send a follow up email, including the survey link as well, to the students in order to remind them about the opportunity. The survey was active online for a total of two weeks. An online survey was beneficial due to easy accessibility and potential to reach a wide variety of students.

Instrument Development

Pretest. Prior to conducting the study, a pretest was utilized to help refine the question wording of the survey items. According the CSU Writing Studio (2015), questions that have been used in previous surveys need to be pretested due to differences in survey context. This helps to ensure a good flow of the survey as well as tests for potential skip patterns associated with certain questions. Furthermore, the pretest also served as a good measure of the expected

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time it would take for participants to complete the survey. The pretest sample consisted of five undergraduate students (one male and four females) from a variety of majors, who were recruited by utilizing the snowball sampling strategy.

Compulsive Buying. In order to assess the level of CBT of the participants, the current study utilized the Edwards Scale (1993). This scale consists of 13-item, 5-point Likert-type scale Items are rated from 1=strongly disagree and 5=strongly agree (e.g., "I hate to go shopping"; "I go on buying binges") that considers compulsive buying tendencies along a continuum ranging from non-compulsive to addicted. The scale has been utilized and validated in prior recent studies relating to compulsive buying by researchers such as that of Maraz et *al*. (2015).

Self-Perceived Attractiveness. The survey also addressed self-perceived attractiveness and utilized the Self-Perceived Attractiveness Scale to measure this variable. The Self-Perceived Attractiveness Scale is a 5-point, 7-item Likert-type scale that measures how attractive participants perceive themselves to be and was used in the study conducted by Lucas and Koff (2013). Items were rated from 1=strongly disagree to 5=strongly agree, with higher scores indicating higher self-perceived attractiveness (e.g., "I feel that I'm better looking than most other individuals"; "I feel that I have a better sense of style than most other individuals").

Self-Esteem. Likewise, the Rosenberg's Self-Esteem Scale is a 10-item, 5-point Likert-type scale used to asses self-esteem and has demonstrated strong reliability. Items were rated 1=strongly disagree to 5=strongly agree (e.g., "In general, I am satisfied with myself"; "I feel useless at times"). The Rosenberg's Self-Esteem Scale has been used in previous studies examining compulsive buying behavior among college students, such as the study performed by Yurchisin and Johnson (2004).

Negative and Positive Affect. Similar to Muller et *al.* (2012)'s design, to assess positive and negative affect, the current study used a subset of six positive and seven negative affect items from the PANAS scale (Watson et *al.*, 1988). Items were rated from 1=very rarely to 5=very frequently in a Likert-type scale (e.g., happy, irritable, ashamed). After the pretest, three positive affect items and three negative affect items were removed due to pretest participants' feedback regarding the overall length of the survey. The one change that was made to this scale occurred after the pretest, in which a question that asked on average, how often the participants felt "upset" was changed to "sluggish". This change was made because it was assumed that "upset" could have many different meanings to participants, and "sluggish" was chosen to counter the positive affective state "energetic".

Perceived Parental Compulsive Buying Tendencies. In order to measure perceived parental compulsive buying tendencies, the current study borrowed two items from D'Astous et *al.* (1990)'s Peer and Family Influences Likert-type scale. The 5-point items were rated from 1=strongly disagree to 5=strongly agree (e.g., "My father or mother often buys things that he/she doesn't need"; "There are products that my father (or mother) seems unable to stop buying").

Normative Conformity. To evaluate the concept of conformity, items from the Consumer Susceptibility to Interpersonal Influences scale developed by Bearden, Netemeyer, and Tree (1989) were used. The items used pertained specifically to normative conformity, rather than informational conformity. The Likert-type scale consists of eight, 5-point items and has been previously used by Prete et *al.* (2013). Items were rated from 1=strongly disagree to 5=strongly agree (e.g., "It is important that others like the products and brands I buy"; "If I want to be like someone, I often try to buy the same brands that they buy").

Behavioral Responses. In order to measure shopping channel usage frequency, the survey inquired how often each shopping channel was used (e.g., "How often do you shop online?"), utilizing a scale that was rated on a five-point Likert-type scale with anchors ranging from 1= never to 5= several times a day. Eight items further assessed frequency usage for each channel (e.g., "Sometimes I think it would be better if I spent less time shopping on the internet"), which were rated on a five-point Likert-type scales with anchors ranging from 1=strongly disagree to 5=strongly agree. Survey items have been previously tested and utilized in studies such as Dittmar et *al.* (2007) and Walsh, White, Cox, and Young (2011). The survey also inquired into participants' preferred shopping channel ("Please indicate your most preferred way to shop?"), with a follow up open-ended question asking them to explain why their selected shopping channel is their favorite.

In regard to product category preferences, hedonic and utilitarian values were assessed using four five-point Likert-type items, rated from 1=strongly disagree to 5=strongly agree (e.g., "When shopping, I tend to buy or consider more products that would make me feel good"; "When shopping, products with functional features attract more of my attention"). Also, an open-ended question was utilized to give the participants an opportunity to provide further information regarding products that they may be compulsively buy (e.g., "When feeling the urge to shop, what products do you typically seek to buy?"). And lastly, demographics such as gender, age, ethnicity, school year, and major were collected.

Data Analysis

Due to the primarily quantitative nature of this study, SPSS was utilized to assist with data analysis. More specifically, regression analyses were used in order to test hypothesis 1a through

hypothesis 3b, and hypotheses 5a and 5b. Hypothesis 4 was tested with independent sample t-tests to compare shopping channel usage frequency between the high versus the low CBT level consumer groups. Open-ended questions were included regarding shopping channel preferences and products commonly sought by individuals experiencing levels of compulsive buying. This component required a method of analysis more suitable for qualitative data, in the form of coding and grouping information into dominant themes.

CHAPTER IV

RESULTS

The overall purpose of this study was to analyze the phenomenon of compulsive buying within a sample of college students. Various personal characteristics were studied in order to determine any potential relationships with CBT that may arise. The psychological variables of interest were self-perceived attractiveness and self-esteem. The affective variables taken into consideration consisted of general feelings of negative and positive affect. And lastly, the social variables studied were perceived parental compulsive buying tendency and normative conformity. In addition, the usage frequency of three shopping channels (brick-and-mortar, online, and mobile) as well as product values sought were also investigated in relation to CBT.

The results were collected using a survey method. The participants were recruited through five undergraduate courses within the social science and environmental science fields. The survey was active online for a two week period, during which extra credit points were exchanged for survey participation. After the data collection phase was over, a series of analyses including factor analyses, descriptive analyses, regression analyses, and independent sample t-test analyses were conducted in order to test the hypotheses.

Demographics of Participants

Initially, a total of 258 participants responded, however, 13 of the participant responses were considered incomplete due to missing data, and therefore were not considered for further analyses. The final sample that was utilized for analysis consisted of 245 undergraduate students. The age range of the participants was 18-34 years of age, with a mean of 21.04 years old. Being the majority of participants, 77.3% reported as female while 21.5% reported as male. There were

76.7% of participants that reported as Caucasian, 6.9% reported as Hispanic, 4.9% reported as Asian, 2% that reported as African American, and 2% that reported as Middle Eastern. In terms of participants' year in their undergraduate schooling, 42.9% indicated that they were Seniors, 25.5% were Juniors, 19.8% were Sophomores, and 10.9% were Freshmen. A variety of majors were reported ranging from Anthropology, Environmental Health, Marketing, Apparel Design, and Merchandising.

In addition, the survey also inquired the average amount spent by the participants on necessity and non-necessity items per month. On average, the participants reported that they spent between $0- $2,000 monthly on necessities, with an average of $285.16. As for non-necessity items, participants reported that they spent between $0- $1,000 per month, with an average amount of $136.42. Table 1 provides further detailed information pertaining to the characteristics of the respondents.

Table 1. Characteristics of the Respondents (N=245)	Frequency (n)	Sample Percentage (%)
Age	M= 21.04	
Gender		
Female	191	77.30
Male	53	21.50
Missing	1	1.20
Ethnicity		
Caucasian	188	76.70
Hispanic	17	6.90
Asian	12	4.90
Mixed	10	4.00
African American	5	2.00
Middle Eastern	5	2.00
Other	4	1.60
Missing	4	1.60
Year in School		
Senior	106	42.90
Junior	63	25.50
Sophomore	49	19.80
Freshman	27	10.90
Average Amount Spent on Necessities per Month	M= 285.16	
Average Amount Spent on Non-Necessities per Month	M=136.42	

Frequency of Shopping Channel Usage

The online survey also inquired into the frequency of participant usage of three different shopping channels. The channels investigated included brick-and-mortar stores, online shopping, and mobile shopping. Participants responded how often they utilized each channel, ranging from "never" to "several times a day".

Brick-and-Mortar Stores. Within the sample, 14.7% of the participants responded that they never used the brick-and-mortar shopping channel, 24.5% responded that they frequented brick-and-mortar stores once every couple of months, 30.6% responded that they used brick-and-mortar shopping channels once a month, 27.3% responded that they visited brick-and-mortar

stores once a week, and 2.9% responded that they utilized this channel once every other day. See

Table 2 for a further description.

Table 2. Brick-and-Mortar Shopping Channel Usage Frequency		
	Frequency (n)	**Sample Percentage (%)**
Never	36	14.70
Once Every Couple of Months	60	24.50
Once a Month	75	30.60
Once a Week	67	27.30
Once Every Other Day	7	2.90
Several Times a Day	0	0.00

Online Shopping. In regards to online shopping channel usage, 4.9% of participants

indicated that they never used this shopping channel. Almost 37% of participants responded that

they shopped online once every couple of months, 43.3% responded that they shopped online

once a month, and 12.7% responded that they shopped online once every other day. Further,

2.4% participants responded that they used an online shopping channel several times a day. See

Table 3 for additional detail.

Table 3. Online Shopping Channel Usage Frequency		
	Frequency (n)	**Sample Percentage (%)**
Never	12	4.90
Once Every Couple of Months	90	36.70
Once a Month	106	43.30
Once a Week	0	0.00
Once Every Other Day	31	12.70
Several Times a Day	6	2.40

Mobile Shopping. The last shopping channel investigated was shopping via mobile

phones or tablets. Being the majority of respondents, 38% responded that they never used any

kind of mobile shopping channel. However, 32.7% of participants responded that they utilized

mobile shopping apps once every couple of months, 16.7% responded that they utilized mobile

shopping apps once a month, and 6.9% responded that they utilized mobile shopping apps once a

week. Furthermore, 3.7% of participants responded that they shopped via mobile apps once

every other day and 2% responded that they shopped via mobile apps several times a day. Table

4 offers further description.

Table 4. Mobile Shopping Channel Usage Frequency		
	Frequency (n)	**Percentage (%)**
Never	93	38.00
Once Every Couple of Months	80	32.70
Once a Month	41	16.70
Once a Week	17	6.90
Once Every Other Day	9	3.70
Several Times a Day	5	2.00

Preferred Shopping Channel. In addition to analyzing the reported usage frequency of

each shopping channel, information pertaining to participants' preferred shopping channel was

also obtained. A total of 66.1% of participants responded that brick-and-mortar was their

preferred shopping channel, while 29.4% responded that online was their preferred channel, and

4.5% responded that mobile was their preferred channel (see Table 5).

Common responses explaining brick-and-mortar stores as the preferred channel included

the ability to tangibly inspect items, assurance of good fit due to ability to try clothing on, and

instant gratification. Responses explaining online shopping as the preferred channel included

convenience, ability to see items on a larger screen, and greater product variety. Mobile shopping

was the channel with the least previous research related to it. Responses the participants listed as

explanations for mobile being their preferred shopping channel included quick and easy

accessibility, convenience, greater deals on products, and minimizes time spent shopping.

Table 5. Preferred Shopping Channel		
	Frequency (n)	**Percentage (%)**
Brick-and-Mortar Stores	162	66.10
Online Shopping	72	29.40
Mobile Shopping	11	4.50

Product Preferences. The survey utilized in the present study also collected information pertaining to what types of items are sought to buy when participants were feeling the urge to shop. Overwhelmingly, clothing was the response that was cited most frequently. 'Clothing' could be thought of as a hedonic item (Hirschman & Holbrook, 1982), but interestingly enough 'groceries' was cited as the second most common thing to seek to buy when feeling the urge to shop, which could serve as an example of utilitarian products. Other common hedonic responses included shoes, accessories, makeup/beauty products, outdoor/sporting equipment, and video games. Several responses that reflected utilitarian values included necessities, pet supplies, automobile supplies, and tools. See Table 6 for more detailed information.

Table 6. Preferred Items to Buy when Feeling the Urge to Shop	
	Frequency (n)
Clothing	181
Groceries/Food	65
Shoes	47
Accessories	38
Makeup/ Beauty Products	22
Outdoor/ Sporting Equipment	16
Video Games	12
Home Goods	11
Necessities	6
Books	6
Electronics	4
Craft/Art Supplies	4
Don't Get the Urge to Shop	4
Music Accessories	3
Movies	2
Games/Puzzles	2
Experiential Purchases (i.e. plane/concert tickets)	2
Pet Supplies	2
Automobile Supplies	1
Tools	1
Photography Accessories	1
Perfume	1

Factor Analyses

In order to ensure the reliability and cohesiveness of the items on the scales used, factor analyses were conducted for each of the multi-item scales prior to hypothesis testing. Items were removed if factor loadings were below 0.50, indicating that the item did not fit well with the rest of the items on the scale (Kerlinger & Lee, 2000).

Self-Perceived Attractiveness. The first psychological variable analyzed was self-perceived attractiveness, which was measured using five items rated on a 5-point Likert type scale with anchors 1= strongly disagree to 5= strongly agree. The five items were retained through the factor analysis phase. The reliability of the scale was reported at 0.80. See Table 7 for further information.

Table 7. Factor Analysis for Self-Perceived Attractiveness			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.80	51.52
I feel that I'm better looking than most other individuals.	0.79		
I feel that I have a better sense of style than most other individuals.	0.70		
I think that I'm sexier than most other individuals.	0.80		
I think that I have a more attractive body than most other individuals.	0.73		
I think I dress better than most other individuals.	0.70		

Self-Esteem. The second psychological variable analyzed, self-esteem, was measured using ten items rated on a 5-point Likert type scale with anchors 1= strongly disagree to 5= strongly agree. All of the items were retained through the factor analysis phase. Four of the items were reverse coded during analysis, meaning that the higher the number, the better self-esteem. The reliability of the scale was reported at 0.89. The data is elaborated on in Table 8.

Table 8. Factor Analysis for Self-Esteem			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.89	51.26
In general, I am satisfied with myself.	0.72		
At times, I think I am no good at all. [1]	0.71		
I feel that I have many good qualities.	0.73		
I am able to do things as well as most other people.	0.60		
I feel I do not have much to be proud of. [1]	0.76		
I feel useless at times.[1]	0.70		
I feel that I'm a person of worth.	-0.67		
I wish I could have more respect for myself.[1]	0.67		
All in all, I am inclined to think that I am a failure.[1]	0.78		
I take a positive attitude toward myself.	0.80		

*Items denoted[1]= reverse coded.

Negative Affect. The variable negative affect was measured on a frequency scale that inquired how often participants experienced certain affective states. The scale consisted of seven items with anchors that ranged from "very rarely" to "very frequently". All of the items were retained through the factor analysis phase. The reliability of the scale was reported at 0.79. Table 9 offers additional information.

Table 9. Factor Analysis for Negative Affect			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.79	45.20
On average, I feel irritable.	0.60		
On average, I feel ashamed.	0.69		
On average, I feel nervous.	0.60		
On average, I feel sluggish.	0.58		
On average, I feel afraid.	0.74		
On average I feel sad.	0.81		
On average, I feel lonely.	0.67		

Positive Affect. Affective states investigated were broken up into the categories of positive and negative affective states. The variable positive affect was measured on a frequency scale that inquired how often participants experienced certain affective states. The scale consisted of six items with anchors that ranged from "very rarely" to "very frequently". After running the factor analysis one item was removed from analysis due to low factor loading. The reliability of the scale was reported at 0.87. See Table 10 for further detail.

Table 10. Factor Analysis for Positive Affect			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.87	60.35
On average, I feel happy.	0.84		
On average, I feel proud.	0.86		
On average, I feel enthusiastic.	0.81		
On average, I feel confident.	0.75		
On average, I feel energetic.	0.77		
On average, I feel determined.	0.61		

Perceived Parental Compulsive Buying Tendencies. The first social variable analyzed, perceived parental compulsive buying tendencies, was measured using two items rated on a 5-point Likert type scale with anchors 1= strongly disagree to 5= strongly agree. One item was removed from analysis due to low factor loading. The reliability of the scale was reported at 0.82. See Table 11 for additional detail.

Table 11. Factor Analysis for Perceived Parental Compulsive Buying Tendencies			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.82	84.89
There are products that my parent seems unable to stop buying.	0.92		
My father/mother often buys things that he/she doesn't need.	0.92		

Normative Conformity. The second social variable analyzed was normative conformity, which was measured using seven items rated on a 5-point Likert type scale with anchors 1= strongly disagree to 5= strongly agree. One item was removed from analysis due to low factor loading. The reliability of the scale was reported at 0.89. Table 12 offers further detail.

Table 12. Factor Analysis for Normative Conformity			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.89	60.64
It is important that others like the products and brands I buy.	0.69		
When buying products, I generally purchase brands that I think others will approve of.	0.78		
If other people can see me using a product, I often purchase the brand they expect me to buy.	0.80		
I like to know what brands and products make good impressions on others.	0.82		
I achieve a sense of belonging by purchasing the same products and brands that others purchase.	0.82		
If I want to be like someone, I often try to buy the same brands that they buy.	0.77		
I often identify with other people by purchasing the same products and brands they purchase.	0.77		

Compulsive Buying Tendency. The variable compulsive buying tendency was measured using ten items rated on a 5-point Likert type scale with anchors 1= strongly disagree to 5= strongly agree. Two of the items were reverse coded during analysis so that the higher the number represented a higher tendency to shop compulsively. Three items were removed from analysis due to low factor loadings. The reliability of the scale was reported at 0.68. Refer to Table 13 for further information.

Table 13. Factor Analysis for Compulsive Buying Tendency			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.68	43.21
I likely feel driven to shop.	0.74		
I likely get little or no pleasure from shopping[1].	0.68		
I typically hate to go shopping[1].	0.56		
I often go on buying binges.	0.72		
I often feel "high" when I go on a buying spree.	0.69		
I buy things even when I don't need anything.	0.63		
I go on a buying binge when I'm likely to be upset, disappointed, depressed, or angry.	0.63		
I often worry about my spending habits but still go out and spend money.	0.65		
I often buy things even though I cannot afford them.	0.52		
I often feel compelled to go shopping.	0.71		

*Items denoted [1]=reverse coded

Brick-and-Mortar Shopping Frequency. The outcome shopping channel variable of

brick-and-mortar stores was measured using eight items rated on a 5-point Likert type scale with

anchors 1= strongly disagree to 5= strongly agree. All of the items were retained through the

factor analysis phase. The reliability of the scale was reported at 0.84.See Table 14 for further

information.

Table 14. Factor Analysis for Brick-and-Mortar Shopping Frequency			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.84	47.72
As soon as I enter a shopping center, I want to go into a store and buy something.	0.69		
I often have a real desire to go into retail stores and buy something.	0.74		
I often buy something I see in a retail store without planning to, just because I've got to have it.	0.66		
Sometimes I think it would be better if I spent less time shopping at brick-and-mortar stores.	0.64		
Some people have suggested to me that I spend too much time shopping at brick-and-mortar stores.	0.70		
Sometimes I think it would be better if I spent less money shopping in brick-and-mortar stores.	0.68		
Some people have suggested to me that I spend too much money shopping in brick-and-mortar stores.	0.76		
I lose track of how much time I spend shopping when in retail stores.	0.64		

Online Shopping Frequency. The outcome shopping channel variable of online shopping was measured using eight items rated on a 5-point Likert type scale with anchors 1= strongly disagree to 5= strongly agree. All of the items were retained through the factor analysis phase. The reliability of the scale was reported at 0.91. Table 15 offers further detail.

Table 15. Factor Analysis for Online Shopping Frequency			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.91	60.82
As soon as I have access to the internet on a computer, I want to go to a retail site and buy something.	0.71		
I often have a real desire to shop online via computer and buy something.	0.79		
I often buy something I see on the internet without planning to, just because I've got to have it.	0.77		
Sometimes I think it would be better if I spent less time shopping on the internet.	0.86		
Some people have suggested to me that I spend too much time shopping on the internet.	0.80		
Sometimes I think it would be better if I spent less money shopping on the internet.	0.78		
Some people have suggested to me that I spend too much money shopping on the internet.	0.81		
I lose track of how much time I spend shopping online while using a computer.	0.72		

Mobile Shopping Frequency. The outcome shopping channel variable of mobile shopping was measured using eight items on a 5-point Likert type scale with anchors 1= strongly disagree to 5= strongly agree. All of the items were retained through the factor analysis phase. The reliability of the scale was reported at 0.93. See Table 16 for further detail.

Table 16. Factor Analysis for Mobile Shopping Frequency			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.93	68.47
As soon as I begin browsing mobile shopping apps, I want to buy something.	0.77		
I often have a real desire to browse mobile shopping apps and browse something.	0.82		
I often buy something I see on a mobile shopping app without planning to, just because I've got to have it.	0.81		
Sometimes I think it would be better if I spent less time shopping on mobile phone/tablet apps.	0.87		
Some people have suggested to me that I spend too much time shopping via mobile phone/tablet apps.	0.81		
Sometimes I think it would be better if I spent less money shopping via mobile phone/tablet apps.	0.88		
Some people have suggested to me that I spend too much money shopping via mobile phone/tablet apps.	0.81		
I lose track of how much time I spend shopping via my mobile phone/tablet.	0.85		

Hedonic Product Preference. The outcome variable of hedonic product preference was measured using two items rated on a 5-point Likert type scale with anchors 1= strongly disagree to 5= strongly agree. All of the items were retained through the factor analysis phase. The reliability of the scale was reported at 0.33 (See Table 17). The low reliability posed a concern and further analyses were conducted later in order to address this issue.

Table 17. Factor Analysis for Hedonic Product Preference			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.33	59.95
When shopping, I tend to buy or consider more products that would make me feel good.	0.77		
When shopping, products with fun and recreational features attract more of my attention.	0.77		

Utilitarian Product Preference. The outcome variable of utilitarian product preference was measured using two items rated on a 5-point Likert type scale with anchors 1= strongly disagree to 5= strongly agree. All of the items were retained through the factor analysis phase. The reliability of the scale was reported at 0.72. See Table 18 for further information.

Table 18. Factor Analysis for Utilitarian Product Preference			
	Factor Loading	**Reliability**	**Cumulative %**
Scale/Item		0.72	78.42
When shopping, I tend to consider products that are necessary and practical.	0.89		
When shopping, products with functional features attract more of my attention.	0.89		

Hypothesis Testing

Composite scores were calculated for each of the multi-item scales for further analyses. Analysis techniques such as regression and independent sample t-tests were utilized in order to test the hypotheses. Regression analyses were conducted to test Hypothesis 1 through Hypothesis 4, as well as Hypothesis 6. Independent sample t-tests were conducted to test Hypothesis 5.

Hypothesis 1. To test HIa and H1b, regression analysis was used with compulsive buying tendency as the dependent variable. The two psychological independent variables were self-perceived attractiveness and self-esteem. The overall model was significant ($R^2 = 0.06$, F=

7.44, p < 0.001). Specifically, results showed that self-perceived attractiveness did indeed demonstrate a positive relationship with compulsive buying tendency ($\beta = 0.25$, t = 3.82, p < 0.001), supporting H1a. However, there was not a negative relationship found between self-esteem and compulsive buying tendency ($\beta = -0.09$, t = -1.41, p > 0.05). Therefore, support was not found for H1b. Information regarding hypothesis testing for H1a and H1b is presented in Table 19.

Table 19. Regression Analyses for Psychological Variables Predicting CBT					
	df	R^2	F	β	t
Dependent Variable: CBT	237	0.06	7.44***		
Self-Perceived Attractiveness				0.25	3.82***
Self-Esteem				-0.09	-1.41

*= p< 0.05, **= p< 0.01, ***= p< 0.001

Hypothesis 2. To test H2a and H2b, regression analysis was used with compulsive buying tendency as the dependent variable. The two affective independent variables were negative affect and positive affect. The overall model was significant ($R^2 = 0.03$, F = 3.79, p < 0.05). In support of H2a, results showed that negative affect did indeed hold a positive relationship with compulsive buying tendency ($\beta = 0.19$, t = 2.38, p < 0.01). In addition, positive affect was shown to demonstrate a negative relationship with compulsive buying tendency, providing support for H2b ($\beta = 0.21$, t = 2.56, p < 0.01). The information is summarized below in Table 20.

Table 20. Regression Analysis for Affective Variables Predicating CBT					
	df	R^2	F	β	t
Dependent Variable: CBT	238	0.03	3.79*		
Negative Affect				0.19	2.38**
Positive Affect				0.21	2.56**

Hypothesis 3. To test H3a and H3b, regression analysis was used with compulsive buying tendency as the dependent variable. The two social independent variables were perceived

parental compulsive buying tendency and normative conformity. The overall model was significant ($R^2 = 0.08$, F = 10.1, p < 0.001). Specifically, results showed that perceived parental compulsive buying tendency and normative conformity each held a positive relationship with compulsive buying tendency, lending support for both H3a ($\beta = 0.19$, t = 2.96, p < 0.05) and H3b ($\beta = 0.18$, t = 2.78, p < 0.05). Results summarized in Table 21.

Table 21. Regression Analysis for Social Variables Predicating CBT					
	df	R^2	F	β	t
Dependent Variable: **CBT**	239	0.08	10.1***		
Perceived Parental Compulsive Buying Tendency				0.19	2.96*
Normative Conformity				0.18	2.78*

Hypothesis 4. To test H4, independent sample t-tests were utilized. Each of the shopping channels served as dependent variables, with compulsive buying tendency as the independent variable. In order to assess if the shopping channels were utilized more by participants with higher compulsive buying tendencies than those with lower compulsive buying tendencies, the sample was split into two categories based upon the mean score of their compulsive buying tendency rating. The low CBT tendency group consisted of 113 participants. The high CBT tendency group consisted of 132 participants.

The results suggested that overall participants with higher compulsive buying tendencies were significantly more likely to utilize each of the shopping channels than participants with lower compulsive buying tendencies. Specifically, the difference between the high and the low compulsive buying tendency groups' usage of the brick-and-mortar channel was found to be significant ($M_{low} = 2.13$ vs. $M_{high} = 3.07$, t = -10.39, p < 0.001). Also, participants with higher compulsive buying tendencies were significantly more likely to utilize the online shopping channel ($M_{low} = 1.77$ vs. $M_{high} = 2.41$, t = -5.79, p < 0.001). Furthermore, it was also found that

participants with higher compulsive buying tendencies were significantly more likely to utilize

the mobile shopping channel as well ($M_{low} = 1.49$ vs. $M_{high} = 2.09$, t = -5.55, p < 0.001). In

general, overall support was found for H4. Table 22 elaborates on these results.

Table 22. Independent Sample T-test Comparing Shopping Channel Frequencies Between Low vs. High CBT Groups			
	M_{low}	M_{high}	t
Brick-and-Mortar	2.13	3.07	-10.39***
Online	1.77	2.41	-5.79***
Mobile	1.49	2.09	-5.55***

Hypothesis 5. To test H5a and H5b, two sets of simple regression analyses were

conducted with hedonic product preference and utilitarian product preference as the dependent

variables. Again, compulsive buying tendency served as the independent variable. The overall

regression model was significant ($R^2 = 0.03$, F = 7.48, p < 0.01), as was the model for the

utilitarian product preference variable ($R^2 = 0.08$, F = 21.68, p < 0.001). Specifically, results

supported the positive relationship between compulsive buying tendency and preference to seek

hedonic products, therefore supporting H5a ($\beta = 0.17$, t = 2.74, p < 0.01). In addition, results also

suggested that there was indeed a negative relationship between compulsive buying tendency and

preference to seek utilitarian products, also supporting H5b ($\beta = -0.29$, t = -4.66, p < 0.001). See

Table 23 for further information.

Table 23. Regression Analyses Predicting Hedonic/Utilitarian Product Preference					
	df	R^2	F	β	t
Dependent Variable: Hedonic Product Preference	241	0.03	7.48**		
CBT				0.17	2.74**
Dependent Variable: Utilitarian Product Preference	241	0.08	21.68***		
CBT				-0.29	-4.66***

Further Analyses

After testing the reliabilities of each scale and prior to hypothesis testing, it was decided that further analysis was needed for the questions pertaining to the hedonic product preference scale due to low reliability. Regression analyses were conducted using each item of the hedonic product preference scale as a dependent variable, while using compulsive buying tendency as the independent variable. The regression model for the first item was significant ($R^2 = 0.37$, $F = 9.35$, $p < 0.01$). Specifically, the item "When shopping, I tend to buy or consider more products that would make me feel good", was positively related to compulsive buying tendency ($\beta = 0.19$, $t = 3.05$, $p < 0.01$). However the regression model for the second item was not found to be significant ($R^2 = 0.005$, $F = 1.25$, $p > 0.05$). Specifically, the item "When shopping, products with fun and recreational features attract more of my attention", did not demonstrate a significant relationship with compulsive buying tendency ($\beta = 0.07$, $t = 1.12$, $p > 0.05$).

It is speculated by the researchers that the second question pertaining to hedonic values may be the reason for the overall low reliability. The use of the word "recreational" may have implied a different meaning to participants than what it was intended to measure, which was not caught during the pretest. See Table 24 for further detail.

Table 24. Regression Analyses for Hedonic Product Preference Scale Items					
	df	R^2	F	B	t
Dependent Variable: When shopping, I tend to buy or consider more products that would make me feel good.	242	0.37	9.35**		
CBT				0.19	3.05**
Dependent Variable: When shopping, products with fun and recreational features attract more of my attention.	243	0.005	1.25		
CBT				0.07	1.12

CHAPTER V

DISCUSSION

The current study has sought to investigate the relationship between compulsive buying tendency and various psychological, affective, and social variables as well as several behavioral outcomes. Previous research has demonstrated a varying level of support for the relationship between compulsive buying tendency and each of the variables of interest. Specifically, one aim of this study was to analyze how these psychological, affective, and social variables may influence the likelihood to engage in compulsive buying. In turn, another aim of the study was to determine how compulsive buying tendency may affect various shopping outcomes, such as the shopping channel utilized or the types of products sought. Support was found for a majority of the developed hypotheses, which is discussed in detail regarding each hypothesis below. Table 25 summarizes the findings of the hypotheses as well.

Table 25. Summary of Hypothesis Findings	
Hypothesis	**Results**
H$_{1a}$: Self-perceived attractiveness will have a **positive** relationship with compulsive buying tendency.	Supported
H$_{1b}$: Self-esteem will have a **negative** relationship with compulsive buying tendency.	Not Supported
H$_{2a}$: Negative affect will have a **positive** relationship with compulsive buying tendencies.	Supported
H$_{2b}$: Positive affect will have a **negative** relationship with compulsive buying tendencies.	Supported
H$_{3a}$: Perceived parental compulsive buying tendencies will have a **positive** relationship with compulsive buying tendencies.	Supported
H$_{3b}$: Normative conformity will have a **positive** relationship with compulsive buying.	Supported
H$_4$: Consumers with higher compulsive buying tendencies will utilize the three channels more than those with lower compulsive buying tendencies.	Supported
H$_{5a}$: Compulsive buying tendencies will have a **positive** relationship with preference to seek products that represent greater hedonic value.	Supported
H$_{5b}$: Compulsive buying tendencies will have a **negative** relationship with preference to seek products that represent greater utilitarian value.	Supported

Hypothesis 1a: Self-perceived attractiveness will have a positive relationship with compulsive buying tendency.

Hypothesis 1a inquired into the potential positive relationship that may be held between self-perceived attractiveness and compulsive buying tendency. It was found that participants with high self-perceived attractive scores were also significantly more likely to score high on the compulsive buying tendency scale. That is, participants who felt they were better looking and had a better sense of style relative to others were more likely to engage in compulsive buying.

Lucas and Koff's (2013) study calls for further exploration of issues related to perceived attractiveness and compulsive buying. The current study served to advance the research by analyzing self-perceived attractiveness in relation to compulsive buying. Results from the Lucas and Koff (2013) study suggested a positive relationship between self-perceived attractiveness and impulse buying, which were similar to the present study, as there was a positive relationship demonstrated with self-perceived attractiveness and compulsive buying tendency. The current study utilized female and male participants, whereas the Lucas and Koff (2013) study only utilized female participants, yet results between the two studies were still found to be similar.

One possible reason for this relationship as suggested by Lucas and Koff (2013) may be that individuals with high levels of self-perceived attractiveness may use shopping as a strategy for maintaining their perceived level of attractiveness. This may relate to the results found by Roberts and Pirog (2004), which suggested that the level of importance of an attractive appearance as a goal was strongly associated with compulsive buying. Image and appearance maintenance have been identified through previous research as extrinsic goals (Otero-Lopez & Villardefrancos, 2014). Compulsive buying has been demonstrated through these studies to closely relate to extrinsic goals, and could even be considered an example of working towards achieving extrinsic goals through the form of material possessions. So it is logical that individuals who engage in striving for one extrinsic goal, to have a high level of attractiveness, may also engage in compulsive buying as another extrinsic goal. Similarly, individuals who are have high scores of self-perceived attractiveness may also likely have high narcissism scores. As Harnish and Bridges (2014) demonstrated, the trait narcissism has been shown to positively relate to compulsive buying.

Hypothesis 1b: Self-esteem will have a negative relationship with compulsive buying tendency.

Hypothesis 1b considered the potential negative relationship that may be held between self-esteem and compulsive buying tendency. Findings did not suggest a significant relationship between the two variables, contrary to previous research (Faber & O'Guinn, 1989; Tommasi & Busonera, 2012; Yurchisin & Johnson, 2004). That is, individuals who felt they had many good qualities and were satisfied with themselves were no less likely to engage in higher levels of compulsive buying tendency.

This finding is most consistent with the results from Lee et *al.*'s (2000) study, in which they found that compulsive buying and self-esteem did not demonstrate a significant relationship within a group of identified television shoppers. This finding differs from that of many other previous findings that have indeed suggested a negative relationship between self-esteem and compulsive buying tendencies (Roberts, 1998; Rodriguez-Villarino et *al.*, 2006). The lack of a negative relationship found between self-esteem and compulsive buying tendency is an interesting finding. As it can be assumed that self-perceived attractiveness and self-esteem are positively related, then it would not be expected that the two concepts would demonstrate oppositional relationships with compulsive buying tendencies

Correlation analysis of the data further suggested a significant positive relationship between self-perceived attractiveness and self-esteem ($r = 0.24$, $p < 0.001$). If self-perceived attractiveness and compulsive buying demonstrate a positive relationship in H1a, then it seems counterintuitive for self-esteem to hold a negative relationship with compulsive buying tendency, considering that self-perceived attractiveness and self-esteem should be closely related. However this is the first study to consider both self-perceived attractiveness as well as self-esteem in relation to compulsive buying. Due to the discrepancy in findings between previous research and

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the current study, this inconsistent relationship between self-esteem and compulsive buying

tendency warrants additional future research.

In one pertinent study conducted by Lee et *al.* (2000) the lack of significant relationship

found between self-esteem and compulsive buyers was attributed to the fact that television

shoppers with compulsive buying tendencies may be different than that of other individuals with

compulsive buying tendencies. Also a majority of their participants were of an older age,

specifically aged 50 and over. The older demographic may have impacted self-esteem levels,

given that some individuals become more secure with themselves as they age. This justification

may not be suited for the current study, given the difference in demographic composition of the

different samples utilized. However it has been suggested that self-esteem among college

students is significantly related to competition, others' acceptance, and appearance (Crocker &

Luhtanen, 2003). The issue of appearance was also found to be an important factor related to

college students' self esteem. Lowery et *al.* (2005) suggested that self-esteem was negatively

related to body image dissatisfaction for men and for women.

Hypothesis 2a: Negative affect will have a positive relationship with compulsive buying
tendencies.

The findings to hypothesis 2a were supported, which suggested that participants who

experience a greater amount of overall negative affect are significantly more likely to engage in

compulsive buying tendencies. Results suggested that participants who experienced a greater

overall frequency of feeling irritable, ashamed, nervous, sluggish, afraid, sad, or lonely showed a

greater tendency to engage in compulsive buying. Specifically, when experiencing these negative

affective states, the participants may be more likely to feel driven to shop, go on a buying binge,

or buy unneeded things.

These findings coincide with prior research produced from Faber and Christenson's (1996) and Miltenberger et *al.*'s (2003) previous studies which suggested that negative affect was a commonly felt characteristic related to the shopping experience among individuals who engaged in compulsive buying. Specifically, Miltenberger et *al.* (2003) found that negative affect was associated with before and after the shopping experience. In a similar study by Faber and Christenson (1996), it was suggested that compulsive buying may occur as a mechanism to improve a negative mood state. However, results of the study also acknowledged that often times the improved mood was short lived or reverted back to a negative state of affect after the purchase was made (Faber & Christenson, 1996). Furthermore, the findings from the current study are consistent with the findings of Flight et *al.* (2012), as their work demonstrated that negative affect significantly predict compulsive buying, whereas positive affect was only shown to predict impulse buying. In addition, another interesting finding of their study was the weak relationship demonstrated between negative affect influencing the urge to buy. This suggests that negative affective states have the potential to motivate some individuals to engage in compulsive buying, perhaps to alleviate the experience of the negative affect.

Hypothesis 2b: Positive affect will have a negative relationship with compulsive buying tendencies.

In contrast to hypothesis 2a, it was suggested in hypothesis 2b that positive affect will hold a negative relationship with compulsive buying tendency. Support was found for hypothesis 2b. In other words, individuals who experienced a greater amount of positive affective states such as happiness, pride, enthusiasm, confidence, energetic, and determination were significantly less likely to engage in compulsive buying. That is, greater overall positive affective states are less likely to result in feeling compelled to shop.

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Previous research findings regarding positive affect in relation to compulsive buying have primarily been time-dependent, in the sense that the positive affect is experienced immediately during or after the buying experience (Dittmar et *al.*, 2007; Schlosser et *al.*, 1994). This study took a more general approach to analyzing overall feelings of positive affect in relation to compulsive buying. The current study also expands on the findings from Flight et *al.* (2012). In their study it was found that positive affect did not predict compulsive buying tendency; however, negative affect did. While Flight et *al.*'s (2012) study lacked any relationship between positive affect and compulsive buying tendencies, the current work actually found a significant negative relationship between positive affect and compulsive buying tendency. In addition, the current study is different from that of Flight et *al.*'s (2012) because affect was analyzed in a general day-to-day basis, rather than only considering affect prior to engagement in compulsive buying as a predictive factor. The demonstrated relationship between positive affect and compulsive buying serves to reaffirm the demonstrated relationship in hypothesis 2a, given that the directional affective hypotheses are opposite of one another.

Hypothesis 3a: Perceived parental compulsive buying tendencies will have a positive relationship with compulsive buying tendencies.

Hypothesis 3a proposed that perceived parental compulsive buying tendencies and compulsive buying tendency would share a positive relationship. Support was found for hypothesis 3a, as well. That is, participants who perceived that their parents have demonstrated compulsive buying tendencies in the form of being unable to quit buying things or buying things that were not needed, tended to be more likely to engage in compulsive buying as well. Although the topic of perceived parental compulsive buying tendencies has not been widely researched in relation to compulsive buying tendency, the findings from the current study are consistent with

findings from previous research in the aspect that perceived parental compulsive buying

tendencies may increase an individual's likelihood of engagement in compulsive buying

tendencies as well (D'Astous et *al.*, 1990; DeSarbo & Edwards, 1996).

Roberts (1996) suggested that individuals may develop attitudes regarding consumption

and spending as children. The assumption that behaviors related to shopping may be learned by

observing parental shopping patterns aligns closely with the work related to consumer

socialization conducted by Ward (1974). It is acknowledged that there are a variety of

socialization agents that are encountered through the course of childhood and adolescence. The

current study served to confirm the important role parents in particular play as socialization

agents.

Hypothesis 3b: Normative conformity will have a positive relationship with compulsive buying.

Similar to hypothesis 3a, it was suggested in hypothesis 3b that normative conformity

would also demonstrate a positive relationship with compulsive buying. Hypothesis 3b was also

supported. Results suggested that participants who found it important to purchase brands others

will approve of, tended to be more likely to engage in compulsive buying tendencies such as

purchasing items even when it imposes a financial burden. Findings regarding normative

conformity and compulsive buying tendency have been inconsistent throughout the previous

research. The results from the current study align closely with the findings produced by Prete et

al. (2013), in which they found a positive relationship between interpersonal influences and

compulsive buying tendency. Interpersonal influences were constructed as the desire to behave

in accordance with the opinions, expectations, or preferences of others. This concept closely

relates to that of normative conformity. It was suggested that individuals who are sensitive to

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interpersonal influences may be more likely to be persuaded by assertive sales tactics and other

forms of social pressure, resulting in compulsive buying (Prete et *al.,* 2013).

Hypothesis 4: Consumers with higher compulsive buying tendencies will utilize the three
channels more than those with lower compulsive buying tendencies.

Hypothesis 4 contends that participants who score high on the compulsive buying scale

will utilize the three shopping channels of interest (brick-and-mortar, online, and mobile) more

frequently than participants with low compulsive buying scores. Support was found for

Hypothesis 4. Results showed that as hypothesized, participants with high CBT scores were

significantly more likely to utilize the brick-and-mortar, online, and mobile shopping channels

more frequently than participants with low CBT scores.

The support for the brick-and-mortar channel in regards to this hypothesis was not

surprising, considering that Telci (2010) had previously found a significant positive relationship

between mall patronage and compulsive buying. Many previous studies have focused on

compulsisve buying within the brick-and-mortar in-store context (e.g,. Flight et *al.*, 2012; Prete

et *al.*, 2013). There is also research to support that many consumers appreciate the experiential

aspect of shopping that they receive from visiting brick-and-mortar stores. This means that

consumers who consider the shopping process as a fun, leisurely activity and also enjoy the

aesthetic and sensory pleasures that come along with it (Holbrook & Hirschman, 1982). Taking

into consideration the work by Flight et *al.* (2012) regarding positive affect and impulse buying,

it is possible to that these pleasurable feelings associated with shopping in-store may lead to

impulse purchases. If the behavior becomes repetitive, then it could lead to the development of

compulsive buying tendencies. Further work should be dedicated to examining how the specific

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experiential perspective can be applied specifically to the context of individuals with compulsive buying tendencies.

Also, the support for the online channel was expected because there has been a considerable amount of research conducted investigating compulsive buying specific to online buying (Dittmar et *al.*, 2007; Duroy et *al*., 2014; Wang & Yang, 2008). Of these studies, it has been suggested that the large variety of available items and instant gratification upon purchase are motivating factors for individuals who engage in compulsive buying to shop online (Duroy et *al*., 2014). These motivations to engage in compulsive buying through online channels were demonstrated again in a more recent study conducted by Trotzke et *al.* (2015). However, another additional motive cited by individuals with compulsive buying tendencies as a reason to utilize the online channel was because they were able to avoid social interactions (Trotzke et *al.*, 2015). The desire to remain anonymous by shopping online may be due to any potential negative feelings that could be simultaneously experienced by individuals, such as feeling depressed or ashamed.

The study of mobile shopping is still quite limited, especially with regard to compulsive buyin. However, the study conducted by Duroy et *al*., (2014) was one study related to compulsive buying that considered mobile shopping as a channel, however it was categorized within the larger channel of online shopping. As reported in the study, a major benefit of utilizing the mobile and online channels was the instant satisfaction of being able to conveniently purchase items at any time or any place (Duroy et *al*., 2014). This closely coincides with the results produced from the current study, in which the importance of quick and easy access to shopping sites was referenced as the primary response for preferring the online or mobile shopping channels among participants. A possible explanation as to why quick and easy access

to shopping sites may be popular among individuals with high compulsive buying tendencies

could be that the act of buying serves as an instant relief from current stressors. The notion of the

act of buying serving as a mechanism to manage stress has been suggested by previous

researchers, such as Edwards (1993).

Hypothesis 5a: Compulsive buying tendencies will have a positive relationship with preference
to seek products that represent greater hedonic value.

Hypothesis 5a suggested that there would be a demonstrated positive relationship

between compulsive buying tendencies and the act of seeking products that represent hedonic

values. This hypothesis was supported, suggesting that participants with high compulsive buying

tendencies would be more likely to seek products that make them feel good or that they consider

to be fun, when feeling the urge to buy. This finding is consistent with the findings of the

previous literature (Lo & Harvey, 2014; Schlosser et *al*., 1994). In these previous studies, it was

found that items such as jewelry, electronics, and clothing were most often sought by participants

with high compulsive buying tendencies. These items could be considered hedonic products

because they are capable of providing entertainment or eliciting emotional responses (Hirschman

& Holbrook, 1982).

These results closely mirror the responses that were collected in the current study. Babin,

Darden, and Griffin (1994) have stated that individuals with compulsive buying tendencies are

more likely to gain a hedonic response from the act of shopping, so it seems likely that these

same individuals would seek out items that represent hedonic value as well. It has also been

noted that the factor of 'enjoyment' has been shown to significantly increase an individual's

likelihood to purchase items via mobile devices (Lu & Yu-Jen Su, 2009). That is, if an individual

perceives the mobile shopping channel as fun or enjoyable, he or she will be more likely to make

purchases using that channel. The concept of enjoyment closely relates to that of hedonic values. Further work should consider the role that hedonic values play among individuals who engage in compulsive buying tendencies via mobile shopping.

Hypothesis 5b: Compulsive buying tendencies will have a negative relationship with preference to seek products that represent greater utilitarian value.

In contrast to hypothesis 5a, it was suggested in hypothesis 5b that there would be a demonstrated negative relationship held between compulsive buying tendencies and seeking products that could be thought of to have utilitarian value, such as items that are considered to be necessary, practical, or functional. Hypothesis 5b was also supported, with results indicating that participants with high compulsive buying tendencies were less likely to seek products representing utilitarian value when feeling the urge to buy. That is, participants who were more likely to engage behaviors such as buying binges were less likely to purchase items that are necessary and functional. The support for hypothesis 5b is consistent with the support found for hypothesis 5a, considering that the two hypotheses mirror each other in theory.

The relationship between utilitarian products and compulsive buying has not been specifically analyzed through previous research. However, the demonstrated lack of utilitarian items that have been reported as popular for individuals experiencing compulsive buying to seek, has been exemplified in studies such as the ones conducted by Lo and Harvey (2014) or Schlosser et *al*. (1994). The negative relationship found between compulsive buying tendency and preference to seek utilitarian products suggested that individuals who were likely to engage in compulsive buying were not likely to seek out items with practical or functional value. This coincides with the research conducted by Babin et *al*. (1994), which demonstrates that while compulsiveness was not shown to be related to utilitarian values surrounding the shopping

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experience. This study extends the previous work by actually establishing a negative relationship

between compulsive buying and preference to seek utilitarian products. As cited by Holbrook

and Hirschman (1982), utilitarian values related to shopping entail more of a work mentality.

Therefore if compulsive buying is largely motivated by perceptions of shopping as a fun

experience, then it helps explain that the opposite would also be true; compulsive buying is not

motivated by perceptions of shopping as work.

CHAPTER VI

CONCLUSIONS

The aim of this study was to investigate how various psychological, affective, and social variables may impact the likelihood to engage in compulsive buying among college students. Further, an additional aim was to determine whether the level of experienced compulsive buying tendency had an effect on the shopping channels utilized and the types of products sought. In general, there were multiple significant relationships found between compulsive buying tendency and the variables of interest. Throughout the research process several limitations were identified, however, the produced results also gave insight to potential areas that are in need of further research. The implications, limitations and recommendations for future research are discussed below.

Theoretical Implications

This study conceptualized a novel model that served as the theoretical framework for the research. The model helps to understand the directional relationships among compulsive buying tendency and the investigated variables. In addition, the study also contributed to the body of work specific to compulsive buying among college students, as it has been suggested that this is an area that has been in need of further work (Harvanko et *al*., 2010). There are four specific implications of this study that will be discussed. These implications are relative to the exploration of novel concepts in relation to compulsive buying.

The first implication is the study of compulsive buying within the mobile shopping channel. Through this study, it has been demonstrated that the use of mobile shopping apps among individuals with high levels of compulsive buying tendencies does occur. There has been

limited research on mobile shopping to date, especially in regard to compulsive buying. It was found that while not the majority, some participants did indeed report mobile apps as their preferred channel of shopping. In addition, the study found that participants with higher levels of compulsive buying tendencies were significantly more likely to utilize mobile shopping apps than participants with low levels of compulsive buying tendencies. Considering the utilization of college students as the study sample, it is beneficial to study their compulsive buying tendencies across different and new channels. As suggested through studies such as Duroy et *al.*'s (2014), the combination of easy accessibility and limited spare time college students often have, may be a large motivation to utilize mobile shopping channels. This study contributes knowledge to the literature that some college students may prefer to use mobile shopping to engage in compulsive buying.

Another theoretical implication of the study is the use of hedonic and utilitarian values to classify products sought by individuals who tend to engage in compulsive buying. Previous work has suggested specific items that are commonly sought by individuals with compulsive buying tendencies, however they were simply descriptive and were not considered as representing any theoretical value (Lo & Harvey, 2014; Schlosser et *al*., 1994). Until the current study, work relative to compulsive buying and hedonic versus utilitarian values has been incredibly limited. One study by Babin et *al.* (1994) considered the relationship between compulsiveness and perceptions of the overall shopping experience as either hedonic or utilitarian. However, the study was not set in a specific compulsive buying context and did not examine the products sought in terms of hedonic versus utilitarian value. The results of the current study provide more specific findings because participants reported items that were most frequently sought when

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experiencing the urge to buy, in addition to testing the relationship held between compulsive buying and hedonic as well as utilitarian product preferences.

A further implication is that this study is the first to consider the role of affect as a general state of being relative to compulsive buying tendencies, rather than as temporally specific to the act of compulsive buying. Previous to this study, positive and negative affect have generally been applied to compulsive buying as occurring at specific times in relation to the compulsive buying behavior (i.e. before, during, or after the compulsive buying) (Faber and Christenson, 1996; Miltenberger et *al.*, 2003). Other studies examined the role of very specific affective states on compulsive buying tendencies, by focusing on traits such as anxiety or depression (Otero-Lopez & Villardefrancos, 2013). However the current study contributes to the literature by confirming the effects of affect on compulsive buying tendencies and looking at a range of different affective states and considering their frequency in an overall, general day-to-day sense rather than at a set point in time relative to a purchasing behavior.

A final implication of this study is the inclusion of perceived parental compulsive buying and normative conformity as social variables related to compulsive buying. This contributes to the literature because there has not been much prior work done considering either of these concepts in relation to compulsive buying. Studies related to perceived parental compulsive buying tendencies and the effect they may have on compulsive buying are limited, and of what is available, in need of updating. The current study has strengthened the suggestion that parents serve as important socialization agents in terms of the impact their consumption patterns may have on children later in life (Ward, 1974). This finding could lead to the development of family counseling programs to further educate parents struggling with CBT on how their behaviors may affect their children's spending habits once they become young adults. Additionally in regard to

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the social variables of interest, normative conformity has previously demonstrated conflicting relationships with compulsive buying. The current study adds depth to the literature related to compulsive buying and normative conformity by suggesting a positive relationship.

Practical Implications

This study also provides several practical implications as well that may be of interest to the fields of clinical and/or financial rehabilitation and academia. First, understanding how various psychological, affective, and social characteristics affect the likelihood to engage in compulsive buying may assist clinical counselors or financial advisors in helping their clients. If professionals have a better understanding of the characteristics that may give way to higher levels of compulsive buying, they will be better equipped to teach their clients how to curb detrimental spending urges. For example, individuals exhibiting compulsive buying tendencies who are parents of children or adolescents may not be aware of the impact their spending habits may be have on their children later in life. Likewise, clinicians may also strategize techniques to help clients deal with negative affective states better in order to avoid feeling compelled to engage in compulsive buying as a form of affect relief. This study also provides insightful results for researchers interested in compulsive buying studies, and also for researchers interested in social-psychological aspects of consumer behaviors.

A managerial implication that may be derived from the current study is the knowledge that mobile apps as a distinguished shopping channel are being currently used by undergraduate students. This new shopping channel should be monitored closely to see whether there will be future increases in the usage of this channel among individuals with compulsive buying tendencies. This information may have the potential to be of interest to business and marketing industries. However, it should be noted that the purpose of this research is to understand how

compulsive buying is influenced by various factors and how it may result in certain behavior in order to foster the knowledge needed by counselors and practitioners working with this population. The information that is derived as a result should work toward better understanding the phenomenon of compulsive buying in order to assist the individuals experiencing it, and is not intended as a resource to be used by companies to exploit characteristics of compulsive buying tendencies.

Limitations

As in any study, there are several limitations that must be taken into consideration. The first apparent limitation is that this study utilized a convenience sample, which resulted in a fairly homogeneous group of participants. For instance, the participants were predominantly Caucasian females. Of the total sample 76.7% were Caucasian and 77.3% were female. This limits the generalizability of the results, and leads into the next limitation of the study. Initially, it was important to obtain an equal amount of male participants as female participants in the study. However, due to low male enrollment in the courses that were used for participant recruitment, the sample did not consist of as many males as originally planned for. In addition, the study could have benefited from recruiting participants of greater diversity with regard to major in school. Although one course from the natural sciences was used to recruit participants, all of the other courses were within fields that related to the social sciences.

Another potential limitation may be that because compulsive buying may imply a stigma to some individuals, some participants may not have revealed full truths in their answers. However, hopefully because confidentiality was ensured through the survey, this bias was minimized as much as possible. As a final limitation, there were only five participants included in the pretest.

Though this should not have impeded the data, utilizing a larger pretest sample may have provided further opportunities to refine or clarify survey questions.

Future Research

The first suggestion for future research would be to conduct a study with greater gender equality in order to gain further insight into compulsive buying tendencies specific to men. It has been suggested that there may be a gender difference among consumers in regard to characteristics such as conformity within the general shopping context. In a study focusing on impulse buying, females were found to be more susceptible to social pressures of conformity, however there was no relationship found between conformity and impulsivity (Wu & Huan, 2010). Using a greater number of male participants would allow for further gender testing in regard to specific variables relative to compulsive buying. Taking the study a step further and only recruiting men as the sample may be interesting as well, as there have been no compulsive buying studies to date focusing solely on men. Compulsive buying has been a phenomenon largely attributed to being specific to women, therefore many studies have been conducted with samples consisting only of women. However a study examining compulsive buying exclusively within a male sample may provide fruitful results. It would be beneficial to see how different psychological, affective, and social variables affect males and females separately. Also there may likely be a difference in the type of items compulsively purchased by males and females. Additionally, similar studies should be conducted which utilize a sample that represents a more ethnically diverse population. This may provide interesting comparative results because there is a possibility that different ethnicities may demonstrate different psychological and social compositions that may differently influence the likelihood to engage in compulsive buying.

Additional psychological and social variables should be studied through future research in order to gain a better understanding of the factors that may influence compulsive buying. The low R^2's that were found for most of the regression models in the current study suggest that there may be other factors present that are unaccounted for, but that may also likely have an impact on the compulsive buying tendencies. Muller et *al.* (2015) acknowledge social factors as contributing to the development of compulsive buying tendencies, and recommend considering marketing stimuli, advertising, and credit card offers as factors that may affect compulsive buying in future studies. Another individual characteristic that could be studied is the relationship between self-control and compulsive buying tendency. Horvath, Buttner, Belei, and Adiguzel (2015) conducted a study considering this relationship in Europe, but have also put forth a call for similar research to occur in the United States.

The demonstrated relationships between self-perceived attractiveness and self-esteem and compulsive buying should also be studied further. Particularly the relationship held between self-esteem and compulsive buying should be further examined because the results of the present findings are contradictory to what a large amount of literature has suggested. This study suggested that there is a positive relationship between self-perceived attractiveness and self-esteem, which suggests that the relationships each holds with compulsive buying should be the same direction. Additional research should be allocated to investigating this discrepancy.

And lastly, in regard to the types of products purchased, future studies would benefit to research further into the role of hedonic versus utilitarian products in relation to compulsive buying. The scales utilized in this study for each of the variables (hedonic and utilitarian) only consisted of two items, and the scale for hedonic product preference was found to have low

reliability. Rephrasing the current questions or developing new questions to add to the scale would be beneficial.

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Appendix

Research Instrument

Consumer Shopping Survey

Dear Student:

We are conducting a study titled "Understanding College Students' Compulsive Buying Tendencies Across Shopping Channels: Psychological, Affective, and Social Perspectives". The purpose of this study is to understand how psychological characteristics, affective states, and social influences may play a role in the likelihood to engage in compulsive buying.

Please allow for 10-15 minutes to complete the survey. We appreciate your contribution to the research, however your participation is voluntary. Feel free to skip questions or stop the survey at any time. Your confidentiality is assured and answers will remain anonymous. A numeric code will be assigned to your survey rather than your name.

There are no known risks to participating in this survey. In addition, there are no direct benefits to your participation. A token of 5 points extra credit in AM 250/DM 360 will be exchanged for participation. The extra credit points will be received even if the survey is discontinued. If you wish to earn 5 extra points, but are not interested in participating in the study, you will be given an alternative extra credit assignment. The alternative assignment will require you to read a scholarly article assigned by the instructor and to write a one-page summary of that article.

Your participation is greatly appreciated. If you have any questions feel free to contact the researcher at (509) 846-9675 or clhowar@mail.colostate.edu. If you have questions about human research participants' rights, please contact the CSU institutional review board at (970) 491-1553 or RICRO_IRB@mail.colostate.edu. If you find any of the material in this survey to be stressful or cause discomfort, the CSU Counseling Services is located in Aylesworth 123 or can be reached at (970) 491-6053.

If you wish to continue to the survey, please click the following link.

      www.examplelink.colostate.edu

Thank you in advance for considering our invitation to participate.

Sincerely,

Consumer Shopping Behavior Survey

Part 1. Please answer the following questions.

1.1 Last 4 digits of CSU Student ID number: _____

(Your ID number will only be used assign the extra credit points after your participation. Your

identity will be kept anonymous)

1.2 Course number in which you are receiving extra credit in exchange for survey participation:

1.3 Your Gender :_____

1.4 Your Age:_____

1.5 Your Ethnicity: _____

1.6 Your Year in School:

____ Freshman

____ Sophomore

____ Junior

____ Senior

1.7 Your Major:_____

1.8 How much money on average do you spend on groceries and necessities each month (e.g.

utilities, food)?

_____

1.9 How much money on average do you spend on non-necessity products each month (e.g.

video games, apparel accessories, music)?

_____

Your Shopping Preferences

Part 2. Please circle the number that best indicates your level of agreement with the following statements.

2.1 I likely feel driven to shop and spend, even when I don't have the time or the money.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

2.2 I likely get little or no pleasure from shopping.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

2.3 I typically hate to go shopping.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

2.4 I often go on buying binges.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

2.5 I often feel "high" when I go on a buying spree.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

2.6 I buy things even when I don't need anything.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

2.7 I go on a buying binge when I'm likely to be upset, disappointed, depressed, or angry.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

2.8 I often worry about my spending habits but still go out and shop and spend money.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

2.9 I likely feel anxious after I go on a buying binge.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

2.10 I often buy things even though I cannot afford them.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

2.11 I often feel guilty or ashamed after I go on a buying binge.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

2.12 I often buy things I don't need or won't use.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

2.13 I often feel compelled to go shopping.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

About Yourself

Part 3. Please circle the number that best indicates your level of agreement with the following statements.

3.1 I feel that I'm better looking than most other individuals.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

3.2 I feel that I have a better sense of style than most other individuals.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

3.3 I think that I'm sexier than most other individuals.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

3.4 I feel that I have a more attractive body than most other individuals.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

3.5 I think I dress better than most other individuals.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

Part 4. Please circle the number that best indicates your level of agreement with the following statements.

4.1 In general, I am satisfied with myself.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

4.2 At times, I think I am no good at all.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

4.3 I feel that I have many good qualities.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

4.4 I am able to do things as well as most other people.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

4.5 I feel I do not have much to be proud of.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

4.6 I feel useless at times.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

4.7 I feel that I'm a person of worth.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

4.8 I wish I could have more respect for myself.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

4.9 All in all, I am inclined to think that I am a failure.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

4.10 I take a positive attitude toward myself.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

Your General Affective States

Part 5. Please read each item and select the response that best indicates to what extent you generally feel this way. That is, how you feel on average.

5.1 On average, I feel <u>happy</u>.

Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.2 On average, I feel <u>proud</u>.

Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.3 On average, I feel <u>enthusiastic</u>.

Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.4 On average, I feel <u>confident</u>.

Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.5 On average, I feel <u>irritable</u>.

Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.6 On average, I feel <u>ashamed</u>.

Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.7 On average, I feel <u>energetic</u>.

Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.8 On average, I feel <u>calm</u>.

       Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.9 On average, I feel <u>nervous</u>.

       Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.10 On average, I feel <u>sluggish</u>.

       Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.11 On average, I feel <u>determined</u>.

       Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.12 On average, I feel <u>afraid</u>.

       Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.13 On average, I feel <u>sad</u>.

       Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

5.14 On average, I feel <u>lonely</u>.

       Very rarely   Somewhat   Moderately   Quite a bit   Very frequently

Your Social Interactions

Part 6. Please circle the number that best indicates your level of agreement with the following statements

6.1 There are products that my father (or mother) seems unable to stop buying (shoes, tools, clothing, etc.).

Strongly Disagree   Strongly Agree

    1   2   3   4   5

6.2 My father (or my mother) often buys things that he (she) doesn't need.

Strongly Disagree   Strongly Agree

1   2   3   4   5

6.3 Usually, when I want to buy something, I talk with my parents.

Strongly Disagree   Strongly Agree

1   2   3   4   5

Part 7. Please circle the number that best indicates your level of agreement with the following

statements

7.1 I rarely purchase the latest fashion styles until I am sure my friends approve them.

Strongly Disagree   Strongly Agree

1   2   3   4   5

7.2 It is important that others like the products and brands I buy.

Strongly Disagree   Strongly Agree

1   2   3   4   5

7.3 When buying products, I generally purchase brands that I think others will approve of.

Strongly Disagree   Strongly Agree

1   2   3   4   5

7.4 If other people can see me using a product, I often purchase the brand they expect me to buy.

Strongly Disagree   Strongly Agree

1   2   3   4   5

7.5 I like to know what brands and products make good impressions on others.

Strongly Disagree   Strongly Agree

1   2   3   4   5

7.6 I achieve a sense of belonging by purchasing the same product and brands that others

purchase.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

7.7 If I want to be like someone, I often try to buy the same brands that they buy.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

7.8 I often identify with other people by purchasing the same products and brands they purchase.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

Your Shopping Activities

Part 8. Please select the response that best indicates your level of agreement with each of the

statements listed.

8.1 About how often do you go shopping at brick-and-mortar stores?

   a) Never

   b) Once every couple of months

   c) Once a month

   d) Once a week

   e) Once every other day

   f)   Several times a day

8.2 As soon as I enter a shopping center, I want to go into a store and buy something.

Strongly Disagree   Strongly Agree

1	2	3	4	5

8.3 I often have a real desire to go into retail stores and buy something

Strongly Disagree   Strongly Agree

1	2	3	4	5

8.4 I often buy something I see in a retail store without planning to, just because I've got to have it

1	2	3	4	5

8.5 Sometimes I think it would be better if I spent less <u>time</u> shopping at brick-and-mortar stores.

Strongly Disagree   Strongly Agree

1	2	3	4	5

8.6 Some people have suggested to me that I spend too much <u>time</u> shopping at brick-and-mortar stores.

Strongly Disagree   Strongly Agree

1	2	3	4	5

8.7 Sometimes I think it would be better if I spent less <u>money</u> shopping in brick-and-mortar stores.

Strongly Disagree   Strongly Agree

1	2	3	4	5

8.8 Some people have suggested to me that I spend too much <u>money</u> shopping in brick-and-mortar stores.

Strongly Disagree   Strongly Agree

1	2	3	4	5

8.9 I lose track of how much I am shopping when in retail stores.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

Part 9. Please select the response that best indicates your level of agreement with each of the

statements listed.

9.1 About how often do you shop online using a computer?

  a) Never

  b) Once every couple of months

  c) Once a month

  d) Once a week

  e) Once every other day

  f) Several times a day

9.2 As soon as I log onto the Internet on a computer, I want to go to a retail site and buy

something.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

9.3 I often have a real desire to shop online via computer and buy something.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

9.4 I often buy something I see on the Internet without planning to, just because I've got to have

it

Strongly Disagree   Strongly Agree

    1   2   3   4   5

9.5 Sometimes I think it would be better if I spent less <u>time</u> shopping on the Internet.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

9.6 Some people have suggested to me that I spend too much <u>time</u> shopping on the Internet.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

9.7 Sometimes I think it would be better if I spent less <u>money</u> shopping on the Internet.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

9.8 Some people have suggested to me that I spend too much <u>money</u> shopping on the Internet.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

9.9 I lose track of how much I shop online while using a computer.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

Part 10. Please select the response that best indicates your level of agreement with each of the statements listed.

10.1 About how often do you shop via mobile phone/tablet apps?

   a) Never

   b) Once every couple of months

   c) Once a month

   d) Once a week

e) Once every other day

f) Several times a day

10.2 As soon as I begin browsing mobile shopping apps, I want to buy something.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

10.3 I often have a real desire to browse mobile shopping apps and buy something

Strongly Disagree   Strongly Agree

   1   2   3   4   5

10.4 I often buy something I see on a mobile shopping app without planning to, just because I've

got to have it.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

10.5 Sometimes I think it would be better if I spent less <u>time</u> shopping on mobile phone/tablet

apps.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

10.6 Some people have suggested to me that I spend too much <u>time</u> shopping via mobile

phone/tablet apps.

Strongly Disagree   Strongly Agree

   1   2   3   4   5

10.7 Sometimes I think it would be better if I spent less <u>money</u> shopping via mobile phone/tablet

apps.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

10.8 Some people have suggested to me that I spend too much <u>money</u> shopping via mobile phone/tablet apps.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

10.9 I lose track of how much I am shopping via my mobile phone/tablet.

Strongly Disagree   Strongly Agree

| 1 | 2 | 3 | 4 | 5 |

Part 11. Please answer the following question.

11.1 Please indicate your most preferred way to shop?

   a) Brick-and-mortar stores

   b) Online websites via computer

   c) Mobile shopping apps via phone/tablet

11.2 Based on your answer to the previous question, please explain why this is your preferred way to shop.

_____

Part 12. Please select the response that best indicates your level of agreement with each of the statements listed.

12.1 When shopping, I tend to buy or consider more products that would make me feel good.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

12.2 When shopping, products with fun and recreational features attract more of my attention.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

12.3 When shopping, I tend to buy or consider products that are necessary and practical.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

12.4 When shopping, products with functional features attract more of my attention.

Strongly Disagree   Strongly Agree

    1   2   3   4   5

Part 13. Please answer the following open-ended question.

13.1 When feeling the urge to shop, what products do you typically seek to buy (e.g. video games, jewelry, tools, groceries)?