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## Online Shopping: The Influence of Body Image, Personality, and Social Anxiety

Brooke Mann  
Fort Hays State University, bmmann@fhsu.edu

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ONLINE SHOPPING: THE INFLUENCE OF BODY IMAGE, PERSONALITY, AND  
SOCIAL ANXIETY

being

A Thesis Presented to the Graduate Faculty  
of the Fort Hays State University in  
Partial Fulfillment of the Requirements for  
the Degree of Master of Science

by

Brooke M. Mann

B.S., Fort Hays State University

Date \_\_\_\_\_

Approved \_\_\_\_\_  
Major Professor

Approved \_\_\_\_\_  
Chair, Graduate Council

## ABSTRACT

The usage of the Internet has experienced significant growth over the past several decades, providing a vehicle for the online shopping market to experience exponential gains as well. In a 2011 U.S. Census survey, 71.7% of households reported access to the Internet, an increase from the reported 54.7% in 2003 and furthermore a large increase from the 18.0% from the 1997, the first year the Census Bureau reported Internet usage (File, 2013). Research has shown various reasons for expansion of online shopping, such as convenience, ease, and the excitement of experiencing something new, but gives little insight into characteristics that lead consumers to choose to shop online (Huang & Yang, 2010; To, Lio, & Lin, 2007; Yen, Yen, Chen, Wang, Chang, & Ko, 2012). The consumer characteristics that lead to online shopping could be implications of body image dissatisfaction and social anxiety. Personality factors could also influence consumer's decision to shop online rather than in store.

Using a demographic group likely to shop online and a survey measuring body image satisfaction, personality and social anxiety, this study hypothesized these variables would predict online shopping behavior. Online shopping was measured by a questionnaire adapted from previous research and measures frequency and preference of online shopping. The Multidimensional Body-Self Relations Questionnaire (MBSRQ) was used to measure body image dissatisfaction; participants answered statements such as, "I like the way my clothes fit me" and "I am physically unattractive." Social anxiety was assessed using the Social Interaction Anxiety Scale (SIAS). This measurement of fears of social interactions uses statements like, "I find it easy to make friends of my own age" and "I feel I'll say something embarrassing when talking." Finally, personality was

evaluated by using the NEO Five-Factor Inventory- 3 (NEO-FFI-3), which measures the well-known Big Five personality constructs. Participants rated responses to statements such as, “I rarely feel lonely or blue” and “I like to be where the action is.” Sex differences in online shopping preference were also assessed.

To analyze the data, a multiple regression was used to test the predictability of online shopping. Although the overall regression model was not significant, some correlations between variables were found. Social anxiety was significantly correlated with online shopping. Neuroticism was significantly correlated with online shopping. Body image satisfaction was significantly correlated with social anxiety, conscientiousness, extraversion, and neuroticism. Significant correlations were found between social anxiety, and conscientiousness, extraversion, and neuroticism. Agreeableness was significantly correlated with conscientiousness and neuroticism. Conscientiousness was significantly correlated with extraversion and neuroticism. A significant correlation was found between extraversion and neuroticism. To assess sex differences, an independent *t* test was used. It was found women shop online more frequently than men.

The possible implications of this study can be far reaching and provide valuable information to many different fields. Clinicians will be better able to understand how body image issues and social anxiety affect client’s everyday life. The findings of the relationship between online shopping and consumer characteristics will help in understanding the underlying issues of those suffering from online shopping addiction or problems. This study assists in providing a complete picture of clients struggling with any of these issues, which, in turn, benefits the therapeutic process and allows for a holistic approach. Online retailers will be able to use the information yielded from this research

to better target their intended population. Limitations include only using a population in a rural area, and restrictions of the shopping experience scale used. Future directions include using a diverse population, possibly in an urban area. This study aimed to understand online shopping behaviors by examining personality traits of online shoppers. This study adds to the literature on consumer characteristics of those who shop online.

*Keywords:* online shopping, body image, personality, social anxiety

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## INTRODUCTION

Internet usage has grown significantly over the past two decades; therefore online shopping has substantially developed as well. For example in the past two years alone, the number of online shoppers has increased 40% (Lim & Ting, 2012). Research suggests online shopping motivations stem from convenience, selection, lack of socialization, savings, the ability to customize, as well as adventure and fashion (To, Lio, & Lin, 2007). Consequently, social scientists have investigated why some consumers might be reluctant to shop online and results indicate reasons including inadequate online technologies and perceived risk are at the top of the list (Bhatnagar, Misra, & Rao, 2000; Choi & Lee, 2003; Eggert, 2006). However, there has been minimal investigation into the influence of consumer traits on shopping behaviors online. The purpose of this study is to address this gap in the literature. Thus, the introduction will contain a review of the literature on key concepts. The first portion will review literature on body image regarding how the terms are defined, categories of body image, and how it applies to the fashion industry and online shopping. Next, personality and social anxiety will be discussed and the literature review will conclude with research regarding online shopping.

### **Body Image**

**Definition and rates.** Body image is a complex construct and can be defined in many ways. This concept is not only multifaceted but it includes multidimensional characteristics such as the opinions, feelings, satisfactions, and behaviors of one's experiences and body awareness (Cash & Pruzinsky, 2002). Grogan (2008) defines body image as emotions and thoughts one has about their body. Core components to body

image attitudes are evaluation, investment, and affect. Evaluation is in regards to body satisfaction. Investment in body image attitudes means the importance of appearance ideals to an individual and their appearance self-schemas. Affect of body image attitudes is the emotions one feels concerning their body image in certain situations (Cash, Thériault, & Annis, 2004). Negative thoughts and feelings about one's own body, such as dislike towards certain body parts or feelings of disgust when looking in the mirror, defines body image disturbance.

Typically, because body image is multidimensional, it is divided into subgroups. One subgroup is body size distortions. These perceptual distortions are in regards to one's own body size. An example of this is when one perceives their body as being larger than they are, for instance a woman seeing her arms as fat and therefore not wearing tank tops. The other subgroup of body image is body dissatisfaction. This concept is the cognitive, affective, or attitudinal nature of negative body image. Body image dissatisfaction usually involves a perception of discrepancy between one's ideal body and his or her actual body. Behaviors can indicate when people are dissatisfied with their bodies, such as dieting, exercising, and cosmetic surgery (Grogan, 2008).

Body image dissatisfaction is high in the United States with an estimated 66.1% of the adult population being affected (Kruger, Lee, Ainsworth, & Macera, 2008). Body image dissatisfaction has been described as being one of the most consistent and largest factors for risk and maintenance of eating disorder pathology (Stice, 2002). Reported rates of body image dissatisfaction and the desire to lose weight has been as high as 80% for college age women (Neighbors & Sobal, 2007; Vohs, Heatherton, & Herrin, 2001).

Body image dissatisfaction at its most intense can lead to a diagnosis of Body Dysmorphic Disorder. This disorder is defined as an individual being preoccupied with perceived flaws in their physical appearance, which are not observable or appear only slightly to other individuals. These concerns can include body areas such as weight, stomach, legs, skin, hair, or facial features such as nose or lips. The preoccupation with the perceived flaws is time consuming and intrusive and excessive behaviors or cognitions are performed in response to the unwanted thoughts or feelings. The prevalence rate of Body Dysmorphic Disorder among U.S. adults is 2.4%, affecting men and women equally (APA, 2013).

**Sex differences.** Sociocultural perspectives propose sex differences for ideal body types represent different cultural standards (Grossbard, Lee, Neighbors, & Larimer, 2009). For example, some authors assert many women use their appearance and body shape to define themselves (Orbach, 1978). Women are dissatisfied with overall appearance and weight, reporting unhappiness with specific areas as well such as hair, face, muscle tone, torso, etc. (Cash & Henry, 1995). Areas women tend to be especially dissatisfied with are their hips, thighs, and stomachs. Research shows women aspire to be slender. If given the choice, most women would choose to be thinner than they currently are. Women also tend to overestimate their overall body size, as well as the size of specific body parts (Grogan, 2008). Larger body size is discrepant from the cultural norm for thinness, which results in a negative self-evaluation by women (Grossbard et al., 2009).

Some research supports the idea that men are similar to women in regards to body image disturbance. Men are not only dissatisfied with their bodies overall but experience some unhappiness with certain body parts. These feelings are comparable to the displeasure women feel; however, men report dissatisfaction in different areas than women. Men are concerned about both weight and muscularity (Grossbard et al., 2009). The ideal for men is to be slender yet muscular (Leit, Pope, & Gray, 2001). When men are more muscular, it symbolizes power and success (Grossbard et al., 2009). Barlett, Harris, Smith, and Bonds-Raacke (2005) studied the impact of action figures on negative body image in men. It was found handling highly muscular action figures negatively impacted body esteem in adult men.

Neighbors and Sobal (2007) studied the degree of body image dissatisfaction in university students ( $n=310$ ). Dissatisfaction in both body weight and body shape were found to be present in men and women. Researchers classified participants into groups by BMI. Most women (87%) who were in the normal weight desired to weigh less, whereas, women who were classified as underweight reported almost no body weight and shape dissatisfaction. Women in the overweight category expressed the greatest dissatisfaction with weight and body image. In the study, men were found to also express body weight and body image dissatisfaction; however, it was expressed differently than women. It was found 20% of men wanted to gain weight and 48% desired to lose weight. Men showed less concern about being a certain weight or clothing size than women.

**The fashion industry and body image.** Not only does society have an impact on body image, the fashion industry does as well. Fashion reflects the social message of the

ideal body size by using tall, thin models, with highly unlikely body types. The fashion industry has been reinforcing the ideal body type for decades; in 1970, models weighed 8% less than the average woman, compared to models now weighting 23% less (Harris, 2009). The ideal body size for women is tall and slender, although they are still expected to be shapely (Grogan, 2008). Consumers who are bigger than the model's sizes may feel a higher degree of discrepancy between their body and the ideal body. Also consumers may have a hard time visualizing the fit/size of a garment on their own body when online shopping (Kim & Damhorst, 2010). It is important to understand how the difference between the bodies of consumers and visual information from the models influences customer's perceptions of their bodies and their concerns with apparel when shopping online.

## **Personality**

**Definition and theory.** Many definitions of personality currently exist. Researchers agree the general concept of personality is dynamic and organized characteristics an individual possesses that uniquely shapes his or her thoughts, actions, and behaviors in a variety of situations. Personality can also be considered a psychological construct. This means personality is complex and encompasses genetic background, as well as learning history and how learning history influences responses to situational factors (Olson & Hergenhausen, 2010; Ryckman, 2008).

The most prominent aspects of personality, often called the Big Five personality factors, are openness, conscientiousness, extraversion, agreeableness, and neuroticism. These domains of personality contain important facets which define each dimension.

People who score high in openness are creative, imaginative, and curious. Openness is associated with the ability to think about novel ideas and be unconventional. The facets included in openness are fantasy, aesthetics, feelings, actions, ideas, and values.

Conscientious individuals are organized, thorough, punctual, and reliable.

Conscientiousness features include: competence, order, dutifulness, achievement striving, self-discipline, and deliberation. Energetic, assertive, optimistic people score high in extraversion. Extraversion is composed of warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotion traits. Sympathy, kindness, and affection are characteristics shared by those who have high scores in agreeableness. The features of agreeableness consist of trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. Those individuals who score high in neuroticism are moody, anxious, and tense and are more likely to have irrational ideas and less ability to control their impulses. Neuroticism facets are anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability (Costa & McCrae, 1992a).

McCrae and Costa (1987) observed characteristics attributable to the Big Five personality factors. They found individuals with high scores of openness are seen by themselves and others as intelligent. However, it is unknown whether intelligence influences individuals to have high levels of openness or if being open develops high levels of intelligence. It was also found those individuals who score low in agreeableness are often mistrustful and skeptical, as well as being unsympathetic. These people are also often seen as uncooperative, stubborn, and rude. On the other hand, a person with a high level of agreeableness may be dependent and submissive. Finally, those individuals with

high levels of consciences are dutiful, scrupulous, and seen as being moralistic. These individuals are also seen as hardworking, ambitious, energetic, and persevering.

**Academic motivation.** Personality characteristics are strongly related to a variety of academic motivations (Clark & Schroth, 2010; Komarraju & Karau, 2005; Phillips, Abraham, & Bond, 2003). Komarraju and Karau (2005) found a pattern of significant relationships between the Big Five personality traits and the subscales of the Academic Motivations Inventory. Three core factors of the subscales (engagement, achievement, and avoidance) were shown to have the strongest relationship with personality. Openness and extraversion best explained engagement. Achievement was related to conscientiousness, neuroticism, and openness. The researchers found avoidance best explained by neuroticism and extraversion but also it had an inverse relationship with both conscientiousness and openness. These results show differences in personality characteristics can help explain differences in student motivations.

Clark and Schroth (2010) examined the relationship between personality and intrinsic and extrinsic academic motivation in college students. Results indicated intrinsically motivated students tended to be extroverted, agreeable, conscientious, and neurotic. Those students who were extrinsically motivated scored higher on extroversion, agreeableness, conscientiousness, and neuroticism. This research suggests individuals with different personality characteristics pursue college degrees for dissimilar reasons and have different academic priorities.

**Appearance evaluation and appearance orientation.** It has been found personality characteristics factor into appearance evaluation (which is the overall

satisfaction or dissatisfaction of an individual's appearance), appearance orientation (amount of investment in appearance), cosmetic surgery, and consequently, body image of an individual (Kvalem, von Soest, Roald, & Skolleborg, 2006; von Soest, Kvalem, Skolleborg, & Roald, 2009). The relationship between personality, appearance evaluation, and cosmetic surgery was investigated using women who had recently undergone cosmetic surgery and a comparison group from the population. Results indicated a strong correlation between the personality variables of extraversion and neuroticism and appearance evaluation. It was found extraversion scores increased from before to after surgery. A number of participants from the control group (24.2%) had previously had cosmetic surgery and high extraversion scores predicted cosmetic surgery experience in the comparison sample. Neuroticism was shown to be predictive of experience with cosmetic surgery when using data from the comparison sample. Overall, results showed an association between extraversion and cosmetic surgery increased when appearance evaluation was included as a covariate. Women who had cosmetic surgery were less satisfied with their appearance compared to women without surgery experience (von Soest et al., 2009).

Kvalem et al. (2006) studied how personality traits and emotional reaction to negative comments about appearance during childhood related to appearance evaluation and appearance orientation. Emotional reaction to negative comments about looks were found to significantly predict appearance evaluation and amount of investment in appearance. High scores of extroversion predicted positive appearance evaluation and orientation. Neuroticism was found to be related to negative appearance evaluation and a

high amount of investment in appearance. These results confirm differences in personality aspects are important to study when evaluating body image.

**Marital satisfaction.** The relationship between personality and marital satisfaction has been a research topic of interest for many years. Research demonstrates neuroticism and extraversion have associations with marital dissatisfaction and openness, agreeableness, and conscientiousness relate to marital satisfaction (e.g., Botwin, Buss, & Shackelford, 1997; Gattis, Berns, Simpson, & Christensen, 2004; Kelly & Conley, 1987; Kilman & Vendemia, 2013). Lester, Haig, and Monello (1989) studied 30 married couples and found high extraversion in either partner was related to a more dissatisfied spouse. High levels of openness, agreeableness, and conscientiousness were found to be associated with higher marital satisfaction and were traits found to be highly valued by both sexes (Botwin et al, 1997). Gattis et al. (2004) studied the relationship between personality dimensions and marital satisfaction in a sample that included distressed, treatment seeking couples, as well as a small sample of nondistressed couples for comparison. When comparing distressed and nondistressed couples, the researchers found agreeableness, conscientiousness, and positive expressivity to be positively related to marital satisfaction and neuroticism to be negatively related.

Neuroticism has been found to be the most powerful predictor of marital dissatisfaction (Karney & Bradbury, 1995; Kelly & Conley, 1987). Kelly and Conley (1987) conducted a 40-year longitudinal study of married couples and found neuroticism predicted divorce early and later in marriage. In a study conducted by Verreault, Sabourin, Lussier, Normandin, and Clarkin (2013) it was found high levels of

neuroticism predicted endorsement of primitive defenses, which predicted dissatisfaction. Additionally, high self-report levels of neuroticism predicted low partner-reported couple satisfaction.

**Online shopping behaviors.** Personality traits impact other areas of life besides academics, marital satisfaction, and body satisfaction. Huang and Yang (2010) found personality traits are predictors of online shopping behaviors. Those individuals who scored high in openness used online shopping to experience adventure and new ideas. Participants with high scores in conscientiousness liked online shopping for convenience, and extraverted individuals used Internet shopping because of social interactions, such as sharing information and shopping experiences. Some research has shown neuroticism, agreeableness, and openness have a significant influence on the willingness to shop online (Bosnjak, Galesic, & Tuten, 2007). Besides the few expectations mentioned above, the relationship between online shopping and consumer personality traits has been largely unstudied. Though, it is reasonable to make the connection certain personality characteristics will influence online shopping decisions. The link between these two factors is important to understanding the influences of personality and the growth of online shopping (Huang & Yang, 2010).

### **Social Anxiety**

**Definition and prevalence.** Social anxiety is not just shyness, nor is it an inability to speak in public; it is a pervasive disorder robbing individuals of the opportunity for a full, vibrant life (Stein & Gorman, 2001). Social anxiety is defined as an intense fear of negative evaluation from others, and a chronic concern and self-doubt

about one's social ability and social performance (APA, 2000). Social anxiety occurs from the real or imagined perception of evaluation in social settings. It is described as the experience of stress, discomfort, and fear in social circumstances (Kupper & Denollet, 2012). This strong fear of judgment and embarrassment is extremely distressful and is estimated to affect 15 million American adults (NIMH, 2013). The terms social phobia and social anxiety are often used interchangeably in literature; however, social phobia refers to a diagnosed condition whereas social anxiety is a milder form of social distress (Villiers, 2009).

Social interaction is not only important but also usually unavoidable in life. Social anxiety can result from one situation such as eating or drinking in public or it can be generalized and broad, affecting all areas of living so the individual experiences anxiety around almost anyone other than family (NIMH, 2013). The anxiety caused by these interactions, if severe enough, can have both emotional and physical effects and can cause impairments in all aspects of one's daily living (Villiers, 2009). Among disabilities to education, occupation, and socialization, individuals often make major life choices to accommodate their social anxiety. Examples of life choices include dropping out of school because of fears of speaking in front of people, taking jobs allowing limited interaction with others, and avoiding dating or non-romantic relationships leading to loneliness and isolation (Stein & Gorman, 2001). In the National Comorbidity Survey Replication (NCSR), 92.6% of participants with social anxiety reported role impairment because of their distress, with 36.5% of those individuals reporting severe impairment in

at least one domain of functioning (Ruscio, Brown, Chiu, Sareen, Stein, & Kessler, 2008).

Social anxiety was once thought of as a relatively rare disorder; however, it is now known patients with social anxiety do not commonly seek or receive psychiatric care, leading to an underestimation of the prevalence (Amies, Gelder, & Shaw, 1983). More recently social anxiety has received increased attention and is now recognized as a serious but treatable condition. Therefore, prevalence rates, comorbidity, and age of onset of social anxiety have been widely studied (e.g., APA, 2000; Kessler, Berglund, Demler, Jin, Merikangas, & Walters, 2005; Ruscio et al., 2008).

The National Comorbidity Survey Replication (NCSR) was designed to represent estimates of lifetime prevalence, age-of-onset information, and comorbidity rates of the DSM-IV disorders. The survey was conducted between February 2001 and April 2003 using the World Health Organization World Mental Health Survey version of the Composite International Diagnostic Interview. Nine thousand two hundred eighty-two participants older than age 18 were assessed by the household survey, as well as semi-structured clinical interviews. The results of this study indicated social anxiety was the fourth most prevalent lifetime disorder, falling behind major depressive disorder, alcohol abuse, and specific phobias. Social anxiety had a lifetime prevalence rate of 12.1% and a 12-month prevalence rate of 7.1%, which falls within the reported prevalence rate of 3%-13% reported in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR, APA, 2003). Anxiety disorders were the class with the highest prevalence rate of 28.8%. Almost one-quarter, or 24.1%, of respondents

reported at least one lifetime social fear, or social situation causing extreme anxiety. Public speaking (21.2%) and speaking in a meeting or class (19.5%) were the two most common lifetime social fears. The least common anxiety invoking social situations were using a bathroom away from home and writing, eating, or drinking while being watched, with prevalence rates of 5.7% and 8.1%, respectively (Kessler et al., 2005; Ruscio et al., 2007).

Social anxiety is considered an early-onset disorder with 50% of individuals diagnosed reporting an onset before adolescence (Stein & Gorman, 2001). The NCSR found the median age of onset for anxiety disorders (age 11 years) was much earlier than for substance use disorders and mood disorders. The median age of onset for social phobia was found to be age 13 (Kessler et al., 2005). The DSM-IV-TR reports age of onset for social anxiety is typically mid-teens, although some individuals report onset to be early childhood (APA, 2003).

Resulting from an early onset, social anxiety is often complicated by the occurrence of a comorbid disorder such as substance abuse and major depression (Stein & Gorman, 2001). The NCSR found 62.9% of respondents with lifetime social anxiety involving one to four social situations met the criteria for at least one other lifetime Diagnostic and Statistic Manual Fourth Edition (DSM-IV) disorder. Those individuals reporting higher numbers of social situation fears had a higher rate of meeting diagnostic criteria; 75.2% of respondents reporting 5-7 distressing social situations, 81.5% of participants with 8-10 fears, and 90.2% of those reporting 11 or more anxiety provoking social situations met criteria for at least one other DSM-IV diagnosis. The NCSR used

logistic regression models controlling for age at interview, sex, and race-ethnicity to estimate lifetime comorbidity odds ratios of social anxiety and other DSM-IV subgroups. The group of disorders most likely to be comorbid (predicted by the highest odds ratio) was with any anxiety disorder with an odds ratio of 5.9%, followed by mood disorders (4.8%) and any substance use disorder (2.8%) (Ruscio et al., 2008).

**Sex differences.** Sex studies on social anxiety have shown to be contradictory (e.g., APA, 2003; Heimberg & Juster, 1995; Turk et al., 1998). Researchers conducting the Epidemiological Catchment Areas (ECA) study (Schneider, Johnson, Hornig, Liebowitz, & Weissmann, 1992) found based on 13,000 participants in four communities, the lifetime prevalence rate of social phobia for men and women were similar, with rates of 2.0% and 3.1%, respectively. The DSM-IV-TR (APA, 2003) reports social phobia is more common in women than men based on epidemiological and community-based studies but in most clinical samples, both sexes are represented equally or there is a majority of men. Heimberg and Juster (1995) found women are more likely to receive a diagnosis of social phobia but men and women present for treatment in equal proportions.

A number of sex similarities and differences were noted in a study conducted by Turk et al. (1998). The study consisted of 108 men and 104 women with a principal diagnosis of social phobia, based on structural interviews. It was found men and women reported suffering from social phobia for comparable lengths of time. There were no significant differences examined in the number of men and women who received psychotherapy previously or had been treated with medication. It was reported men and women had equally received comorbid diagnoses of mood disorders or additional anxiety

disorders. However in specific social anxiety situations, significant differences were found. Women reported having significant situational fears in nine areas. These fears included talking to a person in authority, working while being observed, being in front of an audience, expressing disagreement to people not known very well, to name a few. Men reported significantly more fear in only two social situations; urinating in public bathrooms and returning items to a store. Some social situations were found to be feared by both men and women such as informal social interactions like going to a party or situations where one was being observed as in eating or drinking in public. The study suggests men and women with social phobia also differ in degree of fear.

**Personality.** Personality factors have been shown to be associated with social anxiety. In a study of 95 college students, Norton, Cox, Hewitt, and McLeod (1997) used the NEO-Five Factor Inventory (NEO-FFI) and the Anxiety Sensitivity Index (ASI) to predict scores on the Social Phobia Scale (SPS) and the Social Interaction Anxiety Scale (SIAS). Results indicated both anxiety sensitivity and extraversion predicted scores on the SPS and SIAS. Anxiety sensitivity and neuroticism were significantly positively correlated to the SPS and SIAS whereas extraversion and conscientiousness were significantly negatively correlated with the two measures. This suggests individuals who score high on either the SPS or the SIAS are tense, ashamed, and fearful of their anxiety symptoms.

**Internet usage.** Studies have been conducted researching the relationship between Internet usage and social anxiety. These studies looked at the connection between social anxiety disorder and usage of the Internet (e.g., Erwin, Turk, Heimberg,

Fresco, & Hantula 2004; Mazalin & Klien, 2008). Erwin et al. (2004) found participants with social anxiety had increased avoidance of face-to-face interactions after increased Internet usage. The same study also revealed Internet usage strengthens maladaptive beliefs and leads to a fear of negative evaluation online. In addition, the researchers found positive effects associated with Internet usage. Individuals with social anxiety who spent greater lengths of time online had increased social supports.

Yen et al. (2012) found individuals with high social anxiety experienced lower social anxiety while interacting online rather than in real-life. Although humiliating social experiences can occur online, it is easier to escape the embarrassing interaction. Opportunities to modify one's preexisting self-image may be presented when interacting online. Communicating online is less stressful than face-to-face because participants do not need to respond immediately, there are limited negative interpretations of social cues, and the reading of facial expressions is missing. Although there have been studies showing the influence of social anxiety on Internet usage, the idea social anxiety would lead to online shopping has little research. However, based on the research showing the power of social anxiety to increase Internet usage, it is reasonable to conclude social anxiety could lead to greater frequency of online shopping.

### **Online Shopping**

Internet usage has experienced vast growth the past couple of decades. According to the U.S. Census Bureau, 1997 was the first year they inquired about Internet access in the home and 18.0% of respondents stated they had Internet access at home. The number of respondents with Internet access in the home rose to 54.7% in 2003 and 75.6% in 2011

(File, 2013). As a result, online shopping has seen rapid expansion as well. In 2006, online sales topped \$100 billion (Cassis, 2007). Retailers of online shopping stores reported growth rates between 20%-70% in their online businesses (Corcoran, 2007). According to the U.S. Census Bureau, in 2011 U.S. retailers reported online shopping sales were \$194 billion, an increase from the \$167 billion in 2010. In 2011, clothing and clothing accessories were the largest retail merchandise category for online shopping (U.S. Department of Commerce Economics and Statistics Administration, 2013). The U.S. Census Bureau News (2013) reported online shopping sales in the first quarter of 2013 to have increased 2.7% from the fourth quarter of 2012, adjusted for seasonal variation but not for price changes. Furthermore, the online shopping sales in the first quarter of 2013 increased 15.2% from the first quarter of 2012 (U.S. Department of Commerce, 2013). It is essential to study, as well as identify, the motivations for the boom in online shopping and the behaviors leading to online shopping.

**Retailers respond to rapid growth.** As online shopping continues to grow, retailers are persistently working on increasing shopping ease and awareness by expanding the number of products offered, adding in-store retrieval or free shipping, and even experimenting with social media. Now retailers have added the option to retrieve items in store that were purchased online or at specially designated retrieval depots and some stores, such as Sears and K-mart, will even bring your purchases out to your car. Retailers are reaching out to customers on Facebook and Twitter as a way of advertisement, some using social networking sites to host daily deals or flash sales. Online shopping has also provided an outlet for retailers to expand their businesses

internationally. Stores such as Zara and Top Shop are expanding their online store to U.S. customers as their store base is growing more slowly. As online shopping continues to grow, modernization of the marketing and retail world are also continually happening (Heller, 2011).

**College students.** College students spend hours surfing the Internet and are the most eager consumers to make online purchases (Cassis, 2007). It is important to understand college student's behaviors leading to online shopping to improve marketing efforts. Apparel is one of the most popular Internet shopping categories for college students. About 25% of college students have purchased apparel online (Case & King, 2003). Seock and Bailey (2008) found college students are confident about their shopping abilities and believe they are good shoppers. College students have the tendency to shop online to find out about sales or to compare prices at different businesses. The same study found brand/fashion consciousness and shopping enjoyment were positively related to purchases online. Therefore not only do students enjoy shopping for attire online but they are also looking for brand specific apparel items. Researchers also found a sex difference in online shopping. Specifically, women had a greater number of online apparel purchases than men.

**Consumer differences.** Swinyard and Smith (2003) found there are significant differences between those individuals who shop online and those who choose to shop in store. Online shoppers tend to be younger, wealthier, have higher levels of education and computer literacy, and spend more time on their computer and Internet. These individuals also find online shopping to be more entertaining and convenient than those who do not

shop online. Also, online shoppers are less fearful about financial loss resulting from the security of online shopping.

Using innovation diffusion theory, a model used to describe how new concepts are exchanged among members of society, Lennon et al. (2007) studied the adoption of online apparel shopping of rural consumers. Individuals in 11 states completed consumer surveys in 2000 ( $n=2,198$ ) and in 2003 ( $n=879$ ). Using variables measured in 2000, the researchers predicted online apparel purchasing in 2003. Previous practice and online apparel purchasing in 2000 were found to be the two strongest predictors of online apparel purchasing in 2003. The beliefs about both the compatibility of online shopping and the Internet were shown to have direct effects on online shopping in 2003. These results illustrate the progression of the diffusion process. Education and income also had effects on online shopping in 2003.

Attitudes toward online shopping have been a topic of recent research. Soopramanien (2011) examined the formation of attitudes of consumers toward online shopping when consumers consider both the benefits and risks. It was found as experience with online shopping increased, so did consumer's intentions to buy products online. Increased experience with online shopping also reduced the degree of skepticism and risk aversion and therefore increased consumer's intent to shop online.

Utilitarian and hedonic motivations and online shopping have been widely studied (Bridges & Floresheim, 2008; Childers, Carr, Peck, & Carson, 2001; Overby & Lee, 2006; Pahnla & Warsta, 2010). Bridges and Floresheim (2008) found utilitarian values for online shopping include extrinsic factors such as sale prices and ease of use of

technology and hedonic values involving intrinsic motivations such as enjoyment or satisfaction of online shopping experiences. Utilitarian and hedonic values have been found to impact both affect and habit of online shopping behavior (Pahnila & Warsta, 2010). Research conducted by Overby and Lee (2006) suggests utilitarian value better relates to online shopping preferences and intentions than hedonic values.

### **Purpose**

Although there has been research conducted to show factors such as risk, convenience, and technologies influence online shopping; there has been little research into the link of consumer traits and online shopping (Bhatnagar et al., 2000; Choi & Lee, 2003; Eggert, 2006). It is logical to assume the characteristics of body image, social anxiety, and personality factors impact online shopping behaviors. The purpose of this study was to better understand the influences these traits may have on online shopping, thereby addressing a current gap in the literature. Therefore, the research question of this study was as follows: to what extent, if any, can body image satisfaction, personality, and social anxiety predict online shopping behaviors?

**Body image, social anxiety, and online shopping.** It was hypothesized *increased levels of body image dissatisfaction, would predict more frequent online shopping.* When a consumer's body does not match the model's, he or she may feel a higher degree of body image dissatisfaction because he or she does not match the ideal body type and may have a difficult time visualizing the garment size and fit on his or her own body (Kim & Damhorst, 2010). A further hypothesis is *a high score of social anxiety would predict high occurrence of online shopping.* Research has shown social anxiety increases the

usage of the Internet, therefore a logical assumption would be social anxiety influences online shopping as well (Erwin et al., 2004; Mazalin & Klien, 2008).

**Personality and online shopping.** Bosnjak et al. (2007) have shown personality facets such as neuroticism, agreeableness and openness have an influence on the willingness to shop online. Individuals who score high on agreeableness tend to exhibit characteristics of trust and straightforwardness, and may appreciate the ease and convenience of online shopping. Therefore, it was hypothesized *higher scores of agreeableness would predict more frequent online shopping*. Additionally, *elevated levels of neuroticism would predict occurrence of online shopping*. Individuals with high levels of neuroticism often exhibit an inability to control impulses, and are self-conscious and moody, thus making online shopping an outlet for both impulsive shopping and avoiding social interactions. *Higher scores of openness would predict frequency of online shopping*, was also hypothesized. Those who score high in openness are unconventional and open to new experiences, which may lead to the exploration of online shopping (McCrae & Costa, 2010).

It was hypothesized *high levels of conscientiousness would predict higher rates of occurrence of online shopping*. Huang and Yang (2010) found the convenience of online shopping to be a motivating factor for use by individuals who score high in conscientiousness. Individuals who score high in conscientiousness are organized and enjoy planning, therefore the convenience of online shopping will lend well to their preferences. Finally, high scores of extraversion are indicative of an individual who is sociable, enjoys noisy environments and prefers activity or a fast pace life (McCrae &

Costa, 2010). Therefore, *increased scores of extraversion would predict lower frequency of online shopping* was hypothesized.

**Sex and online shopping.** An additional hypothesis was *women would have a higher frequency of online shopping than men*. Seock and Bailey (2008) compared the online purchase rates of men and women over 12 months, results indicated women conduct more online information searches and have more purchase experience for apparel products than men.

## METHOD

### **Participants**

Participants for this study were 302 college-aged students enrolled in psychology courses at Fort Hays State University. The sample consisted of 179 women and 123 men with a mean age of 19.30 (SD = 2.41). In addition, 241 were White/Caucasian, 21 Latino/Hispanic American, 14 African American, 9 Mixed/Biracial, 2 Asian/Asian American, 1 Middle Eastern, and 1 Samoan. This small, Midwestern University is located in a rural area with limited shopping options; therefore, students may have more experience with online shopping than the average U.S. citizen. The students were recruited using a recruiting script and asking for volunteers to participate in this study. There was no compensation for participation, except partial course credit or extra credit as provided and explained by the professor of the course. The surveys were pen and paper questionnaires handed out to the students; they then filled out the surveys and turned them in. No names or identifying information was included in the surveys.

### **Materials and Procedures**

The measures for this study were a written questionnaire containing demographic information, shopping preference questions, a body image scale, a personality questionnaire, and a survey appraising level of social anxiety. The demographic segment of the survey included basic information such as age, ethnicity/race, sex, etc. (Appendix A). The shopping preference questions were adapted from Yu's (2009) shopping experience scale. It was used to gather information about frequency of shopping, both online and in store, and preference of shopping online or in store, as well as additional

information regarding online shopping. Participants rated their answers on a scale ranging from “Not at all characteristic or true of me (0)” to “Extremely characteristic or true of me (4)” on items such as, “I prefer to shop online” and “I spend 3 hours a week shopping online” (Appendix B).

To assess body image, the Multidimensional Body-Self Relations Questionnaire (MBSRQ), developed by Thomas F. Cash (2000), was used (Appendix C). This measures cognitive and behavioral attitudes individuals have toward the physical self. This assessment is a self-report inventory and uses a likert-style 5-point scale. The MBSRQ contains seven content subscales, as well as three additional scales measuring weight vigilance and the perception and labeling of one’s weight. For this study, only two subscales were used. The Appearance Evaluation (AE) measures the participant’s level of satisfaction or dissatisfaction with one’s looks and their feelings of attractiveness or unattractiveness and contains seven items. This subscale includes items such as, “I like the way my clothes fit me” and “I am physically unattractive.” Participants respond using a scale ranging from “definitely disagree (1)” to “definitely agree (5).” The Body Areas Satisfaction Scale (BASS) has nine items and is similar to Appearance Evaluation (AE) except the BASS is in regards to the level of satisfaction discrete aspects of one’s appearance such as muscle tone and weight. On this subscale participants indicated their level of satisfaction with areas of their body such as face or muscle tone on a rating scale from “very dissatisfied (1)” to “very satisfied (5).” The MBSRQ subscale scores are the means of the constituent items, after reverse scoring designated items. To obtain a body-image evaluation score, the two scales are combined and converted to z scores. Adult

norms are provided for the subscales based on U.S. national survey data. The subscales are internally consistent and stable with Cronbach Alpha's between .73 to .88 (Cash, Winstead, & Janda, 1986; Cash, Winstead, & Janda, 1985). The reliabilities of this measure range from .75 to .90 (Cash & Pruzinsky, 2002).

The Social Interaction Anxiety Scale (SIAS) was used to assess social anxiety (Appendix D). This measurement appraises the fears of general social interactions and participants indicated their level of response on a scale ranging from “not at all like me (0)” to “extremely like me (4).” Sample statements include: “I have difficulty talking with other people” and “I get nervous if I have to speak to someone in authority.” The SIAS has high intercorrelations with the Social Phobia Scale (SPS) with a correlation of .72 (Brown et al., 1997). The total score possible is 60, the cutoff of 34 or higher indicates a possibility of social phobia, and a score of 43 or higher is indicative of social anxiety. Three items are reverse scored (5, 9, 11) to assess response validity.

The personality section of the questionnaire used the NEO Five-Factor Inventory-3 (NEO-FFI-3). This assesses the Big Five domains of personality; agreeableness, conscientiousness, extraversion, neuroticism, and openness (Appendix E). Participants responded using a scale ranging from “disagree strongly (0)” to “agree strongly (4).” It uses statements such as, “I laugh easily” and “I work hard to accomplish my goals.” This inventory contains 60 questions and consists of 5 scales measuring each of the domains, all containing 12 questions. The responses for each domain are totaled and then converted to *T* scores. These *T* scores indicate which range the individual falls into for each of the 5 scales, very low, low, average, high or very high. Almost half of the items are reverse

scored to assess response validity. Coefficient alpha's for the NEO-FFI-3 and the corresponding NEO-PI-3 (NEO Personality Index-3) self-report measure range from .78 to .88 in an adult sample (McCrae & Costa, 2010). Short-term retest reliability has not been studied with the NEO-FFI-3; however, studies on the previous edition, NEO-FFI, have shown test-retest reliabilities to range from .75 to .90 (Costa & McCrae, 1992b; Murray, Rawlings, Allen, & Trinder, 2003; Robins, Fraley, Roberts, & Trzesniewski, 2001).

## RESULTS

### **Outcome of Body Image, Personality, Social Anxiety, and Online Shopping**

**Correlations and descriptive statistics.** Correlations and a linear regression were used to evaluate the hypotheses that body image satisfaction ( $M= 3.58, SD= 0.80$ ), social anxiety ( $M= 1.27, SD= 0.75$ ), agreeableness ( $M= 2.81, SD= 0.58$ ), conscientiousness ( $M= 2.75, SD= 0.60$ ), extraversion ( $M= 2.67, SD= 0.63$ ), neuroticism ( $M= 1.82, SD= 0.67$ ), and openness ( $M= 2.45, SD= 0.58$ ) would predict frequency of online shopping ( $M= 4.95, SD= 7.05$ ). Scatterplots indicated all variables were linearly related. Assumptions of the linear regression statistic were examined and found to be in acceptable ranges (Warner, 2008). The relationship between each independent variable and the dependent variable was tested. There was a significant positive correlation between frequency of online shopping and social anxiety,  $r(295)= 0.12, p < .05$ , as predicted. Although, it was hypothesized that increased levels of body image dissatisfaction would predict higher frequency of online shopping, body image dissatisfaction and online shopping were found to be not significantly related,  $r(295)= -0.08, p > .05$ .

**Personality.** The hypothesis that elevated scores of neuroticism would predict frequent online shopping, was found to be significant,  $r(295)= 0.14, p < .05$ . It was hypothesized high scores of agreeableness, openness, and conscientiousness would predict increased frequency of online shopping; however, no significant correlations between these variables were found. Extraversion and online shopping were not significantly related despite the hypothesis low scores of extraversion would predict higher frequency of online shopping.

As expected, some personality characteristics were significantly correlated with each other. Agreeableness and conscientiousness were found to be significantly positively correlated,  $r(301) = 0.24, p < .01$ . A significant negative correlation was found between agreeableness and neuroticism,  $r(301) = -0.13, p < .05$ . There was a significant positive correlation found between conscientiousness and extraversion,  $r(301) = 0.36, p < .01$ . Conscientiousness and neuroticism were found to be significantly negatively correlated,  $r(301) = -0.36, p < .01$ . A significant negative correlation was found between extraversion and neuroticism,  $r(301) = -0.45, p < .01$ .

**Body image satisfaction and social anxiety.** Correlations between independent variables were examined (Table 1). A number of significant correlations with body image were found. Body image satisfaction and social anxiety were significantly negatively correlated,  $r(301) = -0.45, p < .01$ . There was a significant positive correlation between body image satisfaction and conscientiousness,  $r(301) = 0.33, p < .01$ . Body image satisfaction and extraversion were significantly positively correlated,  $r(301) = 0.41, p < .01$ . A significant negative correlation between body image satisfaction and neuroticism was found,  $r(301) = -0.44, p < .01$ . Social anxiety was significantly correlated with a number of variables. Social anxiety and conscientiousness were found to be significantly negatively correlated,  $r(301) = -0.32, p < .01$ . There was a significant negative correlation found between social anxiety and extraversion,  $r(301) = -0.61, p < .01$ . Social anxiety and neuroticism were found to be significantly positively correlated,  $r(301) = 0.54, p < .01$ .

Table 1

*Correlation Matrix Frequency of Online Shopping, Body Image, Social Anxiety, and Personality Variables*

	Freq. Online Shopping	BI	SA	Agr	Con	Ext	Neu	Open
Body Image	-.08							
Social Anxiety	.12*	-.45**						
Agreeableness	-.09	-.08	.02					
Conscientiousness	.03	.33**	-.32**	.24**				
Extraversion	-.08	.41**	-.61**	.08	.36**			
Neuroticism	.14*	-.44**	.54**	-.13*	-.36**	-.45**		
Openness	-.05	-.07	.06	.06	.03	-.01	.04	
Mean	4.95	3.57	1.26	2.81	2.75	2.66	1.81	2.46
SD	7.05	0.79	0.75	0.58	0.61	0.63	0.67	0.58

*Note.* \* $p < .05$ , \*\* $p < .01$

**Predicting online shopping from body image satisfaction, personality, and social anxiety.** A multiple linear regression was used, as this statistical analysis tests the independent variable's predictability of the dependent variable. The backward method of entry was used for this linear regression. This process begins with all predictor variables included in the equation. In each step the predictor variable that leads to the smallest decrease in the  $R^2$  for the model is dropped. This method of entry is used to determine

which variables have the most predictive value; the last variable in the model has the highest predictive value, the second to last variable has the second highest, and so on (Warner, 2008). The independent variables, body image satisfaction, social anxiety, agreeableness, conscientiousness, extraversion, neuroticism, and openness only explained 5% of the variance, and the overall model was not significant,  $R = .21$ ,  $R^2 = .05$ , adjusted  $R^2 = .02$ ,  $F(7, 288) = 2.00$ ,  $p > .05$ . In the second model, extraversion was removed, this led to a model that is statistically significant,  $R = .21$ ,  $R^2 = .05$ , adjusted  $R^2 = .03$ ,  $F(6, 289) = 2.33$ ,  $p < .05$ . The results of this model may suggest that because extraversion was significantly correlated with many of the other independent variables, and not correlated with frequency of online shopping, it does not significantly predict frequency of online shopping when there are other competing explanations.

### **Outcome of Sex and Online Shopping**

It was hypothesized women ( $M = 2.67$ ,  $SD = 0.90$ ,  $N = 176$ ) would shop online more than men ( $M = 2.38$ ,  $SD = 0.91$ ,  $N = 120$ ). This hypothesis was tested using an independent  $t$  test. There was a significant difference in online shopping frequency between men and women,  $t(293) = 2.71$ ,  $p < .05$ . Women shop online more frequently than men.

## DISCUSSION

### **Body Image and Online Shopping**

Past research has shown online shopping influences consumer body image satisfaction when trying to imagine fit and size of garments. Body image satisfaction is also impacted when shopping online by perceptions of the ideal body as depicted by retailer's use of thin, shapely models (Kim & Damhorst, 2010). Because of the relationship of online shopping on body image satisfaction, it is reasonable to presume body image satisfaction has the ability to effect online shopping frequency. This study expected online shopping frequency and body image dissatisfaction to be significantly correlated and found the two variables to be not significantly related.

### **Personality and Online Shopping**

Previous studies found personality traits to predict and influence online shopping behaviors (e.g., Bosnjak et al., 2007; Huang & Yang, 2010). This study aimed to replicate findings on correlations between personality characteristics and online shopping frequency. Bosnjak et al. (2007) found agreeableness, neuroticism, and openness to be significantly related on online shopping frequency. The current study found no significant correlation between agreeableness or openness and online shopping. This may be because individuals who are high in agreeableness and openness have the ability to entertain new ideas, and be open to different experiences; therefore, they may not limit themselves to one avenue of shopping. Neuroticism and online shopping were significantly related. Individuals scoring high in neuroticism have difficulties controlling impulses and are frequently self-conscious. Online shopping may provide an opportunity to give into

impulsive behavior and avoid social interactions, making it a good outlet for individuals high in neuroticism.

Huang and Yang (2010) found individuals scoring high in conscientiousness to be motivated to shop online. The current study hypothesized individuals high in conscientiousness will have increased frequency of online shopping. A significant relationship was not found. This could be because individuals high in conscientiousness plan and are organized. These individuals may be driven to find the best bargain, or most convenient way of shopping which could vary between shopping in store and online.

Past studies have been unable to find a relationship between online shopping and extraversion. However, based on the characteristics of individuals high in extraversion, such as being outgoing, and sociable, the current study hypothesized individuals with high levels of extraversion will have lower frequencies of online shopping. Extraversion and frequency of online shopping were not significantly related.

### **Social Anxiety and Online Shopping**

A significant relationship between social anxiety and Internet usage has been indicated in many studies (e.g., Erwin et al., 2004; Mazalin & Klien, 2008). It would be reasonable to expand this relationship to online shopping frequency as well. The current study found a significant positive correlation between social anxiety and online shopping frequency. As an individual's level of social anxiety increases, so does his or her frequency of online shopping. There are many reasons an individual with high social anxiety would chose to shop online versus in-store such as minimal social interaction and limited negative interpretations of social cues.

### **Body Image, Personality, and Social Anxiety Predicting Online Shopping**

Although past research has looked at some consumer characteristics and frequency of online shopping, there are a limited number of studies looking at the combined influence of customer attributes on online shopping. This study was the first to examine the relationship of body image satisfaction, personality, and social anxiety together on online shopping frequency. It was expected body image satisfaction, personality traits, and social anxiety would significantly predict online shopping frequency. The overall regression model was not significant, indicating these variables together do not predict online shopping frequency. This could be due to many of the independent variables being not significantly related to online shopping frequency. These results could also be because many of the independent variables are interrelated. After removing extraversion, the overall regression model became significant. This indicates that the independent variables of body image satisfaction, social anxiety, agreeableness, conscientiousness, neuroticism, and openness does significantly predict online shopping frequency.

### **Sex and Online Shopping**

Consistent with previous research findings, this study found women shop online more frequently than men (e.g., Girard, Korgaonkar, & Silverblatt, 2003; Seock & Bailey, 2008). Results could be a reflection of the trend of women shopping online for apparel products more often than men. This result could also be influenced by the sample

used by this study, as it was comprised of more women (59.3%) than men (40.7%).

### **Limitations and Directions for Future Research**

This study had several limitations. First, the participants used in this study were from a small Midwestern University. Although, this population may have more experience with online shopping than individuals in urban settings, participants may shop online due to necessity or convenience, rather than the influence of characteristics. Additionally, this study lacked a diverse population, 59.3% of participants were women, and 82.5% of participants were white. Furthermore, the population for this study was students enrolled in psychology classes, a convenience sample rather than a random sample.

There were limitations with the methodology of this study. Online shopping frequency was assessed using an adaptation of a shopping experience scale (Yu, 2009). The question assessing frequency of online shopping had participants rate the number of times in the past 12 months on a scale from “Never (1)” to “At least once a week (5)”. A better way of accessing frequency of online shopping would have been to have participants give the number of times they have purchased apparel online in the past 12 months.

Future directions include examining consumer characteristics using a more diverse population. The sample used in this study is from a rural area and therefore have limited in-store shopping options. It may be beneficial to examine consumer characteristics of individuals in an urban setting. Personality attributes of shoppers with many in store options may provide a better picture of traits associated with individuals

who chose to shop online due to reasons besides convenience. Due to sex differences in online shopping frequency, as well as known differences across body image satisfaction, social anxiety, and personality, it may be worthwhile to study sex differences in motivations to shop online.

### **Implications**

The implications possible from this study are vast and will have importance in many different fields. It is known body image dissatisfaction is a risk factor for disordered eating, poor self-esteem, and leads to the development of eating disorders such as anorexia nervosa and bulimia (e.g., Cooley & Toray, 2001; Polivy & Herman, 2002; Stice, 2002). Although, this study did not demonstrate a relationship between body image dissatisfaction and online shopping, it provides clinicians with valuable information on the relationship to social anxiety, and correlation to personality characteristics. This knowledge may help clinicians understand the pervasiveness of body image dissatisfaction of their clients.

Social anxiety also has significant effects on day-to-day functioning due to symptoms such as intense fear and self-doubt. The findings of this study highlight the relationship of social anxiety, personality characteristics, body image dissatisfaction, and online apparel shopping. Clinicians can use this information to better understand the outlook of clients with social anxiety, and the lengths they will go to avoid social interactions.

This study will also be useful for a clinician with a client struggling with online shopping problems. It could help both the clinician and client realize the underlying

issues contributing to online shopping troubles. These factors may be problems with body image satisfaction, fear of social situations arising from shopping in store, or personality characteristics such as those influencing individuals to make impulsive buys, just to name a few.

This study provides the opportunity for clinicians to better understand a wide variety of clients. The findings of this study lend well to the holistic approach of examining multiple levels and dimensions of clients and their presenting problems. This leads to deeper understanding and the ability to treat the whole person, which is viewed as greater than the parts (Fulder, S. 2005; Priester et al., 2009).

Additionally, this research will help online retailers narrow the scope of their target population, and therefore be able to better market their apparel products. This information will allow retailers to better market products towards those who shop online frequently such as those with a higher level of social anxiety, or individuals who exhibit certain personality characteristics. Additionally, this knowledge would allow retailers to target marketing to increase shopping of those who do not shop online regularly, such as men.

## **Conclusions**

This study aimed to measure the predictability of body image, social anxiety, and personality on online shopping. Although this hypothesis was not supported, this study yielded interesting results. This study was the first to examine the relationship between body image, social anxiety, personality, and online shopping. Though body image satisfaction and online shopping were found to be unrelated, the link between the two

should be further explored. This study was the first to propose a relationship with social anxiety and online shopping frequency, and the two variables were significantly related. Previous research investigated the relationship between personality characteristics and online shopping; though, this study found the only personality characteristic to be significantly correlated with online shopping to be neuroticism. Additionally, the hypothesis women shop more frequently online than men, was supported, consistent with previous research. Overall, this study has contributed to research on consumer characteristics of online shoppers.

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## Appendix A

*IRB Approval Letter*

**FORT HAYS STATE  
UNIVERSITY**

*Forward thinking. World ready.*

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OFFICE OF SCHOLARSHIP AND SPONSORED PROJECTS

DATE: October 9, 2013

TO: Brooke Mann

FROM: Fort Hays State University IRB

STUDY TITLE: [518894-1] Insight into Online Shopping Behaviors

IRB REFERENCE #: 14-014

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: October 9, 2013

REVIEW CATEGORY: Exemption category # 2

Thank you for your submission of New Project materials for this research study. The departmental human subjects research committee and/or the Fort Hays State University IRB/IRB Administrator has determined that this project is EXEMPT FROM IRB REVIEW according to federal regulations.

Please note that any changes to this study may result in a change in exempt status. Any changes must be submitted to the IRB for review prior to implementation. In the event of a change, please follow the Instructions for Revisions at <http://www.fhsu.edu/academic/gradschl/irb/>.

The IRB administrator should be notified of adverse events or circumstances that meet the definition of unanticipated problems involving risks to subjects. See <http://www.hhs.gov/ohrp/policy/AdvEvntGuid.htm>.

We will put a copy of this correspondence on file in our office. Exempt studies are not subject to continuing review.

If you have any questions, please contact Leslie Paige at [lpaige@fhsu.edu](mailto:lpaige@fhsu.edu) or 785-628-4349. Please include your study title and reference number in all correspondence with this office.

## Appendix B

Consent to Participate in Research

*Department of Psychology, Fort Hays State University*

***Study title: Insight into Online Shopping Behaviors***

*Name of Researchers: Brooke Mann*

*Contact Information: bmzoller@mail.fhsu.edu*

*Name of Faculty Supervisor & Contact Information, if student research:*

*Dr. Jenn Bonds-Raacke*

*Email: jmbondsraacke@fhsu.edu*

**You are being asked to participate in a research study. It is your choice whether or not to participate.** Your decision whether or not to participate will have no effect on your academic standing or performance in the course to which you are otherwise entitled. Please ask questions if there is anything you do not understand.

**What is the purpose of this study?** The purpose of the study is to study factors that influence whether or not someone shops online over in store shopping.

**What does this study involve?** If you decide to participate in this study, you will view a survey and answer questions about online shopping and self-perceptions. You will not be required to provide your name or any other identifying information. If you decide to participate in this research study, you will be asked to sign this consent form after you have had all your questions answered and

understand what will happen to you. Consent forms will be stored separately from survey responses. After completing the survey, the survey will be collected and you will be read a debriefing statement. The length of time of your participation in this study will be no longer than 30 minutes. Approximately 150 participants will be in this study.

**Are there any benefits from participating in this study?** The benefits to participating in this study are a better understanding of your shopping habits and preferences and how other factors relate to this. Your participation will help us learn more about online shopping and what factors influence shopping preferences.

**Will you be paid or receive anything to participate in this study?** You will not receive financial compensation for your participation. However, there may be course credit or extra credit points may be offered by the instructor as compensation for participation as outlined in the course syllabus.

**What about the costs of this study?** There are no costs for participating in this study other than the time you will spend completing the surveys.

**What are the risks involved with being enrolled in this study?** It is unlikely that participation in this project will result in harm to participants. It is unlikely that you are at risk for psychological, legal, physical, social harm or any risk that is more than minimal. However, should you feel distressed or become upset by participating; you may contact the Kelly Center, the Psychology Department Ethics Chair, or the course instructor.

**How will your privacy be protected?** No names or identifying information will be asked. Responses to survey questions will be entered into a computer program and stored for 5 years, after which the data will be deleted. Original survey documents will be shredded after the information is entered into the computer program. Only the student researchers and faculty advisors will have access to the database. Results of the survey will be shared with the scientific community through presentation and possible publication. When results are shared, information will be presented in aggregate form and will contain no names or identifying information.

**Other important items you should know:**

- **Withdrawal from the study:** You may choose to stop your participation in this study at any time. Your decision to stop your participation will have no effect on your academic standing.
- **Funding:** There is no outside funding for this research project.

**Whom should you call with questions about this study?** Questions about this study can be directed to the researcher Brooke Mann at [bmzoller@mail.fhsu.edu](mailto:bmzoller@mail.fhsu.edu), Ethics Chairperson in Psychology: Dr. Trey Hill at [wthill@fhsu.edu](mailto:wthill@fhsu.edu), or the faculty supervisor of this study: Dr. Jenn Bonds-Raacke at [jmbondsraacke@fhsu.edu](mailto:jmbondsraacke@fhsu.edu). If you have questions, concerns, or suggestions about human research at FHSU, you may call the Office of Scholarship and Sponsored Projects at FHSU (785) 628-4349 during normal business hours.

**CONSENT**

I have read the above information about *Insight into Online Shopping Behaviors* and have been given an opportunity to ask questions. By signing this I agree to participate in this study and I have been given a copy of this signed consent document for my own records. I understand that I can change my mind and withdraw my consent at any time. By signing this consent form I understand that I am not giving up any legal rights. I am 18 years or older.

---

Participant's Signature and Date

## Appendix C

*Brief Demographics Survey*

Please answer the following questions about your general background.

\_\_\_\_\_ 1. What is your sex?

\_\_\_\_\_ Male

\_\_\_\_\_ Female

\_\_\_\_\_ 2. What is your age?

\_\_\_\_\_

\_\_\_\_\_ 3. What is your ethnicity or ethnic group?

\_\_\_\_\_ White or Caucasian American

\_\_\_\_\_ Black or African American

\_\_\_\_\_ Latino or Hispanic American

\_\_\_\_\_ Asian or Asian American

\_\_\_\_\_ Mixed or bi-racial

\_\_\_\_\_ Other (please specify) \_\_\_\_\_

## Appendix D

*Shopping Experience*

Directions: Think about your experience with apparel shopping regarding clothing, garments, dress, etc.

1. Indicate all ways you have shopped for apparel in the past 12 months, by checking all that apply.

\_\_\_\_\_ Retail stores

\_\_\_\_\_ Internet/Web sites

\_\_\_\_\_ Mail order catalog

\_\_\_\_\_ TV Shopping

\_\_\_\_\_ Others (please specify) \_\_\_\_\_

\_\_\_\_\_ None

2. About how many times in the past 12 months have you purchased apparel items through the following shopping channels?

Shopping Channels	Never	Once or twice a year	Every few months	Every month	At least once a week
A. Retail stores	1	2	3	4	5
B. Internet	1	2	3	4	5
C. Mail Order Catalog	1	2	3	4	5
D. TV Shopping	1	2	3	4	5

3. About how much **money** do you estimate you spent on apparel purchased through the following shopping channels during the last 12 months?

Shopping Channels	None	\$1~ 200	\$201~ 500	\$501~ 1,000	More than \$1,000
A. Retail stores	1	2	3	4	5
B. Internet	1	2	3	4	5
C. Mail Order Catalog	1	2	3	4	5
D. TV Shopping	1	2	3	4	5

Directions: For each question, think about your experience with apparel shopping regarding clothing, garments, dress, etc. Circle the appropriate number that indicates your response.

7. To what degree in the past 12 months have you used the Internet to search for information about an apparel product and later bought the product at a local retail store?

Never						Very Frequently
1	2	3	4	5	6	7

8. To what degree in the past 12 months have you physically examined or tried an apparel product at a local retail store before you bought the product online?

Never							Very Frequently	
1	2	3	4	5	6	7		

Directions: Think about the last time you shopped using the following channels and circle the number that indicates your level of satisfaction for each.

9. How satisfied were you with shopping for apparel from the following shopping channels, in other words, how satisfied were you with the shopping experience?

Shopping Channels	Very Unsatisfied			Neutral			Very Satisfied		
A. Retail stores	1	2	3	4	5	6	7	N.A.	
B. Internet	1	2	3	4	5	6	7	N.A.	
C. Mail Order Catalog	1	2	3	4	5	6	7	N.A.	
D. TV Shopping	1	2	3	4	5	6	7		

10. How satisfied were you with the apparel you purchased from the following shopping channels for example how satisfied were you with the overall quality in terms of style, fabric, size, etc?

Shopping Channels	Very Unsatisfied			Neutral			Very Satisfied		
	1	2	3	4	5	6	7		
A. Retail stores	1	2	3	4	5	6	7	N.A.	
B. Internet	1	2	3	4	5	6	7	N.A.	
C. Mail Order Catalog	1	2	3	4	5	6	7	N.A.	
D. TV Shopping	1	2	3	4	5	6	7		

## Appendix E

*The Multidimensional Body-Self Relations Questionnaire (MBSRQ)*

Directions: For each question, write the appropriate number in the blank provided to indicate the answer that best describes your feelings and attitudes toward your body and appearance.

1 = Disagree Strongly

2 = Disagree A Little

3 = Neither Agree nor Disagree

4 = Agree A Little

5 = Agree Strongly

- \_\_\_\_\_ 1. My body is sexually appealing.
- \_\_\_\_\_ 2. I like my looks just the way they are.
- \_\_\_\_\_ 3. Most people would consider me good-looking.
- \_\_\_\_\_ 4. I like the way I look without my clothes on.
- \_\_\_\_\_ 5. I like the way my clothes fit me.
- \_\_\_\_\_ 6. I dislike my physique.
- \_\_\_\_\_ 7. I am physically unattractive.

Directions: For each question, write the appropriate number in the blank provided to indicate how dissatisfied or satisfied you are with each of the following areas or aspects of your body:

- 1 = Very Dissatisfied  
2 = Mostly Dissatisfied  
3 = Neither Satisfied nor Dissatisfied  
4 = Mostly Satisfied  
5 = Very Satisfied

- \_\_\_\_\_ 8. Face (facial features, complexion)  
\_\_\_\_\_ 9. Hair (color, thickness, texture)  
\_\_\_\_\_ 10. Lower torso (buttocks, hips, thighs, legs)  
\_\_\_\_\_ 11. Mid torso (waist, stomach)  
\_\_\_\_\_ 12. Upper torso (chest or breasts, shoulders, arms)  
\_\_\_\_\_ 13. Muscle tone  
\_\_\_\_\_ 14. Weight  
\_\_\_\_\_ 15. Height  
\_\_\_\_\_ 16. Overall appearance

## Appendix F

*The Social Interaction Anxiety Scale (SIAS)*

Directions: For each question, write the appropriate number in the blank provided to indicate the degree to which you feel the statement is characteristic or true of you.

0 = Not at all characteristic or true of me

1 = slightly characteristic or true of me

2 = moderately characteristic or true of me

3 = very characteristic or true of me

4 = extremely characteristic or true of me

- \_\_\_\_\_ 1. I get nervous if I have to speak with someone in authority.
- \_\_\_\_\_ 2. I have difficulty making eye contact with others.
- \_\_\_\_\_ 3. I become tense if I have to talk about myself or my feelings
- \_\_\_\_\_ 4. I have difficulty mixing comfortably with people I work with.
- \_\_\_\_\_ 5. I find it easy to make friends of my own age.
- \_\_\_\_\_ 6. I tense up if I meet an acquaintance on the street.
- \_\_\_\_\_ 7. When mixing socially, I am uncomfortable.
- \_\_\_\_\_ 8. I feel tense if I am alone with just one person.
- \_\_\_\_\_ 9. I am at ease meeting people at parties, etc.
- \_\_\_\_\_ 10. I have difficulty talking with other people.
- \_\_\_\_\_ 11. I find it easy to think of things to talk about.
- \_\_\_\_\_ 12. I worry about expressing myself in case I appear awkward.
- \_\_\_\_\_ 13. I find it difficult to disagree with another point of view.
- \_\_\_\_\_ 14. I have difficulty talking to attractive persons of the opposite sex.
- \_\_\_\_\_ 15. I find myself worrying that I won't know what to do or say in social situations.
- \_\_\_\_\_ 16. I am nervous mixing with people I don't know well.
- \_\_\_\_\_ 17. I feel I'll say something embarrassing when talking.
- \_\_\_\_\_ 18. When mixing in a group, I find myself worrying that I will be ignored.
- \_\_\_\_\_ 19. I am tense mixing in a group.
- \_\_\_\_\_ 20. I am unsure whether to greet someone I know only slightly.

## Appendix G

*The NEO Five-Factor Inventory-3 (NEO-FFI-3)*

Directions: Using the scale below, please indicate your answer by writing it to the left of the number of the statement the response that best represents your opinion.

0 = Strongly disagree or the statement is definitely false.

1 = Disagree or the statement is mostly false

2 = Neutral, cannot decide, or the statement is about equally true or false

3 = Agree or the statement is mostly true

4 = Strongly agree or the statement is definitely true

- \_\_\_\_\_ 1. I am not a worrier.
- \_\_\_\_\_ 2. I like to have a lot of people around me.
- \_\_\_\_\_ 3. I enjoy concentrating on a fantasy or daydream and exploring all its possibilities, letting it grow and develop.
- \_\_\_\_\_ 4. I try to be courteous to everyone I meet.
- \_\_\_\_\_ 5. I keep my belongings clean and neat.
- \_\_\_\_\_ 6. At times I feel bitter and resentful.
- \_\_\_\_\_ 7. I laugh easily.
- \_\_\_\_\_ 8. I think it's interesting to learn and develop new hobbies.
- \_\_\_\_\_ 9. At times I bully or flatter people into doing what I want them to do.
- \_\_\_\_\_ 10. I'm pretty good about pacing myself so as to get things done on time.

- \_\_\_\_\_ 11. When I am under a great deal of stress, sometimes I feel like I'm going to pieces.
- \_\_\_\_\_ 12. I prefer jobs that let me work alone without being bothered by other people.
- \_\_\_\_\_ 13. I am intrigued by the patterns I find in art and nature.
- \_\_\_\_\_ 14. Some people think I'm selfish and egotistical.
- \_\_\_\_\_ 15. I often come into situations without being fully prepared.
- \_\_\_\_\_ 16. I rarely feel lonely or blue.
- \_\_\_\_\_ 17. I really enjoy talking to people.
- \_\_\_\_\_ 18. I believe letting students hear controversial speakers can only confuse and mislead them.
- \_\_\_\_\_ 19. If someone starts a fight, I'm ready to fight back.
- \_\_\_\_\_ 20. I try to perform all the tasks assigned to me conscientiously.
- \_\_\_\_\_ 21. I often feel tense and jittery.
- \_\_\_\_\_ 22. I like to be where the action is.
- \_\_\_\_\_ 23. Poetry has little or no effect on me.
- \_\_\_\_\_ 24. I'm better than most people, and I know it.
- \_\_\_\_\_ 25. I have a clear set of goals and work toward them in an orderly fashion.
- \_\_\_\_\_ 26. Sometimes I feel completely worthless.
- \_\_\_\_\_ 27. I shy away from crowds of people.
- \_\_\_\_\_ 28. I would have difficulty just letting my mind wander without control or guidance.

- \_\_\_\_\_29. When I've been insulted, I just try to forgive and forget.
- \_\_\_\_\_30. I waste a lot of time before settling down to work.
- \_\_\_\_\_31. I rarely feel fearful or anxious.
- \_\_\_\_\_32. I often feel as if I'm busting with energy.
- \_\_\_\_\_33. I seldom notice the moods or feelings that different environments produce.
- \_\_\_\_\_34. I tend to assume the best about people.
- \_\_\_\_\_35. I work hard to accomplish my goals.
- \_\_\_\_\_36. I often get angry at the way people treat me.
- \_\_\_\_\_37. I am a cheerful, high-spirited person.
- \_\_\_\_\_38. I experience a wide range of emotions or feelings.
- \_\_\_\_\_39. Some people think of me as cold and calculating.
- \_\_\_\_\_40. When I make a commitment, I can always be counted on to follow through.
- \_\_\_\_\_41. Too often, when things go wrong, I get discouraged and feel like giving up.
- \_\_\_\_\_42. I don't get much pleasure from chatting with people.
- \_\_\_\_\_43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.
- \_\_\_\_\_44. I have no sympathy for beggars.
- \_\_\_\_\_45. Sometimes I'm not as dependable or reliable as I should be.
- \_\_\_\_\_46. I am seldom sad or depressed.
- \_\_\_\_\_47. My life is fast-paced.

- \_\_\_\_\_48. I have little interest in speculating on the nature of the universe or the human condition.
- \_\_\_\_\_49. I generally try to be thoughtful and considerate.
- \_\_\_\_\_50. I am a productive person who always gets the job done.
- \_\_\_\_\_51. I often feel helpless and want someone else to solve my problems.
- \_\_\_\_\_52. I am a very active person.
- \_\_\_\_\_53. I have a lot of intellectual curiosity.
- \_\_\_\_\_54. If I don't like people, I let them know it.
- \_\_\_\_\_55. I never seem to be able to get organized.
- \_\_\_\_\_56. At times I have been so ashamed I just want to hide.
- \_\_\_\_\_57. I would rather go my own way than be a leader of others.
- \_\_\_\_\_58. I often enjoy playing with theories or abstract ideas.
- \_\_\_\_\_59. If necessary, I am willing to manipulate people to get what I want.
- \_\_\_\_\_60. I strive for excellence in everything I do.