ANTI-COUNTERFEIT EDUCATION: EXAMINING THE EFFECTIVENESS OF EDUCATIONAL INITIATIVES IN DETERRING THE DEMAND OF FASHION COUNTERFEIT GOODS

by

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Abstract

Within the global marketplace, the production and consumption of counterfeit goods represents a serious social problem. Scholars continue to suggest anti-counterfeit education as a means to resolve this global problem and curb the demand for counterfeit goods, but no scholarly research has empirically evaluated the effectiveness of anti-counterfeit education. Therefore, the purpose of this study is to draw upon such suggestions within the literature, and quantitatively assess the effectiveness of anti-counterfeit education on consumers' perceived knowledge, attitudes, and purchase intentions of fashion counterfeit goods.

Convenience samples of male and female college students participated in this study. Utilizing a one-group pretest posttest, quasi-experimental design, the findings from a series of paired samples $t$-tests revealed a positive, significant change in consumers’ perceived knowledge of fashion counterfeit goods after viewing the anti-counterfeit educational unit. Negative, significant changes in consumers’ favorable attitudes and purchase intentions of fashion counterfeit goods were also revealed after the anti-counterfeit educational unit had been administered. Findings from this study provide relevant implications toward academicians, government officials, fashion retailers, and anti-counterfeiting organizations, such as how to develop effective anti-counterfeit educational content. Such parties with a vested interest in deterring the demand of fashion counterfeit goods should focus on formulating and implementing anti-counterfeit educational tools, such as campaigns and advertisements, which focus on the negative factors and consequences associated with the fashion counterfeit industry.
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CHAPTER 1: Introduction

Purpose and Overview

Within the global marketplace, the production and consumption of counterfeit goods represents a serious problem. According to the International Anti-Counterfeiting Coalition (IACC), it has been reported that the counterfeit goods industry has increased more than 10,000 percent within the past 20 years. Such rapid growth of the counterfeit market has emerged as a danger to world trade, while imposing economical and societal threats such as the loss of jobs and legitimate revenue (Ha & Lennon, 2006). The IACC estimates that between 5% and 7% of world trade consists of trade in illegitimate goods. Trade in counterfeit goods has reached $600 billion annually on a worldwide basis, while counterfeiting has been estimated to cost businesses in the United States approximately $250 billion each year (Norum & Cuno, 2011). The IACC also reported that one explanation for the rapid growth in this problem is due to the increase in consumer demand for counterfeit goods.

Although a thorough body of literature regarding counterfeit goods currently exists, scholars such as Kim and Karpova (2010) indicated that many of the previous studies have addressed counterfeiting as it pertains to the supply dimension. The supply dimension of counterfeiting refers to the production and distribution of such goods. Kim and Karpova (2010) explained that the supply dimension has been investigated by examining U.S. legal policies and industry efforts to limit the production of counterfeit goods. Conversely, academicians have more recently begun to investigate the demand side of the problem (Bian & Veloutsou, 2007; Kim & Karpova, 2010; Koklic, 2011; Norum & Cuno, 2011). When examining demand, scholars have questioned why consumers purchase counterfeit goods. Researchers have identified that
consumers purchase counterfeit goods because of the affordable prices associated with such goods (Ang, Cheng, Lim, & Tambyah, 2001; Kozar & Marcketti, 2011).

Previous studies have also identified significant factors of influence toward consumers’ attitude and intention to purchase fashion counterfeit goods. De Matos, Ituassu, and Rossi (2007) indicated that perceived risk, previous purchasing experience, subjective norm, integrity, and price-quality inference significantly influence attitude toward counterfeits, while Kim and Karpova (2010) indicated that product appearance, previous purchasing behavior, value consciousness, and normative susceptibility are significant predictors of attitude toward buying fashion counterfeit goods. Regarding purchase intention, Kim, Cho, and Johnson (2009) found moral judgment to have a significant, negative influence, while Koklic (2011) found attitude, moral intensity, and perceived risk to significantly affect consumers’ intention to purchase counterfeit products. Additionally, scholars have examined consumers’ attitudes and purchase intentions toward counterfeit goods and the relationship between such constructs. De Matos et al. (2007) identified that consumer intentions to purchase counterfeit goods are dependent on the attitudes they have toward counterfeits, while Koklic (2011) confirmed that unfavorable attitudes toward purchasing counterfeit products negatively affects consumers’ intentions to purchase such products.

Also apparent in previous studies, scholars have suggested various strategies that could be utilized to deter the demand for counterfeit fashion goods. For example, a number of studies have suggested providing consumers with anti-counterfeit education, which communicates the negative aspects of counterfeit product consumption (Ha & Lennon, 2006; Kim & Karpova, 2010; Kozar & Marcketti, 2011; Norum & Cuno, 2011). While anti-counterfeit educational strategies have consistently been mentioned by scholars, previous research has only suggested
the implementation of anti-counterfeit educational campaigns to deter demand, and the effectiveness of such initiatives have not been tested. Therefore, building on literature that currently exists on this topic, the effectiveness of implementing anti-counterfeit educational campaigns to deter the demand of fashion counterfeit goods will be examined within this study.

As indicated by previous studies, many purchasers of counterfeit goods do not think they are doing anything wrong, nor are purchasers aware of the connection between the sale of counterfeit goods and illicit acts of crime, such as terrorism (Ha & Lennon, 2006; Marckett & Parsons, 2006; Norum & Cuno, 2011). Additionally, prior purchasers of counterfeit goods indicated that purchasing a counterfeit product was just as good as purchasing the genuine brand, and therefore, they believed they were not hurting the US economy (Norum & Cuno, 2011). As such, Norum and Cuno (2011) suggested that changes in attitudes toward counterfeit goods might be necessary to discourage demand. As a means to alter consumer attitudes toward fashion counterfeit goods, Norum and Cuno (2011) recommended employing consumer educational programming, with a direct focus on the negative impacts that counterfeit production and consumption have on the economy and society.

While existing literature suggests several educational techniques to dissuade consumer demand for fashion counterfeit goods, there have not been any empirical studies conducted to evaluate if the suggested educational techniques significantly impact consumers’ perceived knowledge, attitudes, and purchase intentions. Studies have specifically advocated for consumer anti-counterfeit education, such as educational campaigns in airports (Kim & Karpova, 2010) and public service announcements (Ha & Lennon, 2006); however, there has not yet been a study that has developed and assessed the effectiveness of an anti-counterfeit educational unit. As such, the purpose of this research study is to provide an empirical analysis that examines the
impact of anti-counterfeiting education on consumers’ perceived knowledge, attitudes, and purchase intentions of fashion counterfeit goods. Within this study, an anti-counterfeit educational unit will be implemented as the treatment for participants within a one-group pretest posttest quasi-experimental design.

**Justification of Study**

Among the top five brands counterfeited, four are fashion brands (Kim & Karpova, 2010). McGlone (2006) reported that these brands include Louis Vuitton, NIKE, Gucci, and Prada. Among these and other luxury brands, it has been found that counterfeiting damages brand equity and can threaten business (Ha & Lennon, 2006). Brand equity refers to “a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or to that firm’s customers” (Aaker, 1991, p. 15). As a result, when the value of a brand is threatened by the production and consumption of counterfeit goods, costly expenses are imposed on luxury fashion retailers. On average, luxury companies spend approximately 2% of their revenues to protect their trademarks (Ha & Lennon, 2006). The costly burden fashion retailers bear continues to occur because of the growing consumption of counterfeit goods. Therefore, additional research on the topic of counterfeit consumption is beneficial for such retailers in the fashion industry.

Furthermore, there has been growing evidence of a link between terrorism and counterfeit goods (Ha & Lennon, 2006). The International Herald Tribune (2007) reported that the proceeds from counterfeit sales served as a major funding contributor to Hezbollah in Lebanon. Pollinger (2008) also reported that counterfeiters based in Los Angeles County have been connected to Hezbollah. Pollinger explained that through a series of raids, authorities have found case-specific evidence of these connections in the homes and business operations of
convicted counterfeiting persons. Examples of such connections include Hezbollah flags, pamphlets, and tattoos imprinted on convicted counterfeiters’ bodies (Pollinger, 2008). In addition, Raymond Kelly, the New York City Police Commissioner, reported that the sale of counterfeit merchandise was responsible for funding the 2004 bombing of a Madrid train, an act of terror resulting in the deaths of 191 people (International Herald Tribune, 2007).

Beyond the connection between counterfeit goods and organized crime/terrorist organizations, the production and consumption of counterfeit goods have additional negative consequences for society at large. In New York alone, the sale of counterfeit goods costs the city an estimated $1 billion per year in lost sales tax revenue (International Herald Tribune, 2007). Since counterfeiters do not pay taxes, there is less money available for schools, hospitals, parks, and other social programs (International Anti-Counterfeiting Coalition). The International Anti-Counterfeiting Coalition also confirmed that counterfeit goods are often made using cheap, substandard, and dangerous materials, which put the health and safety of consumers at risk. For example, Valerie Salembier, Senior Vice President and publisher at Harper’s Bazaar, reported that some of the hazardous ingredients found in counterfeit fragrances include urine, bacteria, and anti-freeze (Leamy & Weber, 2010). The fact that the production and consumption of fashion counterfeit goods has been described as a threat to public health, safety, security, and the economy is justifiable evidence that further study is needed on the topic of fashion counterfeit consumption and consumer demand of such products.

As society continues to face the consequences associated with the supply and demand of counterfeit goods, academicians, government officials, luxury fashion brands, fashion retailers, and anti-counterfeiting groups alike will find value in scholarly research that seeks to evaluate the potential impact of anti-counterfeiting educational programs on deterring consumer demand
for counterfeit fashion goods. For example, further research in this area could identify ways that academicians and government officials could formulate anti-counterfeit education programs and legislation. Furthermore, all parties trying to deter the demand for counterfeit goods, such as luxury brands, retailers in the fashion industry, and anti-counterfeiting groups, could identify how to structure an effective anti-counterfeiting campaign.

In addition, there is a need to further examine the demand side of fashion counterfeit goods because of an existing gap in the literature. While previous studies have advocated for educating consumers to deter the demand of fashion counterfeit goods, there is a lack of justifiable evidence that education is an effective means for curbing such behavior. Due to the growth in counterfeiting and the negative implications thereof, it is necessary to act upon suggestions in the literature, including assessing the effectiveness of anti-counterfeit education and examining the potential impact that anti-counterfeit education might have on deterring demand. It has been stated, “Unless there is no demand for counterfeit brands, then anti-counterfeiting measures will be of limited success. It is therefore important to understand the consumers’ perception of these kinds of brands” (Bian & Veloutsou, 2007, p. 219).

This study intends to act upon current recommended areas for future research and contribute to existing literature on consumers’ purchasing behavior of counterfeit goods. Within this study, dissuading the demand for fashion counterfeit goods through an anti-counterfeit educational unit will be the central focus. Specifically, the study will assess the effectiveness of anti-counterfeit education on consumers’ perceived knowledge, attitudes, and purchase intentions. The topics discussed in the review of literature will include: the nature of fashion counterfeit goods with a discussion on the supply and demand dimensions of counterfeiting; consumers and counterfeit consumption with a discussion on consumers’ perceived knowledge,
attitudes, and purchase intentions towards counterfeit goods; anti-counterfeit education; and a theoretical framework for understanding counterfeit purchasing behavior which includes the Tricomponent Attitude Model, the Theory of Reasoned Action, and the Marketing Theory of Ethics/Hunt-Vitell Model. In addition, a discussion of the study’s quantitative methodology, in which a two-phase, self-administered questionnaire will be utilized, is included in chapter three. Included in chapter four is a presentation of the study’s results, while chapter five includes a discussion on such results and provides implications of the study’s findings.
CHAPTER 2: Review of Literature

Nature of Fashion Counterfeit Goods

A counterfeit good is defined as a reproduction that appears identical to a legitimate product in appearance, packaging, trademarks, and labeling (Ang, Cheng, Lim, & Tambyah, 2001). Within the counterfeiting industry, there are multiple forms of product counterfeiting that occur (Ha & Lennon, 2006; Kim & Karpova, 2010; Koklic, 2011). As explained by Koklic (2011), one of the major forms of counterfeiting is known as deceptive counterfeiting, in which consumers believe they have purchased a legitimate good, when in fact the product is actually fake. Another common form of counterfeiting is known as non-deceptive counterfeiting, in which consumers are fully aware that they are purchasing a counterfeit, and they are intentionally seeking out and purchasing an illegitimate or fake good (Grossman & Shapiro, 1988).

According to the International Anti-Counterfeiting Coalition (IACC), counterfeit merchandise is directly responsible for the loss of more than 750,000 American jobs, and U.S. companies suffer approximately $9 billion in trade losses due to international copyright piracy. The IACC declared that counterfeiting poses a threat to global health and safety, as many counterfeit operations have poor working conditions, do not pay their employees fair wages or benefits, and often use forced child labor. In addition, the IACC acknowledged profits from counterfeiting have been linked to funding organized crime, drug trafficking, and terrorist activity.
The Supply Dimension

Due to the severity of counterfeiting, legislation has attempted to combat the supply dimension of the problem. Norum and Cuno (2011) identified that current legislation addresses the supply side of counterfeit goods through initiatives such as the Trademark Counterfeit Act (TCA), where any individual who is found guilty of intentionally trafficking counterfeit goods risks severe penalties such as a $1 million fine and up to five years imprisonment. International organizations, such as The World Trade Organization (WTO), have focused on combating counterfeit production through organized agreements such as the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) to protect legitimate intellectual property (Ha & Lennon, 2006). According to the WTO (“Intellectual Property,” 2013), the TRIPS Agreement establishes minimum levels of protection for which each government must honor the intellectual property of fellow WTO members. As described in the Agreement, minimum levels of protection include the rights to be conferred and permissible exceptions to those rights, as well as the minimum duration of protection under the Agreement (“Overview: the TRIPS Agreement,” 2013). While the three main features of the agreement include standards, enforcement, and dispute settlement, the areas of intellectual property covered by the TRIPS Agreement include copyrights, trademarks, geographical indications including appellations of origin, industrial designs, patents, layout-designs of integrated circuits, and undisclosed information including trade secrets and test data (“Overview: the TRIPS Agreement,” 2013).

Another organized agreement that has been established to combat counterfeiting is the Anti-Counterfeiting Trade Agreement. Participants in the Anti-Counterfeiting Trade Agreement (ACTA) include Australia, Canada, the European Union (EU), Japan, Korea, Mexico, Morocco,
New Zealand, Singapore, Switzerland, and the United States (Office of the United States Trade Representative).

As stated by the Office of the United States Trade Representative:

The Anti-Counterfeiting Trade Agreement (ACTA) is a groundbreaking initiative by key trading partners to strengthen the international legal framework for effectively combating global proliferation of commercial-scale counterfeiting and piracy. In addition to calling for strong legal frameworks, the agreement also includes innovative provisions to deepen international cooperation and to promote strong intellectual property rights (IPR) enforcement practices.

Members of the US Congress have advocated for legislation that opposes the production of counterfeit goods by supporting genuine fashion designers and brands. As stated in the Innovative Design Protection and Piracy Prevention Act, copyright protection is extended to fashion designs (OpenCongress). Introduced to a Congressional Committee by Virginia Representative Robert Goodlatte on July 13, 2011, the bill has not yet been reported by the committee or passed by either the House of Representatives or the Senate (Congressional Research Service, 2011). The Congressional Research Service (2011) reported that the Innovative Design Protection and Piracy Prevention Act seeks to revise Designs Protected-Section 1301 of title 17, United States Code, to further include articles of apparel. As explained in Section 2, Article 9 of the bill, the term “apparel” refers to (A) an article of men’s, women’s, or children’s clothing, including undergarments, outerwear, gloves, footwear, and headgear; (B) handbags, purses, wallets, tote bags, and belts; and (C) eyeglass frames (Congressional Research Service, 2011). According to Yoo and Lee (2011), the Innovative Design Protection and Piracy
Prevention Act also works for the Anti-Counterfeit Trade Agreement, and the aforementioned 11 countries participating in the agreement.

In addition to government initiated action and reform of intellectual property legislation, the Council of Fashion Designers of America (CFDA) recently took “a leadership role in supporting legislature that would protect designers’ intellectual property” (CFDA, 2013). Formally known as a not-for-profit trade association in the fashion industry, the CFDA’s membership consists of more than 400 of America’s foremost womenswear, menswear, jewelry and accessory designers (CFDA, 2013). In 2006, a group of CFDA members, including CFDA President Diane von Furstenberg, Nicole Miller, Zac Posen, Gela Nash-Taylor, and several other designers, traveled to Washington D.C. to meet with senators and discuss the importance of protecting fashion designers’ intellectual property (CFDA, 2013). The outcome of the meeting led to the development of the Design Piracy Prohibition Act, which was re-introduced as the Innovative Design Protection and Piracy Prevention Act. CFDA Executive Director Steven Kolb was noted for saying:

We are grateful to this influential group of U.S. Senators for recognizing the threat that piracy poses to designers in America today, and we are pleased that they have introduced such a powerful measure to help put an end to it (CFDA, 2013).

As part of the CFDA’s continued efforts toward combating counterfeiting and intellectual property theft, the CFDA and eBay have partnered together on three separate occasions to support the YOU CAN’T FAKE FASHION initiative (CFDA, 2013). Described by the CFDA as “a bold campaign designed to continue to raise awareness against counterfeit goods and celebrate original design within the fashion industry,” the campaign fosters creative design for one-of-a-kind, customized tote bags in various styles. With totes designed by fashion influentials, such as
Tory Burch, Ralph Lauren, Tommy Hilfiger, and John Varvatos, and accessible at fixed prices, all proceeds raised from sales benefit the CFDA Foundation (CFDA, 2013).

While it is evident that legislation and counterfeit awareness campaigns have intended to reduce the production of counterfeit merchandise, industry leaders and designers have identified counterfeiting as a growing problem, and one that requires cooperative efforts with groups such as the International Anti-Counterfeiting Coalition (IACC) to protect legitimate fashion goods (Norum & Cuno, 2011). Norum and Cuno acknowledged there would be no need for a supply of counterfeit goods if the demand for counterfeits did not exist.

*The Demand Dimension*

While industry efforts and legal policies are attempting to limit the production and sale (e.g., supply) of counterfeit goods, Kim and Karpova (2010) acknowledged counterfeits are in the marketplace because there is a demand for them. Also in support of this, Ha and Lennon (2006) conducted two studies utilizing a sample of undergraduate students enrolled in textiles and clothing classes. The authors found that approximately half of the participants in each study had purchased counterfeits in the past. Ha and Lennon concluded that the demand for fashion counterfeits might be common among the college student segment, regardless of legislation and the efforts of legitimate companies and anticounterfeit organizations to combat counterfeiting activities.

Norum and Cuno (2011) indicated that legislation has focused on deterring the suppliers and sellers of counterfeit goods, rather than the consumers, or ultimate purchasers of counterfeit goods. The authors suggested that legislation is lacking in regards to the demand side of the problem because there are limited legal ramifications associated with the consumption of counterfeits. As a result, Norum and Cuno suggested the implementation of legal consequences
and anti-counterfeit education as options for combating the demand side, or consumption, of counterfeit goods. In the following section, consumer demand for counterfeit goods is addressed further.

**Consumers and Counterfeit Consumption**

*Perceived Knowledge of Fashion Counterfeit Goods*

As defined by Eberman (2008), perceived knowledge is a measurement of what an individual thinks he or she knows about a particular subject. In the context of fashion counterfeit goods, perceived knowledge can be defined as what a consumer thinks they know about fashion counterfeit goods or the fashion counterfeit industry. Perceived knowledge, referred to as subjective knowledge by some researchers, can also be thought of as an individual's degree of confidence in his or her knowledge (Brucks, 1985).

Among the literature addressing perceived knowledge toward fashion counterfeit goods, there have been some similarities observed. Kozar and Marcketti (2008) indicated a positive, significant relationship between consumers’ knowledge and concern about counterfeiting and perceptions regarding the legality of manufacturing, distributing, and purchasing of counterfeit goods. The authors indicated that the participants who reported being more knowledgeable and concerned about the negative impacts associated with counterfeiting were more likely to consider the practice of making, selling, and buying counterfeit goods to be a criminal offense. The authors also indicated that the participants who viewed counterfeiting as an illegal act were less likely to knowingly purchase counterfeit apparel goods or to know someone who had previously purchased counterfeit apparel goods.

Congruent with Kozar and Marcketti’s findings (2008), Marcketti and Shelley (2009) explained that consumers who are more knowledgeable about counterfeit goods, such as the
problems associated with counterfeiting and the economy or labor conditions, may have more positive attitudes towards purchasing non-counterfeit goods. Hanzaee and Ghafelehbashi (2012) reported:

In the context of non-deceptive counterfeiting, consumers with higher levels of product knowledge are more likely to be able to evaluate counterfeit branded products more accurately, due to their higher cognitive capacity. As a result, they should have less favorable perceptions of counterfeit branded products. (p. 420)

Also reporting on non-deceptive counterfeiting, Bian and Moutinho (2011) argued that consumers with higher levels of product knowledge have a stronger cognitive capacity to evaluate alternatives by suggesting that “the higher level of product knowledge a consumer possesses, the less chance he/she will generate evaluation bias, with the result that knowledgeable consumers are likely to appreciate that counterfeit branded products are low grade branded products” (p. 197). Similar to Hanzaee and Ghafelehbashi (2012), Bian and Moutinho (2011) found evidence that consumers with higher levels of product knowledge are also more likely to have less favorable perceptions of general product attributes of counterfeit branded products.

Marcketti and Shelley (2009) indicated that consumers’ knowledge is positively and significantly associated with consumers’ willingness to pay more for non-counterfeit goods. Although the authors reported this positive and significant result, they also emphasized that the mean score for knowledge within the sample ranked lowest among the four constructs assessed, which also included concern with apparel industry issues, attitudes toward counterfeit apparel products, and consumer willingness to pay more for non-counterfeit goods. As such, Marcketti and Shelley implied that consumers do not exhibit high levels of knowledge toward counterfeit
goods. Marcketti and Shelley explained their findings as “somewhat surprising given the assumption that fashion and apparel majors, which comprised the majority of consumers sampled, would be somewhat more knowledgeable about counterfeiting, an ever-present apparel industry issue” (p. 335). Marcketti and Shelley also indicated that this relative lack of knowledge toward counterfeits, as indicated by the consumers in the study, was consistent with findings of previous studies, such as those of Dickson (2000), in which it was revealed that many consumers exhibit a low level of perceived knowledge regarding socially responsible business practices in the apparel and textile industry.

**Attitudes toward Fashion Counterfeit Goods**

An attitude is defined as “a learned predisposition to behave in a consistently favorable or unfavorable way with respect to a given object” (Schiffman & Kanuk, 2010, p. 246). In examining consumers’ attitudes toward fashion counterfeit goods, current literature has addressed consumers’ perceptions toward the legality of fashion counterfeit goods. While Kim and Karpova (2010) indicated consumers might be aware that counterfeit production is illegal, the authors also indicated that consumers might not necessarily view the purchase of fake fashion goods as an irresponsible action or an unethical practice, since the act of purchasing counterfeits currently cannot be prosecuted in the United States. Similarly, Ha and Lennon (2006) suggested that college students might not see fashion counterfeit purchasing as an unethical activity. Norum and Cuno (2011) indicated that purchasers of counterfeit goods are more likely to believe counterfeits are just as good as genuine products, and purchasers are less likely to view counterfeiting as unlawful. Norum and Cuno’s findings suggested that many purchasers of counterfeits do not believe they are doing anything wrong. Marcketti and Parsons (2006) suggested that many college students, as well as other consumer groups, might not take fashion
counterfeiting seriously because the idea of copying designers’ creations is a widely accepted practice in the fashion industry.

Also within the existing literature, multiple scholars have examined factors influencing consumers’ attitudes toward counterfeit goods, with some conflicting results (de Matos et al., 2007; Kim & Karpova, 2010; Koklic, 2011). The findings of a study conducted by de Matos et al. (2007) indicated that perceived risk is the most important factor in predicting consumers’ attitudes towards counterfeit goods. As explained by de Matos et al. and Dowling and Staelin (1994), perceived risk refers to the risk related to consumers’ perceptions of uncertainty and negative consequences associated with purchasing a particular product or service. Further, de Matos et al. found that the participants who reported a higher level of perceived risk in purchasing counterfeit goods exhibited unfavorable attitudes toward counterfeit goods.

Following perceived risk, other significant factors relating to consumers’ attitudes toward counterfeit goods included previous purchase experience, subjective norm, integrity, and price-quality inference (de Matos et al., 2007). De Matos et al. (2007) revealed that participants with previous purchase experience (e.g., already purchased a counterfeit good) possessed a favorable attitude toward counterfeits, while participants whose relatives or friends approved of their decision to buy counterfeit goods (e.g., subjective norm) also had more favorable attitudes toward purchasing counterfeit goods. The authors also reported that consumers who considered important values of integrity such as honesty and responsibility, tended to have a negative attitude toward counterfeit goods. Lastly, the authors reported that the participants who considered price as an indication of quality had more favorable attitudes toward counterfeiting. De Matos et al. indicated this finding contradicted their predictions, since it was hypothesized that consumers who consider high prices to be associated with high quality would possess
unfavorable attitudes toward counterfeits due to its inferior pricing. However, the authors reasoned that this finding might be “an important alternative explanation especially if one considers that 70 percent of the respondents in this study had already bought a counterfeit” (p. 45).

Findings of de Matos et al. (2007) also indicated that consumer intentions to buy counterfeit goods are dependent on the attitudes they have toward counterfeits, which as noted above, are influenced by factors such as perceived risk, counterfeit purchase experience, subjective norm, integrity, and price-quality inference. These findings led the authors to conclude that attitude plays a mediating role in the relationship between the antecedents previously mentioned, and behavioral intentions. Similar to de Matos et al., Koklic (2011) found that consumers’ perceived risk, or fear of perceived consequences that might occur due to purchasing counterfeit goods, influences unfavorable attitudes toward fashion counterfeit goods. The author indicated the importance of recognizing both attitude and risk perception as significant determinants of behavioral intention.

Also similar to de Matos et al.’s (2007) findings, Phau, Sequeira, and Dix (2009) found that consumers’ values of integrity influence attitudes toward counterfeits. As stated by the authors, “Consumers who consider values such as honesty, politeness, and responsibility as important tend to have negative attitudes toward counterfeit luxury brands” (Phau, Sequeira, & Dix, 2009, p. 272). While de Matos et al. indicated numerous factors significantly influence consumer attitudes toward counterfeits, Phau et al. (2009) reported:

Integrity was found to be the most significant predictor of consumer attitudes toward the lawfulness of counterfeit luxury brands and attitudes towards the legality of purchasing
counterfeit luxury brands. Thus, consumers who have higher levels of integrity are likely to hold negative attitudes toward counterfeits. (p. 272)

Related to findings of de Matos et al. (2007) and Phau et al. (2009), Koklic (2011) indicated that moral intensity significantly influences unfavorable attitudes toward purchasing fashion counterfeit goods. Koklic explained, “Moral intensity elicits the expected consequences for the society at large and is defined as the extent of issue-related moral imperative in a situation of knowingly purchasing counterfeit products” (p. 128).

Contrary to findings of de Matos et al. (2007) and Phau et al. (2009), Kim and Karpova (2010) reported that integrity is not related to attitude toward purchasing fashion counterfeits. While the authors reported other significant predictors of attitude toward buying fashion counterfeit goods, such as product appearance, value consciousness, and normative susceptibility, the authors did indicate past purchase behavior as a significant predictor of attitude, which coincides with findings of de Matos et al.

Consumers’ Purchase Intentions of Fashion Counterfeit Goods

Consumer purchase intentions are formed under the assumption of a pending transaction and, as a result, often are considered an important indicator of actual purchase (Chang & Wildt, 1994). As it relates to the fashion counterfeit industry, purchase intention can be described as a consumer’s plan to acquire and purchase a specific fashion counterfeit good in the future. Numerous scholars (de Matos et al., 2007; Ha & Lennon, 2006; Koklic, 2011) have indicated specific factors that influence consumers’ willingness to purchase counterfeit goods. One of the most prevalent factors found to influence consumers’ purchase intentions is perceived risk, in which consumers perceive uncertainty and consequences for purchasing counterfeit goods (de Matos et al., 2007). For example, the authors suggested that consumers might be dissuaded from
purchasing counterfeit goods if the factor of perceived risk is at the core of advertising campaigns. Similarly, Koklic (2011) identified that perceived risk can have a significant influence on consumers’ counterfeit purchasing intentions. Specifically, the author found that perceived risk influences both unfavorable attitudes and intention to purchase counterfeit goods, and unfavorable attitude toward purchasing counterfeit goods negatively affects consumers’ intentions to purchase such products. Ha and Lennon (2006) also revealed that consumer concern toward the consequences of fashion counterfeit purchasing, a perceived risk factor, is negatively related to purchase intent.

Scholars have also identified multiple factors beyond perceived risk that have a significant influence on consumers’ purchase intentions of counterfeit goods. Phau et al. (2009) found useful life to be the only significant indicator of willingness to knowingly purchase counterfeit luxury brands. While Phau et al. described useful life as considering product durability and reliability when purchasing a functional product, the authors also reported, “This reflects consumers who are willing to knowingly purchase counterfeit luxury brands with a functional purpose are more likely to weigh the long-term durability of the product with the initial short-term performance” (Phau et al., 2009, p. 274). Further, Ha and Lennon (2006) revealed that ethical judgments significantly influence purchase intention of fashion counterfeit products while concluding that consumers’ intended behavior in ethical contexts seems to be guided by their ethical judgments. Also identifying an influential factor, Kozar and Marcketti (2011) concluded that participants exhibiting higher materialist values were more likely to have reported purchasing counterfeit apparel goods.

Other researchers have disputed previously reported results concerning the factors that predict consumers’ willingness to purchase counterfeit goods. For example, Phau et al. (2009)
reported that attitudinal factors and personality factors are not useful predictors of consumers’ willingness to purchase counterfeit luxury brands. Phau et al. indicated that status consumption has no bearing on willingness to knowingly purchase counterfeit goods. The authors also found that materialism has no influence on willingness to knowingly purchase counterfeit luxury brands, as materialistic consumers have been identified as owning the genuine item rather than settling for the counterfeit alternative. Ha and Lennon (2006) found that ethical ideology, defined by Wilson (2003) as a set of behavioral guidelines deemed to be morally acceptable, is not a significant predictor of intent to buy counterfeit goods. The authors stated that one explanation for this is that perhaps consumers do not think counterfeit purchasing is unethical.

Given these conflicting results, additional research is warranted to explore the factors predicting consumers’ demand for counterfeit goods. However, it is not the intention of this study to further explore opposing results related to demand. Rather, the primary intention of this study is to examine methods for deterring the demand of fashion counterfeit goods. Specifically, it is the researcher’s intention to test the effectiveness of anti-counterfeit educational campaigns in curtailing demand of fashion counterfeit goods.

**Anti-Counterfeit Education**

Numerous scholars have suggested that anti-counterfeit educational initiatives, which focus on the negative factors associated with fashion counterfeit goods, might be beneficial for deterring the demand of such goods (Ha & Lennon, 2006; Kim et al., 2009; Kim & Karpova, 2010; Koklic, 2011; Norum & Cuno, 2011). For example, Ha and Lennon (2006) indicated that most students are unaware of the link between terrorism and counterfeit product sales. As a means to better inform students about the negative aspects of counterfeiting, the authors suggested implementing educational and public policies that emphasize the risks of
counterfeiting. Similar to this strategy, Kim et al. (2009) acknowledged that manufacturers should consider developing advertising campaigns that highlight how the consumption of illicit products imposes harm on individuals and society. Kim and Karpova (2010) suggested educating consumers by implementing anticounterfeiting campaigns which stress the link between fashion counterfeits and negative social phenomena such as sweatshops, loss of legitimate manufacturing jobs in the United States, and unpaid taxes.

Similarly, Kozar and Marcketti (2011) suggested that educators should discuss the negative results of distributing and purchasing counterfeit goods as a technique to encourage socially responsible purchasing behavior. Kim and Karpova (2010) also implied that if educators developed special anticounterfeiting units as part of a curriculum that addresses social responsibility, students might better understand the fashion counterfeiting phenomenon and its damaging consequences. Norum and Cuno (2011) suggested that educators might be able to deter the purchase of counterfeit goods by educating students about the dangers associated with counterfeiting. Topics suggested include instilling fear of punishment; recognizing the negative impacts that counterfeits have on American jobs, loss of tax revenues, balance of payments, and crime; and the use of profit from counterfeit sales toward the funding of organized crime and illicit activities.

Also in favor of anti-counterfeit education, Phau et al. (2009) indicated that consumers are often ill-informed about the detriments of counterfeit trade. As a means to spark change, Phau et al. suggested more cohesive efforts to educate consumers about the negative effects of their buying behaviors on the economy. While the authors suggested that these educational programs should be conducted within school settings, other potential audiences include employees of multinational companies, tourism related, and other domestic businesses. Several
scholars (Ha & Lennon, 2006; Kim et al., 2009) have indicated that anti-counterfeit education has the potential to alter consumers’ viewpoint toward fashion counterfeit goods.

Ha and Lennon (2006) suggested that education might have the capability to change consumers’ views on purchasing fashion counterfeit goods if the negative aspects of counterfeit product consumption, such as how it affects the economy, society, and consumers, are addressed. Likewise, Koklic (2011) suggested that the implementation of consumer education has the potential to influence consumer attitudes and purchasing intentions towards fashion counterfeit goods. Based on the findings of his study, Koklic indicated that the perception of consequences for oneself (perceived risk) and perception of consequences for others (moral intensity) could serve as two powerful areas that might prove effective in changing an individual’s attitudes and intentions. Other researchers have acknowledged that educating consumers about the criminal activities connected to the sale of counterfeit goods through advertising campaigns such as Harper’s Bazaar: Fakes Are Never In Fashion can be an influential factor for consumers (Kim et al., 2009). Specifically, Kim et al. (2009) suggested that a study should be conducted to investigate the effectiveness of these types of advertising campaigns on influencing students’ feelings of guilt and possibly shaping changes concerning behavioral intent toward counterfeits and other illicit products.

**Theoretical Foundation**

Within this study, several models and theories are utilized as a means to provide a theoretical foundation for the topics of research. Such models and theories include: The Tricomponent Attitude Model, in which the cognitive, affective, and conative components of a consumers’ attitudes are discussed; Fishbein and Ajzen’s Theory of Reasoned Action, in which attitude, subjective norm, and behavioral intention are discussed; and finally, the Theory of
Marketing Ethics/Hunt-Vitell Model, in which ethical judgments, intentions, and behaviors of consumers are addressed.

**Tricomponent Attitude Model**

According to the Tricomponent Attitude Model (Figure 1), attitudes consist of three major components, including cognitive, affective, and conative (Schiffman & Kanuk, 2010). Schiffman and Kanuk (2010) explained the cognitive component as consisting of a person’s knowledge and perceptions that are acquired by a combination of direct experiences with the attitude object and related information from various sources. This knowledge and resulting perceptions commonly take the form of beliefs, where the consumer believes that the attitude object possesses various attributes, and that specific behavior will lead to specific outcomes (Schiffman & Kanuk, 2010). The affective component is related to a consumer’s emotion or feelings about a particular product or brand; in other words, the affective component captures an individual’s attitude toward the object (Schiffman & Kanuk, 2010). The conative component is concerned with the likelihood or tendency that an individual will behave in a particular way with regard to the attitude object (Schiffman & Kanuk, 2010). Schiffman and Kanuk acknowledged that in marketing and consumer research, the conative component is frequently treated as an expression of the consumer’s intention to buy.
Figure 1. Tricomponent Attitude Model.

Source: Education Inn of Pakistan (2009)

As it relates to this study, the three components of the Tricomponent Attitude Model align closely with the variables selected for research. Specifically, the cognitive component translates as consumers’ perceived knowledge toward fashion counterfeit goods, while the affective component translates as consumers’ attitudes toward fashion counterfeit goods. The conative component translates as consumers’ purchase intentions of fashion counterfeit goods. Therefore, the variables of this study represent the elements within the Tricomponent Attitude Model, sharing a theoretical interconnectedness among each other.

Theory of Reasoned Action

According to the Theory of Reasoned Action (model is depicted in Figure 2), attitude components are comprehensively integrated into a structure that is designed to lead to both better explanation and better predictions of behavior (Schiffman & Kanuk, 2010). In addition to attitudinal components, subjective norms that influence an individual’s intention to act are also assessed (Schiffman & Kanuk, 2010). Schiffman and Kanuk (2010) explained, “subjective norm can be measured directly by assessing a consumer’s feelings as to what relevant others (family,
friends, roommates, coworkers) would think of the action being contemplated; that is, would they look favorably or unfavorably on the anticipated action?” (p. 253)

Figure 2. Theory of Reasoned Action
Source: Adapted from Fishbein & Ajzen (1975)

In reviewing the literature that addresses the Theory of Reasoned Action, it is evident that the reasoned action approach established by Fishbein and Ajzen is the dominant conceptual framework for predicting, explaining, and changing human social behavior (Ajzen, 2012). Ajzen (2012) reported that the Theory of Reasoned Action stipulates:

The intention to perform a particular behavior is a joint function of a favorable or unfavorable attitude toward the behavior and of a subjective norm that encourages or discourages its performance and that the intention is the direct antecedent of the corresponding behavior. (p. 17)

In the realm of fashion counterfeit goods, multiple scholars have utilized the Theory of Reasoned Action (TRA) as a theoretical foundation (Koklic, 2011; Phau et al., 2009). According to Phau et al. (2009), the attitude construct is often used as a predictor of consumer intentions and behaviors. Koklic (2011) explained that the basic assumption of models such as TRA is that attitudes shape intentions, and intentions shape behavior.
Within this study, TRA provides a theoretical basis for examining consumers’ attitudes and purchase intentions toward fashion counterfeit goods. Due to the nature of TRA, it allows for the inclusion of other relevant constructs within a research study. Ajzen (1991) explained that the TRA is a flexible model, which allows for additional constructs to be incorporated within the model. As such, TRA allows for the inclusion of the perceived knowledge construct to the existing model within this study. TRA’s ability to include additional constructs will prove useful when examining the relationship between consumers’ perceived knowledge, attitudes, and purchase intentions towards fashion counterfeit goods.

**Theory of Marketing Ethics/Hunt-Vitell Model**

Consistent with general theories in consumer behavior, such as the Theory of Reasoned Action, the Hunt-Vitell model proposes that ethical judgments affect behavior through intentions, which serves as an intervening variable (Hunt & Vitell, 2006). Hunt and Vitell (2006) explained, “The H-V model proposes that both ethical judgments and intentions should be better predictors of behavior in situations where the ethical issues are central, rather than peripheral” (p. 145). Expanding further on this, Hunt and Vitell reported that the model suggests the ethical decision-making process is initiated by the individual’s perception of an ethical problem in a situation, and is followed by the evaluation of various possible alternatives that might be used to solve the problem.
In addition, Hunt and Vitell (2006) reported that the ethical judgments in these situations are determined by both deontological and teleological evaluations. The authors explained that deontological evaluation involves comparing the various alternatives with a set of predetermined deontological norms that represent the individual’s personal values, while teleological evaluation is a function of the perceived consequences of each alternative for various stakeholders, the probability that each consequence will occur for each stakeholder group, the desirability of each consequence, and the importance of each stakeholder.

Ha and Lennon (2006) explained the Hunt-Vitell model by stating:

Ethical ideologies affect perceived consequences, which affect ethical judgments. Ethical judgments in turn affect intentions and behaviors. Applying this model to the counterfeit purchasing context, when given the opportunity to purchase fashion counterfeits (an
ethical problem), consumers consider the consequences based on their ethical ideologies. They then form an ethical judgment and assess their purchase intent. (p. 300)

As part of this study, the participants will be exposed to an anti-counterfeit educational unit in which the dangers and consequences associated with the fashion counterfeit phenomena were addressed. This is based on previous findings that suggest that perceived risk is an effective means for deterring counterfeit purchasing behavior (de Matos et al., 2007; Ha & Lennon, 2006; Koklic, 2011). While Ha and Lennon (2006) acknowledged that the Hunt-Vitell model does not directly include the variable of perceived risk, the model does include the consequences of a behavior, which is one aspect of perceived risk. Similarly, just as the Hunt-Vitell model does not directly include the variable of anti-counterfeit education, the recognized consequences associated with fashion counterfeit goods could be attributed to the information presented in the anti-counterfeit educational unit.

Additionally, while anti-counterfeit education is not a component of the Hunt-Vitell model, Kim et al. (2009) explained that researchers, such as Hunt and Vitell, focused on the cognitive components of moral decision making when developing such models. As a result, the model will prove useful when assessing consumers’ perceived knowledge toward fashion counterfeit goods, which represents a cognitive component.

Furthermore, Ha and Lennon (2006) indicated that previous research has found individuals’ ethical ideologies are important in formulating evaluations, attitudes, and behaviors related to ethical situations. Since the consumption of counterfeits has been noted as an ethical problem, Ha and Lennon deemed it conceivable that ethical ideologies impact attitudes, which effect ethical judgments and impact purchase intentions. Therefore, applying the Hunt-Vitell
model to this study will be beneficial when assessing the effectiveness of anti-counterfeit education on consumers’ attitudes and purchase intentions.

**Purpose and Objectives**

Koklic (2011) indicated that implementing consumer education and deterring the demand of counterfeit goods are two means to confine illicit market activities. Suggested strategies for deterring the demand of counterfeiting include influencing consumers’ attitudes and intentions to purchase counterfeit goods (Koklic, 2011). While multiple scholars (Ha & Lennon, 2006; Kim et al., 2009; Kim & Karpova, 2010; Norum & Cuno, 2011) have suggested implementing anti-counterfeit education as a means to deter the demand of counterfeit goods in the marketplace, no studies have examined the effectiveness of such campaigns in actually modifying purchase intentions. As such, this study will test the impact of an anti-counterfeiting educational unit on modifying perceived knowledge, attitudes, and behavior. Specific research objectives of this study are outlined below.

**Objectives**

The objectives of this study are to examine:

1) The effectiveness of anti-counterfeit education in changing consumers’ perceived knowledge toward fashion counterfeit goods.

2) The effectiveness of anti-counterfeit education in changing consumers’ attitudes toward fashion counterfeit goods.

3) The effectiveness of anti-counterfeit education in changing consumers’ purchase intentions toward fashion counterfeit goods.
Hypotheses

Within the literature, numerous scholars have suggested the implementation of anti-counterfeit educational programs and campaigns (Ha & Lennon, 2006; Kim et al., 2009; Kim & Karpova, 2010; Koklic, 2011; Marckett & Shelley, 2009; Norum & Cuno, 2011) to better inform consumers of the consequences associated with the consumption of counterfeit goods. One outcome of this study is to create greater awareness of the counterfeiting phenomenon and the associated consequences of purchasing counterfeit fashion goods. Drawing from the Tricomponent Attitude Model, the study will seek to impact the cognitive component, or consumers’ knowledge and perceptions through anti-counterfeit education. When describing the cognitive component of this model, Schiffman and Kanuk (2010) stated, “knowledge is acquired by a combination of direct experience with the attitude object and related information from various sources,” (p. 249). Addressing the potential that education has on positively impacting consumers’ knowledge, Marckett and Shelley (2009) implied that educational programming, which provides relevant facts regarding the negative outcomes of purchasing counterfeit apparel goods may be a beneficial technique. As such, statistics reported by the International Anti-Counterfeit Coalition and negative social phenomena reported by Harper’s Bazaar will be included in the anti-counterfeit educational unit. As based on previous findings utilized within the anti-counterfeit educational unit, such as those of Marckett and Shelley (2009), it is hypothesized that:

- **Hypothesis 1**: There will be a positive, significant change in consumers’ perceived knowledge toward fashion counterfeit goods after viewing the anti-counterfeit educational unit.
It has also been acknowledged that perceived risk is a variable found to influence consumers’ attitude and intentions (Koklic, 2011). As previously stated, perceived risk has been identified as an important variable to predict consumer attitude toward counterfeits (de Matos et al., 2007). Within studies that have utilized the Hunt-Vitell model of ethical decision-making, it has been recognized that perceived risk is a critical factor influencing ethical decision-making (Koklic, 2011). Koklic (2011) noted, “perceived risk assesses the perceived consequences for the individual who buys counterfeit products, and it involves the perceived negative consequences of knowingly purchasing counterfeit products” (p. 128).

As a means to highlight the perceived risk associated with purchasing fashion counterfeit goods, this study will expose the participants to an anti-counterfeit educational unit, which specifically addresses perceived consequences for individuals who purchase fashion counterfeit goods. As suggested by Kim and Karpova (2010), the anti-counterfeit educational unit will stress the link between fashion counterfeits and highly undesirable social phenomena, such as sweatshops, loss of legitimate manufacturing jobs in the United States, and unpaid taxes. Since it has been empirically verified that perceived risk negatively influences favorable attitudes toward fashion counterfeit goods (Ha & Lennon, 2006; Koklic, 2011), the following hypothesis is proposed:

- **Hypothesis 2**: There will be a negative, significant change in consumers’ favorable attitudes toward fashion counterfeit goods after viewing the anti-counterfeit educational unit.

Also verified in the literature, factors such as perceived risk and unfavorable attitudes toward counterfeit goods negatively impact consumers’ purchase intentions towards counterfeit
goods (Koklic, 2011). Utilizing the Theory of Reasoned Action, numerous studies have identified a negative, significant relationship between consumers’ unfavorable attitudes and intentions to purchase counterfeit goods (Bian & Veloutsou, 2007; de Matos et al., 2007).

In addition, it has been found that consumer purchase intentions of counterfeit goods can be predicted by attitudes, such as perceptions about the lawfulness of counterfeits and the legality of purchasing counterfeits (Cordell, Wongtada, & Kieschnick, 1996). Furthermore, studies which have utilized the Hunt-Vitell Model have indicated that the higher a consumers’ level of moral judgment (an attitude), the less likely the consumer is to approve of or engage in counterfeit transactions (Phau et al., 2009).

This study will expose participants to an anti-counterfeit educational unit, which highlights perceived risk and consequences associated with ethical decision-making, with the intention to impact consumers’ cognitive (perceived knowledge), affective (attitudes), and conative (behavioral intention) components within the Tricomponent Attitude Model. Since this study proposes that anti-counterfeit education will negatively influence attitudes toward fashion counterfeit goods, and it has been verified that unfavorable attitudes toward counterfeit goods can negatively impact purchase intention (Bian & Veloutsou, 2007; de Matos et al., 2007; Koklic, 2011), it is proposed that:

- **Hypothesis 3**: There will be a negative, significant change in consumers’ purchase intentions of fashion counterfeit goods after viewing the anti-counterfeit educational unit.
CHAPTER 3: Methodology

Sample

The participants in this study were selected through a sample of college students specializing in various degree programs at a Midwestern university. As Ha and Lennon (2006) reported that approximately half of the participants in their study had purchased fashion counterfeit goods, the authors suggested use and demand for fashion counterfeit products may be common among undergraduate students. Therefore, sampling from the undergraduate student population was deemed appropriate for this study. While Kozar and Marcketti (2008) indicated that Family and Consumer Science classes provide an excellent opportunity to make students more aware of ethical decisions and dilemmas they will encounter, including the purchasing of counterfeit apparel goods, it is also useful to include a sample of participants with various backgrounds and from different academic programs. The sample for this study extended beyond Family and Consumer Science programs as students from all disciplines should be aware of current social responsibility issues, such as the counterfeiting phenomenon. As a means to utilize a varied sample, the researcher conducted the study within various course levels and academic programs at the university. The courses visited for the study included an introductory principles of marketing course, a beginning apparel and textiles lecture course, an intermediate apparel and textiles evaluation course, an intermediate financial planning course, and an advanced family studies course. As such, participants within the study were enrolled in any one of the various colleges at the university, including agriculture, architecture, planning and design, arts and sciences, business administration, education, engineering, human ecology, and technology and aviation.
Instrumentation

The 22-item instrument utilized in this study incorporated pre-existing scales that have been adapted and utilized for studies focused on the counterfeiting phenomenon. Each item within the instrument was measured utilizing a seven-point Likert-type scale (1-strongly disagree; 7-strongly agree). Scale items were selected to address the intended objectives of the study. Below is a detailed description for each of the major variables that were measured in this study.

Consumers’ Perceived Knowledge of Fashion Counterfeit Goods

Consumers’ perceived knowledge of fashion counterfeit goods was measured utilizing three items that were adapted from Bang, Ellinger, Hadjimarcou, and Traichal (2000). While Bang et al.’s (2000) study was conducted to assess consumers’ knowledge and attitudes toward renewable energy, a study conducted by Marcketti and Shelley (2009) found the scale items to be effective measures of consumers’ knowledge toward counterfeit goods. Bang et al. asked respondents questions such as ‘How concerned are you about pollution’ and ‘…about the environment when making purchases’? Marcketti and Shelley asked respondents adapted versions of the questions such as, ‘How concerned are you about counterfeiting’ and ‘…about the effects of counterfeit apparel when making purchases’? According to the authors, the reliability of the modified scale was acceptable ($a = .814$). As such, as part of the current study, the three items utilized by Marcketti and Shelley were slightly modified so that the respondents could answer the questions via a Likert-type scale. The three individual items for assessing consumers’ perceived knowledge of counterfeits included: ‘I am familiar with counterfeiting’, ‘I am knowledgeable about counterfeiting’, and ‘I am familiar with the efforts to stop counterfeiting’. Reliabilities for the constructs were analyzed to assess internal consistency.
Upon confirming reliability, the items were combined to create the summed mean variable for participants’ perceived knowledge of counterfeits.

**Consumers’ Attitudes toward Fashion Counterfeit Goods**

Five items from Bang et al. (2000) were also utilized to assess consumers’ attitudes toward fashion counterfeit goods. Again, Marcketti and Shelley (2009) found such scale items to be effective in the context of consumers’ attitudes towards counterfeit goods; the authors reported reliability of the modified scale was acceptable ($a = .897$).

The five items Marcketti and Shelley (2009) utilized to assess consumers’ attitudes were already compatible with a Likert-type scale. As part of the current study, consumers’ attitudes toward counterfeits utilized the following items: ‘I would be proud to own a fashion counterfeit good’, ‘I would buy a fashion counterfeit if no one could tell it was counterfeit’, ‘I like counterfeits’, ‘I will buy a fashion counterfeit good in the next 12 months’, and ‘There is nothing the matter with purchasing counterfeit fashion goods’.

Additionally, nine items from the attitudes toward counterfeiting scale developed by Tom, Garabaldi, Seng, and Pilcher (1998) were utilized for measuring consumers’ attitudes toward fashion counterfeit goods. While Tom et al.’s (1998) scale was originally developed as a five-point Likert-type scale, the nine items utilized in this instrument asked the respondents to answer according to a seven-point Likert-type scale, as a means to maintain consistency in the study’s instrument. Additionally, the term ‘counterfeit products’ was modified, and for the purpose of this study, was referred to as ‘fashion counterfeit goods’. The nine items adapted from Tom et al. and utilized in this instrument included: ‘Fashion counterfeit goods do not hurt the economy’, ‘Fashion counterfeit goods hurt the companies that manufacture the legitimate product’, ‘I like fashion counterfeit goods because they demonstrate initiative and ingenuity on
the part of the counterfeiters’, ‘People who buy fashion counterfeit goods are committing a crime’, ‘People who manufacture fashion counterfeit goods are committing a crime’, ‘Buying fashion counterfeit goods demonstrates that I am a wise shopper’, ‘I buy fashion counterfeit goods because the prices of designer products are unfair’, ‘Fashion counterfeit goods are just as good as designer products’, and ‘I would buy fashion counterfeit goods even if I could easily afford to buy noncounterfeit goods’.

To assess internal consistency, reliabilities were analyzed for the items utilized in each of the attitude scales. First, reliability analysis was performed for the five modified items from Marcketti and Shelley (2009); second, reliability analysis was performed for the nine modified items from Tom et al. (1998). Upon confirming reliability, the items were combined to create two separate summed mean variables, with one summed mean variable for participants’ attitudes of counterfeits from Marcketti and Shelley’s scale items and one summed mean variable for participants’ attitudes of counterfeits from Tom et al.’s scale items. Utilizing multiple summed mean variables for the same construct adds significance to the study by testing the usefulness of different scales in measuring attitudes as it relates to counterfeit goods. As such, the researcher can identify the appropriateness of the scales, as one might have a stronger usefulness or reliability than the other, and can make recommendations to future scholars thereof.

**Consumers’ Purchase Intentions of Fashion Counterfeit Goods**

Consumers’ purchase intentions of counterfeit goods were measured utilizing two items from Bian and Veloutsou’s (2007) scale specifically developed for a non-deceptive counterfeit study. This study slightly adapted Bian and Veloutsou’s scale by modifying the wording from ‘counterfeit brands’ to ‘fashion counterfeit goods’. The two items used to assess consumers’
purchase intentions of fashion counterfeit goods included: ‘I am willing to buy fashion counterfeit goods for my own use’ and ‘I often buy fashion counterfeit goods for my own use’.

Additionally, three items originally employed by Madden, Ellen, and Ajzen (1992) were also utilized to assess consumers’ purchase intentions of fashion counterfeit goods. While this scale was not originally developed for counterfeit-focused research, a study by Kim and Karpova (2010) found the scale items to be useful in examining consumers’ motivations toward purchasing counterfeit goods. The authors reported the reliability of the modified scale was acceptable (α = .97) for the three items assessing consumers’ purchase intentions toward fashion counterfeit goods. Therefore, the three items utilized by the authors that were utilized in this questionnaire include: ‘I intend to buy fashion counterfeit goods in the future’, ‘I will try to buy fashion counterfeit goods in the future’, and ‘I will make an effort to buy fashion counterfeit goods in the future’.

To assess internal consistency, reliability analysis was performed separately for each of the purchase intention scales. First, reliability analysis was performed for the two modified items from Bian and Veloutsou (2007), followed by reliability analysis for the three modified items from Kim and Karpova (1992). Upon confirming reliability, the items were combined to create two separate summed mean variables, with one summed mean variable for participants’ purchase intentions of counterfeits from Bian and Veloutsou’s scale items and one summed mean variable for participants’ purchase intentions of counterfeits from Kim and Karpova’s scale items. Again, utilizing multiple summed mean variables for the same construct adds significance to the study by testing for the appropriateness of different scales in assessing counterfeit purchase intentions.
Participants’ Demographic Characteristics

A section for the participants’ demographic information was included in the questionnaire. Questions asked within this section include: ‘What is your sex?’, ‘What is your age range?’, ‘What is your year in college?’, ‘Which academic college is your primary major/degree in?’, ‘To which racial or ethnic group(s) do you most identify?’, ‘On a monthly basis, how much (on average) do you spend on new clothes and accessories?’, and ‘Have you ever knowingly purchased a fashion counterfeit good?’

Procedure

This study employed a quantitative methodology of data collection and analysis. After receiving approval from the Institutional Review Board (IRB), the researcher began to conduct Phase I of the data collection process. The researcher first explained the nature of the study to the prospective participants and then distributed the self-administered questionnaire packet among the students enrolled in the courses selected for the study. Each packet included a coded questionnaire and cover sheet with a designated space for the student to print their name prior to completing the questionnaire. The researcher also explained that participation in the study was completely voluntary and all responses would be kept confidential. While the participants were completing the questionnaire, the researcher collected and saved all of the cover sheets for Phase II of the study (for coding purposes).

Next, the researcher collected all questionnaires and began to administer the anti-counterfeit educational unit (further explanation provided below). Four weeks after the participants were exposed to the treatment, which was selected as the time interval between phases as based on Cook and Campbell’s (1979) recommendations for maintaining validity, the researcher returned to the same courses for Phase II of the data collection process and distributed
the self-administered questionnaire among the students who previously participated in Phase I. In Phase II, each participant was given a new questionnaire packet, which included the participant’s original cover sheet containing the same coded number as Phase I and the participant’s name printed on the front. As such, this coding method allowed the researcher to track individual responses and modifications in participants’ perceived knowledge, attitudes, and purchase intentions. Again, the researcher ensured confidentiality of the participants’ responses in Phase II of the study. Once all of the data was collected from Phase II, the researcher began to perform the appropriate data analysis procedures.

**Validity**

This study included a one-group pretest posttest, quasi-experimental design. Campbell and Stanley (1963) noted that experiments are internally valid when the obtained effect can be attributed to the manipulation of the independent variable, meaning that the effects obtained in the experiment are due only to the experimental conditions manipulated by the researcher and not to any other variables. While Campbell and Stanley explained that an experiment meeting the above criteria contains internal validity, the authors also indicated that there are other variables beside the independent variable or treatment that can influence the dependent variable or observed effects. Therefore, Campbell and Stanley explained that such variables should be considered when conducting a quasi-experimental design.

Additionally, Cook and Campbell (1979) listed a number of factors that can threaten the validity of experiments. Since this study included a pretest and posttest (which are referred to as Phase I and Phase II), the time interval that spanned from the beginning of Phase I to the end of Phase II could be considered a threat to the validity of the research methodology. Therefore, some of the factors that Cook and Campbell identified that pertained to this study include
history, maturation, instrumentation, and testing. History is a threat to internal validity when an observed effect might be due to an event occurring in the respondents’ environment between the pretest and the posttest (Cook & Campbell, 1979). Therefore, the authors acknowledged that the longer the duration between the pretest and posttest, the greater the possibility of history threatening internal validity. Maturation describes how respondents may change between the pretest and posttest, resulting in respondents becoming more mature and the measurement of the data being affected (Cook & Campbell, 1979). Issues with instrumentation include changes that occur to the instrument between the pretest and posttest, which can lead to changes in measurement of the data (Cook & Campbell, 1979). Testing is described as participants remembering the questions from the pretest, and responding differently because of the recall of questions (Cook & Campbell, 1979). While Cook and Campbell did not provide an exact time interval that should be utilized for a one-group pretest posttest design, the authors acknowledged that the time period between the pretest and posttest should not be too short so that participants can recall the specific questions.

As a means to respond to these factors, the researcher formulated the study’s research method and procedure to minimize threats to internal validity. For example, the time interval between Phase I and Phase II of the experiment was four weeks. This time interval was selected so that history and maturation of the study’s participants would not impact the data measurement. In addition, the specific interval of time was selected because of scheduling availability with course instructors and Professors and also as a means to ensure the same participants would still be enrolled in the courses visited and available for both phases of the study. Also influencing the time interval was the work of Kirk (2009, Chapter 2), in which it was noted that pretest posttest designs are most useful when the time interval between tests is
minimized. As such, four weeks was believed to be sufficient for minimizing the participants’ ability to recall questions from the first self-administered questionnaire. Lastly, the researcher chose to keep the self-administered questionnaires in both Phase I and Phase II identical, as a means to address instrumentation threats to validity.

**Anti-Counterfeit Educational Unit**

The anti-counterfeit educational unit (treatment) was administered to the study’s sample after the completion of the first self-administered questionnaire in Phase I. Before the anti-counterfeit educational unit was conducted, the researcher explained that participation in the study was completely voluntary, and students were given the opportunity to leave the session if they did not wish to participate. Having received IRB approval prior to data collection, the researcher concluded that the remaining participants extended their informed consent for the anti-counterfeit educational unit.

To spark the participants’ interest and retain their attention, a combination of text, short media clips, and visual materials were included within a Prezi presentation that lasted approximately 25-30 minutes in length (see Appendix B for Prezi presentation slides). Drawing from previous implications of Koklic (2011) and de Matos et al. (2007), where perceived risk has been identified as a factor that negatively influences favorable attitudes and purchase intentions of counterfeit goods, the anti-counterfeit educational unit was formulated to impact participants’ perception of risk associated with obtaining fashion counterfeit goods. As such, perceived consequences for society at large, such as a loss in tax revenue and the continued funding and support toward child labor and terrorist activity, as well as perceived consequences for one’s self, such as negative health risks, were utilized as focal points in the educational unit.
To introduce the educational unit, the researcher began by defining the term “counterfeit” and providing examples of various types fashion counterfeit goods, such as counterfeit apparel, watches, handbags, wallets, and other fashion accessories. The researcher then provided the study’s participants with various statistics reported by the International Anti-Counterfeiting Coalition, such as between 5% and 7% of world trade is in counterfeit goods and US companies suffer $9 billion in trade losses due to international copyright piracy. Also included were statistics reported by Harper’s Bazaar, such as $20 billion is the estimated loss to American companies from counterfeit products.

Next, the researcher explained the various forms of counterfeiting in the marketplace, such as deceptive and non-deceptive counterfeiting. Deceptive counterfeiting was explained as a situation where consumers believe they have purchased a genuine product, when in fact, the product is fake, while non-deceptive counterfeiting was explained as a situation were consumers are fully aware they are buying a fake product at the time of purchase (Grossman & Shapiro, 1988). As such, participants were informed that non-deceptive counterfeiting continues to grow in the marketplace as fueled by consumer demand (International Anti-Counterfeiting Coalition; Koklic, 2011). To give participants a better understanding of the magnitude of the counterfeit industry and where one might find fashion counterfeit goods, an ABC News video clip following Kris Bucker of Investigative Consultants was shown. Investigative Consultants functions as a fully licensed and insured professional investigative company specializing in intellectual property investigations and enforcement (Investigative Consultants). In this video clip, participants watched Investigative Consultants seize counterfeit merchandise in Los Angeles, California.
In addition, an overview of the existing literature on counterfeit goods and their association with illicit activities, such as terrorist groups and drug cartels, was included. The researcher focused on communicating the negative impacts derived from purchasing counterfeit goods because consumers continue to support the counterfeit industry. For example, the link between purchasing counterfeits and supporting child labor, as explained in a passage of Dana Thomas’ (2007) New York Times bestseller, Deluxe: How Luxury Lost Its Luster, was shared in the educational unit. Participants were informed of other negative impacts seen from purchasing counterfeit goods as shown through concrete examples of how terrorist incidents have been funded through the proceeds of counterfeit sales. The educational unit cited the 1993 World Trade Center bombing, various Al Qaeda operations, the 2004 Madrid train bombings, and Hezbollah operations as being funded through the sale of counterfeit merchandise.

In addition, a focus on why counterfeits are harmful to consumers and society was included in the unit. The six primary reasons why one should not engage in purchasing fakes, as developed by the International Anti-Counterfeiting Coalition, was utilized to communicate this focus. Participants were informed that counterfeiters do not provide fair wages or benefits for employees, have poor working conditions, and often use forced child labor. Also shared with the participants, counterfeiters do not pay taxes, which means less revenue for the general publics’ schools, hospitals, parks, and other social programs (International Anti-Counterfeiting Coalition). To communicate the harmful health risks associated with fashion counterfeit goods, a video from ABC News was included to inform participants about some of the active ingredients found in counterfeit fragrances.

A series of advertisements and propaganda that are currently being used to diminish the demand for counterfeit goods, such as Harper’s Bazaar: Fakes are Never in Fashion campaign
and the Global Public Service Ad campaign, were also included in the unit. As developed by *Harper’s Bazaar*, the “Real Deal: How to Spot a Fake” guidelines to avoid purchasing counterfeit merchandise were shared with participants. Such guides and tips for how to distinguish a fashion counterfeit good encouraged participants to always read the label, make sure everything is spelled correctly, and to check the packaging for any products or containers that should be tightly wrapped or packaged. At the end of the presentation, participants were given the opportunity to ask the researcher questions about fashion counterfeit goods.

**Data Analysis**

Multiple forms of data analysis were utilized to interpret the collected data. To generate an overview of the sample, demographic variables were analyzed using descriptive statistics. Reliability analysis utilizing Cronbach’s alpha on multiple-item measures was performed for the various scale items utilized to measure each variable. From each set of scale items, summed mean variables were created and internal consistency was addressed. Lastly, a series of paired samples *t*-tests were conducted to test the hypotheses of the study, utilizing the summed mean variables. Paired samples *t*-tests were beneficial in this study when examining the directional change that anti-counterfeit education had on consumers’ perceived knowledge, attitudes, and purchase intentions toward fashion counterfeit goods.
CHAPTER 4: Results

This study intended to examine the effectiveness of educational initiatives in deterring the demand of fashion counterfeit goods. Participants’ perceived knowledge, attitudes, and purchase intentions toward fashion counterfeit goods were evaluated both prior to and after viewing an anti-counterfeit educational unit, which identified negative factors associated with counterfeit products and the counterfeit industry. The purpose of this two-phase study was achieved by interpreting participants’ responses through a series of paired samples t-tests. Included in this chapter is a descriptive overview of the study’s sample, a discussion on the reliability of measures used, and an overview of the paired samples t-test results as they pertain to the research objectives and hypotheses.

Descriptive Statistics

Overview of Sample

As shown in Table 1, a total of 323 students participated in the study. Of the 323 participants, nearly two-thirds (63.5%) were female, while approximately one-third was male (36.5%). The majority of participants were between the ages of 20-21 years old (46.4%), followed by those between the ages of 22-23 years old (30.0%). Participants between the ages of 18-19 years old were the third most represented in the study (15.8%), followed by those between the ages of 24-25 years old (4.6%). Participants aged 26 years or older were the least represented in the study (3.1%).
**Table 1**

*Frequency Results for Respondents’ Reported Demographical Information (n = 323)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Male</td>
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</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-19 years old</td>
<td>51</td>
<td>15.8</td>
<td>15.8</td>
</tr>
<tr>
<td>20-21 years old</td>
<td>150</td>
<td>46.4</td>
<td>62.2</td>
</tr>
<tr>
<td>22-23 years old</td>
<td>97</td>
<td>30.0</td>
<td>92.3</td>
</tr>
<tr>
<td>24-25 years old</td>
<td>15</td>
<td>4.6</td>
<td>96.9</td>
</tr>
<tr>
<td>26 years or older</td>
<td>10</td>
<td>3.1</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Year in College</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
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<td>9.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Sophomore</td>
<td>44</td>
<td>13.8</td>
<td>22.9</td>
</tr>
<tr>
<td>Junior</td>
<td>97</td>
<td>30.4</td>
<td>53.3</td>
</tr>
<tr>
<td>Senior</td>
<td>107</td>
<td>33.5</td>
<td>86.8</td>
</tr>
<tr>
<td>Fifth-year/Graduate Student</td>
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</tr>
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<td>14.6</td>
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<tr>
<td>Architecture</td>
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<td>.6</td>
<td>15.2</td>
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<td>Arts and Sciences</td>
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<td>7.7</td>
<td>22.9</td>
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<td>39.6</td>
</tr>
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<td>51.1</td>
</tr>
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<td>95.4</td>
</tr>
<tr>
<td>Dual Degree</td>
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<td>1.9</td>
<td>97.3</td>
</tr>
<tr>
<td>Other</td>
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<td>1.5</td>
<td>98.8</td>
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<tr>
<td>Undecided</td>
<td>4</td>
<td>1.2</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawaiian or Pacific Islander</td>
<td>3</td>
<td>.9</td>
<td>.9</td>
</tr>
<tr>
<td>Asian or Asian American</td>
<td>40</td>
<td>12.5</td>
<td>13.4</td>
</tr>
<tr>
<td>Black or African American</td>
<td>9</td>
<td>2.9</td>
<td>16.2</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>5</td>
<td>1.6</td>
<td>17.8</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>257</td>
<td>80.1</td>
<td>97.8</td>
</tr>
<tr>
<td>Dual Racial</td>
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<td>2.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Variable</td>
<td>Frequency</td>
<td>Valid Percent</td>
<td>Cumulative Percent</td>
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<tr>
<td>---------------------------------------------------------</td>
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<td>---------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Monthly Spending on Apparel and Accessories</td>
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<td></td>
</tr>
<tr>
<td>Less than $50</td>
<td>139</td>
<td>43.0</td>
<td>43.0</td>
</tr>
<tr>
<td>$51-$100</td>
<td>93</td>
<td>28.8</td>
<td>71.8</td>
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<td>$101-$150</td>
<td>53</td>
<td>16.4</td>
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<tr>
<td>$151-$200</td>
<td>27</td>
<td>8.4</td>
<td>96.6</td>
</tr>
<tr>
<td>More than $200</td>
<td>11</td>
<td>3.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Previous Counterfeit Purchase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>102</td>
<td>31.7</td>
<td>31.7</td>
</tr>
<tr>
<td>No</td>
<td>220</td>
<td>68.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Participants were also asked to indicate their academic year in college. Of the 319 participants who responded to this item on the questionnaire, the majority of participants indicated that they were in their senior year (33.5%) or junior year (30.4%). Participants indicating they were in their sophomore year of college (13.8%) represented the third largest in the study, closely followed by participants in their fifth year of college or graduate school (13.2%). Lastly, participants indicating they were in their freshman year of college represented the smallest group present in the study (9.1%).

Regarding participants’ academic college in which their primary degree would be received, the most represented group of participants were enrolled in a Human Ecology degree program (44.3%). This included students majoring in Apparel, Textiles, and Interior Design, Human Nutrition, Hospitality Management and Dietetics, and Family and Consumer Science. Claiming the second and third most represented colleges in the study were Business Administration (16.7%) and Agriculture (14.6%), while the fourth and fifth most represented colleges were Engineering (11.5%) and Arts and Sciences (7.7%), respectively. There were several other degree programs and options indicated by the sample, with a relatively low number
of participants indicating they were pursuing dual degrees in multiple colleges (1.9%), as well as a small number of participants who indicated their college as “Other” (1.5%) or that their major was undecided (1.2%). The least represented college in the study was comprised of participants from Architecture, Planning, and Design (.6%).

Participants were also asked to report the ethnic group with whom they most identify. Of the 321 participants who responded to the question, the majority reported themselves as Non-Hispanic White (80.1%), while participants indicating themselves as Asian or Asian American (12.5%) or Black or African American (2.8%) claimed the second and third most represented ethnic groups in the study, respectively. The fourth most represented ethnic group in the study consisted of participants who indicated identifying with more than one ethnic group or race (2.2%), closely followed by Hispanic and Latino participants (1.6%). The least represented ethnic group consisted of those who identified themselves as Hawaiian or other Pacific Islander (.9%).

With regard to spending patterns, participants were asked to indicate how much they spend on new clothing and accessories on a monthly basis. It can be noted that as the indicated amount of money spent on new clothing and accessories increased, the percentage of participants representing those corresponding amounts decreased. For example, participants who claimed they spent less than $50 per month accounted for the largest percentage of participants (43.0%), while the next highest percentage of participants claimed they spent between $51 and $100 per month (28.8%). Representing the third highest percentage of participants were those who spent between $101 and $150 per month (16.4%), while the fourth highest percentage of participants were those who spent between $151 and $200 per month (8.4%). The smallest percentage of
participants were those who spent more than $200 per month on new clothing or accessories (3.4%).

As a means to gain a better understanding about the participants’ previous experience with counterfeits, each participant was asked to identify if they had ever knowingly purchased a fashion counterfeit good. Of the 322 participants who responded to the question, nearly one third (31.7%) identified that they had knowingly purchased a fashion counterfeit good while the remaining two-thirds (68.3%) indicated they had not knowingly engaged in such purchasing behavior.

Reliability of Measures

Perceived Knowledge of Fashion Counterfeit Goods

The internal reliabilities of the perceived knowledge of counterfeits construct included in both Phase I and Phase II survey instruments were found to be consistent with those previously reported by Marcketti and Shelley (2009). With Chronbach’s *alpha* on multiple-item measures reported as .87 within Phase I and .75 within Phase II of the study, internal consistency was validated for both phases. As such, the three items utilized to assess participants’ perceived knowledge of counterfeits were combined into two separate summed mean variables for each of the phases. In Phase I, the computed mean score for the summed mean variable was reported as 3.6 (*n* = 323, *M* = 3.58, *SD* = 1.63), while the computed mean score for the summed mean variable in Phase II was reported as 5.5 (*n* = 323, *M* = 5.45, *SD* = 1.06). While the instrument contained a 7-point Likert scale to indicate responses, it is evident that participants indicated a relatively low level of perceived knowledge at the initial start of the research study. Additionally, the observed difference in mean scores between the phases suggests that participants indicated being more knowledgeable about fashion counterfeit goods at Phase II once they had been
exposed to the anti-counterfeit educational unit. For reported mean scores of individual items included in the perceived knowledge of fashion counterfeits scale, please reference Table 3 included in Appendix C.

**Attitudes Toward Fashion Counterfeit Goods**

Consistent with reliabilities previously reported by Marcketti and Shelley (2009), the internal reliabilities of the attitudes toward counterfeits construct included in both Phase I and Phase II survey instruments were found to be acceptable. Chronbach’s *alpha* on the multiple-item measures were reported as .88 within Phase I and .90 within Phase II of the study, validating internal consistency for both phases. As such, the five items utilized to assess participants’ attitudes toward fashion counterfeit goods were computed into summed mean variables for each of the phases. The computed mean score for the summed mean variable in Phase I was reported as 2.7 (*n* = 323, *M* = 2.71, *SD* = 1.20), while the computed mean score for the summed mean variable in Phase II was reported as 2.0 (*n* = 323, *M* = 2.03, *SD* = 1.08). With participants indicating their responses on a 7-point Likert scale, it can be distinguished that participants indicated relatively low levels of favorable attitudes toward fashion counterfeit goods both before and after viewing the anti-counterfeit educational unit. However, the evidently lower mean score in Phase II does provide an indication that participants held more unfavorable attitudes toward fashion counterfeit goods after they had been exposed to the anti-counterfeit education. For reported mean scores of individual items included in the attitudes toward fashion counterfeits scale, please reference Table 4 included in Appendix C.

In addition, scale items previously reported reliable by Tom, Garabaldi, Seng and Pilcher (1998) did not remain consistent within this study. With Chronbach’s *alpha* on the multiple-item measure reported as .43 within Phase I and .46 within Phase II, the internal consistency of the
nine items was deemed unacceptable. While Tom et al.’s (1998) scale items were originally developed for a three part study related to both fashion and functional counterfeit goods, such as watches, designer clothing and handbags, perfume, software, CDs, videos, and tape recordings, data analysis from this study found that the scale items unreliable when computed as a summed mean variable. Although Tom et al.’s (1998) scale items did not reflect internal reliability, utilizing multiple scales to assess the same construct indeed added significance to this study. As such, it can be identified that the five scale items proposed by Marcketti and Shelley (2009) provide a stronger usefulness and reliability in measuring attitudes toward fashion counterfeit goods.

**Purchase Intentions of Fashion Counterfeit Goods**

Internal reliabilities of the purchase intention of counterfeits construct included in both Phase I and Phase II survey instruments were found to be consistent with those previously reported by Bian and Veloutsou (2007). Internal consistency was validated for both phases of the study with Chronbach’s *alpha* on the multiple-item measure reported as .73 within Phase I and .81 within Phase II. The two items utilized to assess participants’ purchase intentions of fashion counterfeit goods were deemed acceptable and combined into summed mean variables for each of the phases. In Phase I, the computed mean score for the summed mean variable was reported as 2.7 (n = 323, M = 2.67, SD = 1.33), while the computed mean score for the summed mean variable in Phase II was reported as 1.9 (n = 323, M = 1.90, SD = 1.14). Given the mean scores as based on a 7-point scale, it is indicative that students reported less involvement with intention to purchase fashion counterfeits after viewing the anti-counterfeit educational unit. For reported mean scores of individual items included in the Bian and Veloutsou’s (2007) purchase intentions of fashion counterfeits scale, please reference Table 5 included in Appendix C.
Lastly, additional internal reliabilities of the purchase intention of counterfeits construct in both Phase I and II were assessed in this study. Remaining consistent with previously reported reliabilities by Kim and Karpova (2010), the three scale items utilized to assess purchase intention of counterfeit goods were deemed acceptable with Chronbach’s alpha on multiple-item measures reported as .94 within Phase I and .92 within Phase II. As such, the items were computed into summed mean variables for each of the phases with the computed mean score for the summed mean variable reported as 2.5 (n = 323, M = 2.49, SD = 1.35) in Phase I and the computed mean score for the summed mean variable reported as 1.8 (n = 323, M = 1.76, SD = 1.10) in Phase II. As mean scores were reported on a 7-point scale, such findings indicate that participants had a decreased intention to purchase fashion counterfeit goods after viewing the anti-counterfeit educational unit. For reported mean scores of individual items included in Kim and Karpova’s (2010) purchase intentions of fashion counterfeits scale, please reference Table 6 included in Appendix C.

Utilizing multiple scales to assess the same intention to purchase construct added significance to this study. As seen from the acceptable reliabilities and similar mean scores indicated for scales items from both Bian and Veloutsou (2007) and Kim and Karpova (2010), both scales were utilized in this study’s hypothesis testing.

**Paired Samples t-Tests**

As previously indicated, this study focused on deterring the demand of fashion counterfeit goods by educating participants about the dangers associated with the fashion counterfeit industry. Participants were asked to answer a series of questions both prior to and after viewing an anti-counterfeit educational unit, and a series of paired samples t-tests were conducted to assess the effectiveness of the program in changing the participants’ perceived
knowledge, attitudes, and purchasing behavior. Of the four measures reported, all measures revealed significant differences between the Phase I and Phase II results (see Table 2).

**Table 2**

*Phase I and Phase II Results for Paired Samples in Anti-Counterfeit Educational Unit (n = 323)*

<table>
<thead>
<tr>
<th>Summed Mean Variable</th>
<th>Phase I</th>
<th>Phase II</th>
<th>M diff</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Knowledge</td>
<td>3.58</td>
<td>5.45</td>
<td>-1.88</td>
<td>-20.69*</td>
<td>322</td>
</tr>
<tr>
<td>Attitude</td>
<td>2.71</td>
<td>2.03</td>
<td>.69</td>
<td>10.75*</td>
<td>322</td>
</tr>
<tr>
<td>Purchase Intention 1</td>
<td>2.67</td>
<td>1.90</td>
<td>.77</td>
<td>11.25*</td>
<td>322</td>
</tr>
<tr>
<td>Purchase Intention 2</td>
<td>2.49</td>
<td>1.76</td>
<td>.73</td>
<td>10.86*</td>
<td>322</td>
</tr>
</tbody>
</table>

* p < .001.

**Perceived Knowledge of Fashion Counterfeit Goods**

**Hypothesis 1**: There will be a positive, significant change in consumers’ perceived knowledge toward fashion counterfeit goods after viewing the anti-counterfeit educational unit.

Utilizing the Phase I and Phase II summed mean variables previously reported for participants’ perceived knowledge of counterfeits, a mean difference of -1.88 was reported (Phase I: M = 3.58, SD = 1.63, Phase II: M = 5.45, SD = 1.06). This suggests that a significant increase in perceived knowledge was reported after participants had been exposed to the anti-counterfeiting educational unit (t = -20.69, df = 322, p < .001). As such, Hypothesis 1 was supported.

**Attitudes Toward Fashion Counterfeit Goods**

**Hypothesis 2**: There will be a negative, significant change in consumers’ favorable attitudes toward fashion counterfeit goods after viewing the anti-counterfeit educational unit.
After conducting a paired samples $t$-test for the Phase I and Phase II summed mean variables, a mean difference of .69 was reported (Phase I: $M = 2.71$, $SD = 1.20$, Phase II: $M = 2.03$, $SD = 1.08$). A significant decrease in favorable attitudes towards fashion counterfeit goods was revealed after participants had been exposed to the anti-counterfeit educational unit ($t = 10.75$, $n = 322$, $p < .001$), and therefore, Hypothesis 2 was supported.

**Purchase Intentions of Fashion Counterfeit Goods**

Hypothesis 3: There will be a negative, significant change in consumers’ purchase intentions of fashion counterfeit goods after viewing the anti-counterfeit educational unit.

A paired samples $t$-test was first conducted utilizing the Phase I and Phase II summed mean variables from the Bian and Veloutsou (2007) scale items. A mean difference of .77 was reported (Phase I: $M = 2.67$, $SD = 1.33$, Phase II: $M = 1.90$, $SD = 1.14$). As such, a significant decrease in purchase intention was found after participants had been exposed to the anti-counterfeiting educational unit ($t = 11.25$, $df = 322$, $p < .001$). An additional paired samples $t$-test utilizing the Phase I and Phase II summed mean variables from the Kim and Karpova (2010) scale items assessing purchase intention was also conducted. A mean difference of .73 was reported (Phase I: $M = 2.49$, $SD = 1.35$, Phase II: $M = 1.76$, $SD = 1.10$), and a significant decrease in purchase intention was once again found after participants had been exposed to the anti-counterfeiting educational unit ($t = 10.86$, $df = 322$, $p < .001$). As a result of these findings, Hypothesis 3 was supported.
CHAPTER 5: Discussion

This study examined the effectiveness of anti-counterfeit education in deterring the demand of fashion counterfeit goods. This chapter includes a summary of results, a discussion on the study’s contributions to theory, academia, and the industry, implications, and limitations. A final section discussing recommendations for future research is also presented.

Summary of Results

While previous studies have suggested anti-counterfeit education as a possible means to curb demand of fashion counterfeit goods (Ha & Lennon, 2006; Kim & Karpova, 2010; Norum & Cuno, 2011), there has been a lack of empirical evidence on this topic. The purpose of this study was to expand upon such suggestions in the literature and conduct a study which evaluated the effectiveness of anti-counterfeit educational initiatives in impacting consumers’ perceived knowledge, attitudes, and purchase intentions of fashion counterfeit goods. As such, this section discusses the findings for each of the study’s hypotheses.

Hypothesis 1: There will be a positive, significant change in consumers’ perceived knowledge toward fashion counterfeit goods after viewing the anti-counterfeit educational unit.

The findings from the first hypothesis confirmed a positive, significant change in consumers’ perceived knowledge of fashion counterfeit goods after viewing the anti-counterfeit educational unit, as indicated by the mean difference between participants’ perceived knowledge reported in Phase I and Phase II of the study. As indicated by the results analyzed after Phase I, participants exhibited a low level of perceived knowledge regarding the fashion counterfeit phenomenon. These findings concur with those reported by Dickson (2000), who found that overall, consumers have a low level of perceived knowledge regarding socially responsible
business practices in the apparel and textile industry, as well as Marckett and Shelley (2009) who revealed that consumers have a lack of knowledge regarding the counterfeiting phenomenon. Within this study, participants reported a lack of familiarity with the fashion counterfeit industry. This suggests that at Phase I of the study, participants were unfamiliar with the negative connotations associated with fashion counterfeit goods and illicit activities, such as terrorism, child labor, and drug cartels. Such findings lend support to Ha and Lennon (2006), who stated, “Most students are unaware of the link between terrorism and counterfeit product sales and are moved by that knowledge” (p. 312).

Upon completion of Phase II, participants held a significantly higher perception of knowledge toward fashion counterfeit goods. Participants reported being more familiar with and more knowledgeable about the fashion counterfeit industry in general, as well as being more familiar with the current efforts to stop fashion counterfeiting. This suggests that the anti-counterfeiting educational unit was effective in heightening participants’ awareness of issues associated with the counterfeit industry and current anti-counterfeiting educational campaigns in the media. As defined by Bruck (1985), perceived knowledge refers to an individual’s degree of confidence in his or her own knowledge. Therefore, it is suggested that the study’s participants exhibited a stronger degree of confidence in their knowledge toward the fashion counterfeit industry after being educated about the reported statistics associated with fashion counterfeit goods. As presented within the anti-counterfeiting unit, such statistics that may have increased participants’ perceived knowledge included estimated dollar loss to American companies from counterfeit products, estimated annual loss in tax revenues due to counterfeiting, and number of jobs lost due to intellectual property theft.
These results also speak to Hanzae and Ghafelhabashi (2012) findings, in which it was reported that consumers with higher levels of product knowledge have a stronger capability of evaluating counterfeit products more accurately. Therefore, after being exposed to an anti-counterfeiting educational unit that provides a guideline for spotting counterfeit merchandise, consumers may have a stronger capability to distinguish a counterfeit fashion good from a legitimately branded fashion good.

For firms operating in the fashion industry, these findings suggest it is plausible to increase consumers’ perceived knowledge of fashion counterfeit goods through anti-counterfeit educational efforts. Educational techniques, which communicate the reported facts and negative phenomena associated with fashion counterfeit goods, may help consumers evaluate such goods more effectively and therefore, exhibit a stronger ability to distinguish a counterfeit good from a legitimate good. Such educational efforts might also encourage consumers to purchase fashion goods from genuine firms in authorized retail settings, as opposed to purchasing from unidentified or illegitimate retailers claiming to sell genuine goods for a fraction of the price.

For educators involved in sustainable and socially responsible apparel issues, these findings indicate that consumers are responsive to anti-counterfeit education. Educators should be advised to coordinate educational units, which heighten consumers’ awareness of the reported statistics and negative conditions associated with the fashion counterfeit industry. Such educational material will not only enhance consumers’ perceived knowledge, but it may also dissuade consumers from engaging in fashion counterfeit purchasing behavior.

While anti-counterfeit education was found to significantly impact consumers’ perceived knowledge, findings from the study also indicated a significant change in consumers’ attitudes
toward fashion counterfeit goods. Below, findings related to the second hypothesis are addressed and implications pertaining to participants’ attitudes are provided.

**Hypothesis 2:** There will be a negative, significant change in consumers’ favorable attitudes toward fashion counterfeit goods after viewing the anti-counterfeit educational unit.

The findings from Phase I and Phase II of the study confirmed a negative, significant change in participants’ favorable attitudes toward fashion counterfeit goods, thus supporting Hypothesis 2. These results support Norum and Cuno (2011) and Koklic (2011), who suggested that consumer education might be one way to influence attitudes toward fashion counterfeit goods. For example, after viewing the anti-counterfeit education unit, participants reported that they would not be as proud to own a fashion counterfeit good, nor would they be as inclined to buy a fashion counterfeit good even if no one could tell it was a counterfeit. Also evident in Phase II of the study, participants reported a lower likeability of counterfeits, as well as an increased feeling that purchasing fashion counterfeit goods is wrong. While Kim and Karpova (2010) found that consumers might not view purchasing fake fashion goods as a serious dishonest and irresponsible action, findings from this study suggest that anti-counterfeit education has the ability to shape consumers’ attitudes by impacting their views on the morality of purchasing fashion counterfeit goods.

As part of this study, the anti-counterfeit educational unit was developed to address the negative implications of counterfeit purchasing behavior. As noted in Chapter 2, Ha and Lennon (2006) suggested that education may have the ability to change consumers’ views on fashion counterfeit goods if the negative aspects of counterfeit product consumption are addressed. As such, the anti-counterfeit educational unit used in this study focused on presenting impacts associated with loss in tax dollars for public projects and funding, as well as health and safety
hazards due to substandard materials being used in the production of fashion counterfeit goods. Further, negative impacts on society were also addressed in the educational unit, such as issues related to the exploitation of workers in fashion counterfeit producing factories and the use of proceeds from fashion counterfeit sales to fund drug cartels and terrorist activities.

After viewing such content presented in the anti-counterfeit unit, participants reported a stronger feeling that fashion counterfeit goods hurt companies that manufacture the legitimate product, as well as stronger feelings that fashion counterfeit goods hurt the US economy. In addition to a reported increase in participants’ beliefs that those who manufacture fashion counterfeit goods are committing a crime, participants also reported an increased belief that those who buy fashion counterfeit goods are committing a crime. While Ha and Lennon (2006) explained that counterfeiting is a criminal activity, they suggested that consumers may not see fashion counterfeit purchasing as an unethical activity. However, the findings of this study suggest that anti-counterfeit education may have the ability to shape consumers’ attitudes towards the legality of purchasing fashion counterfeit goods.

For firms operating in the fashion industry, these findings indicate that anti-counterfeit education, which communicates negative impacts that the counterfeiting industry has on the economy, consumers, and society, has the ability to impact consumers’ attitudes toward fashion counterfeit goods. Due to the confirmed findings of this study, it is suggested that anti-counterfeit education may enable consumers to find fashion counterfeit goods less desirable. Also considering implications from previous studies, in which theoretical models suggest that attitudes shape intentions and intentions shape consumer behavior (Koklic, 2011; Phau et al., 2009), such educational efforts might discourage consumers from engaging in counterfeit purchasing behavior.
Findings from this study are also relevant to educators focusing on areas of social responsibility. As seen from participants’ increased beliefs that those who manufacture and those who purchase fashion counterfeit goods are committing a crime, the findings suggest that anti-counterfeit education may enable consumers in understanding that the counterfeiting phenomenon is not a victimless crime. As such, educators should focus on developing anti-counterfeit units, which expose consumers to the reported criminal activity associated with the fashion counterfeit industry, as well as the negative implications to the US economy and genuine fashion retailers. Such an educational program has the ability to influence consumers’ attitudes by altering consumers’ views on the morality of purchasing fashion counterfeit goods. This lends support to findings by Koklic (2011), in which it was implied that increasing the perception of consequences for others (i.e., moral intensity) might prove an effective strategy for changing an individual’s attitudes, and thus managing the demand of fashion counterfeit goods. As such, it is suggested that anti-counterfeit education not only has the ability to impact attitudes, it may also be capable of impacting demand of fashion counterfeit goods.

In addition to the significant findings between anti-counterfeit education and consumers’ attitudes, this study also confirmed significant findings between anti-counterfeit education and consumers’ purchase intentions. Such findings and associated implications, as they relate to the third hypothesis of this study, are described below.

Hypothesis 3: There will be a negative, significant change in consumers’ purchase intentions of fashion counterfeit goods after viewing the anti-counterfeit educational unit.

Given the difference in mean scores reported at Phase I and Phase II of the study, Hypothesis 3 was supported, meaning that the anti-counterfeit educational unit was effective in deterring consumers’ counterfeit purchase intentions. In Phase II, participants reported that they
were not as likely to buy fashion counterfeit goods for their own use, nor were their purchase intentions of fashion counterfeit goods as likely in the future. Participants also indicated that they intend to exert less effort in purchasing fashion counterfeit goods in the future.

As seen by the evident decrease in consumers’ purchase intentions in Phase II, the findings of this study lend support to Norum and Cuno’s (2011) implication that educators can discourage the purchase of counterfeit goods by educating students about the dangers associated with counterfeiting. Drawing from this suggestion, the anti-counterfeit educational unit was devised to communicate such dangers by impacting participants’ perception of risk associated with fashion counterfeit goods. For example, participants viewed an ABC News segment with Valerie Salembier of Harper’s Bazaar reporting on the active ingredients found in counterfeit fragrances. Such ingredients identified through laboratory testing include bacteria, anti-freeze, and urine (Leamy & Weber, 2010). By informing participants of the hazardous substances found in fashion counterfeit fragrances, it is plausible that participants’ perception of risk towards fashion counterfeit goods was impacted. As such, it is suggested that the effectiveness an anti-counterfeit educational unit has in altering consumers’ intentions to purchase fashion counterfeit goods may be attributed to the unit’s ability to influence consumers’ perception of risk.

For firms operating within the retail fashion industry, the findings of this study provide relevant implications. For example, the findings lend support to de Matos et al. (2007), who implied that consumers might be dissuaded from purchasing counterfeit goods if perceived risk is at the core of anti-counterfeit campaigns. Retail fashion firms should respond to this implication by focusing their anti-counterfeit educational tools on the identified health risks associated with fashion counterfeit goods. By elevating consumers’ perception of risk to one’s
self through anti-counterfeit education, it is suggested that consumers may be less inclined to
engage in fashion counterfeit purchasing behavior.

In addition, findings associated with the anti-counterfeit educational unit are relevant to
educators with a focus on areas of social responsibility. For example, since Ha and Lennon
(2006) revealed that consumer concern toward the consequences of fashion counterfeit
purchasing is a perceived risk factor and negatively related to purchase intent, the educational
unit used in this study focused on increasing perceived risk by deepening participants’ concern
toward the consequences others face as a result of purchasing fashion counterfeit goods. Such a
focus was facilitated by informing participants of the “Six Primary Reasons Why You Should
Not Purchase A Fake” as developed by the International Anti-Counterfeiting Coalition. Within
this developed content, participants were informed that purchasing fashion counterfeit goods
continues to fund the counterfeit industry, and therefore, such money continues to fund child
labor, the exploitation of workers in counterfeit manufacturing facilities, organized crime, drug
trafficking, and terrorist activity. As seen from the decrease in consumers’ purchase intentions in
Phase II, educators should incorporate similar content that communicates the consequences
society faces because of the sale of fashion counterfeit goods. Incorporating a similar anti-
counterfeit educational focus implies that consumer concern towards societal consequences may
be elevated. This not only suggests that consumers’ intentions to purchase fashion counterfeit
goods may decrease; it also implies that anti-counterfeit education may have the ability to reduce
consumer engagement in actual counterfeit purchasing behavior.
Contributions to Theory

Tricomponent Attitude Model

As previously discussed in Chapter 2, the three components of the Tricomponent Attitude Model align closely with the variables selected for this study. Specifically, the cognitive component translated as consumers’ perceived knowledge toward fashion counterfeit goods, the affective component translated as consumers’ attitudes toward fashion counterfeit goods, and the conative component translated as consumers’ purchase intentions of counterfeits. While it is evident that the components within the model share a theoretical interconnectedness among each other, the findings of this study further developed the magnitude of this interconnectedness as it pertained to fashion counterfeit goods. As hypothesized and verified in Chapter 4, the anti-counterfeit educational unit had a significant impact on all three of the variables examined in the study. Therefore, the significant changes observed among the model’s cognitive, affective and conative components in Phase II, indicate that the variables of the model were relevant in examining the parameters of this study. As such, it is suggested that the Tricomponent Attitude Model is an appropriate model for future studies examining the interaction between anti-counterfeit education and consumers’ perceived knowledge, attitudes, and purchase intentions of fashion counterfeit goods.

Theory of Reasoned Action

Within the realm of fashion counterfeit goods, previous studies have utilized the Theory of Reasoned Action (TRA) as a theoretical foundation (Koklic, 2011; Phau et al., 2009). Phau et al. (2009) indicated that the attitude construct is often used as a predictor of consumer intentions and behaviors. According to Schiffman and Kanuk (2010), “the Theory of Reasoned Action
(TRA) model represents a comprehensive integration of attitude components into a structure that is designed to lead to both better explanation and better predictions of behavior” (p. 253). This suggests that TRA is useful in applying significant findings of consumers’ attitudes and purchase intentions towards implications of actual behavior. Within this study, TRA provided a theoretical basis for examining consumers’ attitudes and purchase intentions of fashion counterfeit goods, and thus, drawing conclusions about consumer engagement in actual fashion counterfeit purchasing behavior. For example, consumers reported holding less favorable attitudes and a decreased intention to purchase fashion counterfeit goods after being exposed to the anti-counterfeit educational unit. With a decreased likeability and willingness to purchase such goods in the future, the theoretical assumptions of TRA were utilized to imply that anti-counterfeit education, which impacts consumers’ attitudes and purchase intentions, may dissuade consumers from engaging in actual fashion counterfeit purchasing behavior. As such, TRA is an appropriate theoretical model for future studies examining the effectiveness of anti-counterfeit education on attitudes and purchase intentions of fashion counterfeit goods because of the theory’s capability to draw behavioral implications from significant attitudinal and purchase intention findings.

**Theory of Marketing Ethics/Hunt-Vitell Model**

The findings of this study also contribute to the Theory of Marketing Ethics/Hunt-Vitell Model. The basic premise of the Hunt-Vitell model, as interpreted by Ha and Lennon (2006), is that ethical ideologies impact attitudes, which affect ethical judgments and impact purchase intentions. As stated by Ha and Lennon, “When given the opportunity to purchase fashion counterfeits (an ethical problem), consumers consider the consequences and evaluate the ethical problem including its consequences based on their ethical ideologies” (p. 300). Considering the theoretical underpinnings identified by Ha and Lennon, the anti-counterfeit educational unit in
this study was developed with the intention of presenting fashion counterfeit goods as an ethical problem. By utilizing the Hunt-Vitell model as a theoretical foundation, the unit was also developed to make consumers think more deeply about the consequences associated with purchasing fashion counterfeit goods, as a means to impact consumers’ attitudes and purchase intentions of such goods. As seen by the unit’s effectiveness in altering consumers’ attitudes and purchase intentions of fashion counterfeit goods, it is suggested that the Hunt-Vitell Model is a useful theoretical foundation for future studies examining anti-counterfeit educational techniques. As such, the theoretical underpinnings of the Hunt-Vitell model may be useful to educators and retail firms when developing content for anti-counterfeit educational units, campaigns, and advertisements.

**Contributions to Academia**

The findings of this study contribute to the efforts that can be done to shape consumers’ perceived knowledge, attitudes, and purchase intentions of fashion counterfeit goods. Since this study found that anti-counterfeit education increases consumers’ perceived knowledge and decreases favorable attitudes and purchase intentions, educators should respond to these findings and integrate anti-counterfeit educational units within their curricula.

As seen from this study’s significant results, educators should develop units that incorporate the topics included in this study’s anti-counterfeit educational unit. For example, educators should first define what a counterfeit is and explain which types of goods are encompassed within the fashion counterfeit goods term, such as counterfeit apparel, shoes, handbags, fragrances, jewelry, etc. Next, educators should include the “facts on fakes,” such as those reported by *Harper’s Bazaar* and the International Anti-Counterfeit Coalition, and explain the reported statistics associated with the fashion counterfeit industry. For example, educators
could communicate that global trade in illegitimate goods has increased from $5.5 billion in 1982 to currently $600 billion annually (International Anti-Counterfeiting Coalition) and counterfeiting is estimated to cost New York City alone $1 billion lost in annual tax revenue (Harper’s Bazaar). A discussion on the distinction between the various types of counterfeiting in the marketplace, such as deceptive and non-deceptive counterfeiting, is important to include in the unit, as well as any short media clips that identify the magnitude of the counterfeit industry and where one might find counterfeit fashion goods in the marketplace. Such media clips can be found by searching for “counterfeit” in the online video archives for major news providers, such as ABC News and CNN. Educators might also focus on the impact that purchasing fashion counterfeit goods has on others by providing concrete examples of how purchasing such goods supports child labor and terrorist groups, such as Al Qaeda and Hezbollah. To provide students with a greater understanding of the topic, educators should expand on why terrorists seek funding from the sale of counterfeit goods. Educators should also explain how engaging in fashion counterfeit purchasing behavior contributes to negative social consequences, such as the loss of tax money for a city’s schools, hospitals, parks, and other social programs (International Anti-Counterfeiting Coalition). Educators should communicate how fashion counterfeit goods contribute to negative consequences to one’s self, such as negative health risks associated with substandard materials and substances used in manufacturing fashion counterfeit goods. Lastly, a discussion on how to distinguish a genuine fashion good from a fashion counterfeit good, as well as an acknowledgement of current anti-counterfeit educational campaigns in the media, such as Harper’s Bazaar “Fakes are Never in Fashion” campaign, should be incorporated within such educational units.
Although this study focused on counterfeit consumption within the fashion industry specifically, educators from all disciplines should incorporate anti-counterfeit education within their courses, as product counterfeiting is an area of social responsibility with which all educated consumers should be familiar. While previous studies, such as Norum and Cuno (2011) and Kim and Karpova (2010), have only suggested anti-counterfeit education as one solution to the growing problem of fashion counterfeit consumption, this study contributes to academia by confirming the effectiveness of such educational techniques.

Contributions to the Industry

In addition to this study’s relevance to educators, the findings of this study are also relevant to the work of government officials, fashion retailers, and anti-counterfeiting groups. Such organizations, which continually work to dissuade consumers from purchasing fashion counterfeit goods, will find value in investing their resources in developing and implementing anti-counterfeit educational campaigns and advertisements. As such, the findings of this study provide direction for how effective anti-counterfeit educational techniques should be structured. For example, this study implies that providing participants with factual knowledge of the counterfeit industry, such as definitions and reported statistics, is a valuable educational component that can impact consumers’ perceived knowledge. The study’s findings also indicate that informing consumers about the negative impacts and potential harm that purchasing fashion counterfeit goods has on the general public, genuine fashion brand owners and designers, factory workers, and consumers, is a viable educational strategy to influence consumers’ attitudes and purchase intentions of fashion counterfeit goods. Therefore, specific segments of this study’s anti-counterfeit educational unit, such as those that identify the many parties that are harmed in
the production and consumption of fashion counterfeit goods, could be incorporated within industry campaigns and advertisements.

While fashion industry campaigns and advertisements might not be able to deliver as much content as was delivered in this study’s anti-counterfeit educational unit, government officials, fashion retailers, and anti-counterfeiting groups can focus on utilizing specific segments from the anti-counterfeit educational unit that align most closely with the objectives of the company’s campaign or advertisement. For example, government officials might want to focus their educational efforts on the lawfulness and morality consumers’ perceive towards the fashion counterfeit industry. They could do this by creating a campaign that explains why purchasing a fashion counterfeit good is deemed unethical. An image of a child laborer in a fashion counterfeit manufacturing facility with a caption that states, “This is just one reason why purchasing fashion counterfeit goods is an unethical activity” might prove an effective way of educating consumers by impacting their perceived knowledge, attitudes, and purchase intentions of fashion counterfeit goods.

On a similar note, retailers in the fashion industry might want to focus their educational efforts on the negative social consequences associated with the fashion counterfeit industry. For example, an advertisement might show an image of a large group of American citizens who are unemployed and downtrodden. Beneath the image, a section of text that explains how the fashion counterfeit goods industry eliminates job opportunities could be included, while the caption above the image might read, “750,000: The number of jobs lost due to intellectual property theft. Could your counterfeit purchases have contributed to this number?” By integrating negative social consequences into their anti-counterfeit advertisements and making consumers think directly about their own actions, retailers might discover such an educational strategy effective in
altering consumers’ perceived knowledge, attitudes, and purchase intentions of fashion counterfeit goods.

In addition, anti-counterfeiting coalitions and groups might want to focus their educational efforts on the linked relationship between the sale of fashion counterfeit goods and terrorist activity. Such groups could do this by creating a campaign that reveals former operations funded through the sale of counterfeit goods. For example, an advertisement could display an image of the 2004 Madrid Train bombing with a caption that states, “A senseless act of terror. 191 deaths. Funded by the sale of counterfeit merchandise.” Another campaign might display an image of a recovered Al Qaeda terrorist training manual with a caption explaining that the manual calls for the sale of counterfeit goods as one way to raise funds for terrorist operations. As a means to make consumers think more deeply about the subject and how their actions can impact others, the headline above the image could read “Is it possible that the proceeds from your counterfeit handbag are funding terrorist activity?”

By incorporating such content into educational campaigns and advertisements, it is suggested that consumers may begin to think more deeply about their own actions and discover how counterfeit purchasing behavior negatively impacts numerous entities, including the US economy, conditions for workers who can only find employment in factories producing fashion counterfeit goods, legitimate fashion retailers, and even consumers who purchase fashion counterfeit goods. Incorporating such content also suggests that consumers’ perceived knowledge, attitudes, and purchase intentions of fashion counterfeit goods might be influenced, which therefore, indicates that anti-counterfeit educational campaigns and advertisements may have the ability to dissuade consumers from engaging in counterfeit purchasing behavior. As such, the implications of this study and provided direction for anti-counterfeit educational units.
will prove useful to government officials, anti-counterfeiting organizations, and fashion industry executives who have a vested interest in developing educational tools that effectively resonate with consumers.

**Implications of Study**

The most significant finding of this study was the observed effectiveness of anti-counterfeit education as it relates to consumers’ perceived knowledge, attitudes, and purchase intentions of fashion counterfeit goods. Also significant in this study, the findings provide implications for deterring the demand of fashion counterfeit goods. By expanding upon implications of Norum and Cuno (2011), which suggested that influencing attitudes and purchase intentions might be necessary to deter demand, this study sought to deter demand by influencing such constructs through anti-counterfeit education.

After viewing the anti-counterfeit educational unit, participants reported that they were: more familiar with and knowledgeable about the fashion counterfeit industry, found fashion counterfeit goods less likeable, exhibited a stronger belief that those who manufacture and purchase fashion counterfeit goods are committing a crime, and were less likely to purchase fashion counterfeit goods in the future. As such, the findings of this study lend support to previous implications, such as those of Norum and Cuno (2011), and indicate that anti-counterfeit education may be an effective means to deter demand of fashion counterfeit goods. Referring to Norum and Cuno (2011), who stated, “If deterring consumer demand is one way to help solve the problem, then greater attention need to be paid to educational content” (p. 39), findings from this study are indicative to all entities with a vested interest in resolving the global problem of fashion counterfeiting. As such, educators, government officials, fashion retailers, and anti-counterfeiting groups may have the ability to alleviate this global problem if they focus
their efforts on exposing consumers to anti-counterfeit educational units, campaigns, and advertisements.

**Limitations**

There were several limitations apparent in this study. A convenience sample was selected due to the nature of the study and time constraints involved with scheduling Phase I and Phase II course visits. Further research should be conducted utilizing a random sample to verify if the findings can be generalized among a more diverse population. A sample that is more heterogeneous in terms of gender, age, ethnicity, educational background, and amount of money spent on fashion goods each month would be beneficial to confirm generalization among the findings.

The one-group pretest posttest design is also subject to threats of internal validity. Future research could be conducted utilizing the same pretest-posttest design, but with a second group acting as a control group to minimize threats to internal validity. Additionally, the time allotted between Phase I and Phase II could be increased to minimize timing threats to validity, however, the time interval should not be extensively increased that threats to history and maturation are elevated. While Morgan, Klein, and Selbst (2004) acknowledged that a research design attempting to change a behavior pattern or attitude should utilize a short time interval to minimize threats to history and maturation, it would be beneficial to extend the time interval to approximately eight weeks to reduce timing threats to validity. Such an extension in time could lessen any carry-over effects that might increase post-test performance (Laerd Dissertation, 2012), while still considering other threats to internal validity, such as participants becoming more affluent because they are aging (Laerd Dissertation, 2012).
Recommendations for Future Research

While this study gained sufficient empirical evidence on the effectiveness of anti-counterfeit education as it relates to consumers’ perceived knowledge, attitudes, and purchase intention, future research should concentrate more extensively on the necessary subject content within an anti-counterfeit educational unit. For example, future research should place an emphasis on breaking down an anti-counterfeit educational unit to its individual educational topics as a means to determine which educational topics within anti-counterfeit education are most effective toward impacting consumers. While this study suggested that educators should incorporate definitions, reported statistics, tips for spotting a fake, media clips that explain the various forms of fashion counterfeiting, and concrete examples that show the connection between fashion counterfeit goods and child labor, terrorist groups, and health risks, it is evident that anti-counterfeit educational campaigns and advertisements may not be able to include all educational topics/elements. As such, future research should be conducted to assess which of the suggested educational topics are most effective in impacting consumers’ perceived knowledge, attitudes, and purchase intentions. Findings from such research might also be able to indicate the educational topics that must be incorporated within an anti-counterfeit educational campaign or advertisement for it to be deemed effective.

Future research should also investigate the effectiveness of anti-counterfeit education presented through various mediums. Anti-counterfeit educational campaigns and advertisements should be assessed for effectiveness in impacting consumers’ perceived knowledge, attitudes, and purchase intentions through print, social, and broadcast mediums. For print and social mediums, research should investigate how much educational content, such as number of images and/or number of educational topics presented, is needed to have a significant impact on
consumers. For broadcast media, researchers should focus on investigating anti-counterfeit campaigns and advertisements for length of time that is needed to have a significant impact on consumers. For example, various campaigns could be tested in 30 second, 45 second, and 60 second intervals to determine which length of time, if any, is capable of influencing consumers’ perceived knowledge, attitudes, and purchase intentions of fashion counterfeit goods.

Once these future research topics are examined, anti-counterfeit coalitions, government officials, and fashion industry executives alike will have a stronger understanding of the necessary educational topics that must be recognized when formulating an anti-counterfeit educational campaign or advertisement. Such entities will also have a stronger understanding of the various mediums that are most effective for not only reaching consumers, but also impacting consumers’ perceived knowledge, attitudes, and purchase intentions of fashion counterfeit goods.
REFERENCES


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APPENDIX A: Phase I & II Instruments
Consumers’ Knowledge, Attitudes, & Purchase Intention of Fashion Counterfeit Goods: An Exploration

Questionnaire Cover Sheet

• Remember, your participation is voluntary and you may decline to answer any of the following questions. Your responses are completely anonymous.

• Take your time and give each item careful consideration.

• On the first page of questions, please indicate your response to each question by circling the number that best reflects your feelings and attitudes.

• On the second page, please place an “X” in the box that best answers each question.

Thank you for your participation!

ID #: ______________________

PLEASE PRINT YOUR NAME HERE: ________________________________
**PART 1:** Please indicate your level of agreement with each of the following statements by circling the number that corresponds best with your feelings/attitudes.

1 = Strongly Disagree | 2 = Disagree | 3 = Somewhat Disagree | 4 = Undecided  
5 = Somewhat Agree | 6 = Agree | 7 = Strongly Agree

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<td>I would be proud to own a fashion counterfeit good.</td>
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<td>Fashion counterfeit goods are just as good as designer products.</td>
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<td>I am willing to buy fashion counterfeit goods for my own use.</td>
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PART 2: To help the researcher better understand the characteristics of the research participants, please answer a few questions about yourself.

(For each question, please place an X in the box in front of the most appropriate answer.)

1. What is your sex?
   - Male
   - Female

2. What is your age range?
   - Less than 18 years old
   - 18 – 19 years old
   - 20 – 21 years old
   - 22 – 23 years old
   - 24 – 25 years old
   - 26 years and older

3. What is your year in college?
   - Freshman
   - Sophomore
   - Junior
   - Senior
   - Fifth-year or Graduate

4. Which academic college is your primary degree/major in?
   - College of Agriculture
   - College of Architecture, Planning & Design
   - College of Arts and Sciences
   - College Business Administration
   - College of Education
   - College of Engineering
   - College of Technology and Aviation
   - Other
   - My major is undecided

5. To which racial or ethnic group(s) do you most identify (Mark more than one if applicable)?
   - American Indian or Alaska Native
   - Black or African American
   - Hawaiian or other Pacific Islander
   - Hispanic or Latino
   - Asian or Asian American
   - Non-Hispanic White

6. On a monthly basis, how much (on average) do you spend on new clothes and accessories?
   - Less than $50
   - $51 - $100
   - $101 - $150
   - $151 - $200
   - More than $200

6. Have you ever knowingly purchased a fashion counterfeit good?
   - Yes
   - No
Consumers’ Knowledge, Attitudes, & Purchase Intention of Fashion Counterfeit Goods: An Exploration

Questionnaire Cover Sheet

• Remember, your participation is voluntary and you may decline to answer any of the following questions. Your responses are completely anonymous.

• Take your time and give each item careful consideration.

• On the first page of questions, please indicate your response to each question by circling the number that best reflects your feelings and attitudes.

• On the second page, please place an “X” in the box that best answers each question.

Thank you for your participation!

ID #: ______________________

PLEASE PRINT YOUR NAME HERE:

________________________________________________________________________
Please indicate your level of agreement with each of the following statements by circling the number that corresponds best with your feelings/attitudes.

1 = Strongly Disagree  |  2 = Disagree  |  3 = Somewhat Disagree  |  4 = Undecided
5 = Somewhat Agree  |  6 = Agree  |  7 = Strongly Agree

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<td>Fashion counterfeit goods <strong>do not hurt</strong> the US economy.</td>
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<td>Fashion counterfeit goods <strong>hurt</strong> the companies that manufacture the</td>
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<td>I like fashion counterfeit goods because they demonstrate initiative and</td>
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<td>ingenuity on the part of the counterfeiters.</td>
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<td>People who <strong>buy</strong> fashion counterfeit goods are committing a crime.</td>
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APPENDIX B: Anti-Counterfeit Educational Unit
Anti-Counterfeit Education

Presented by:
Kelby L. Polfer

Department of Apparel, Textiles, & Interior Design
What is a counterfeit?

A counterfeit good is defined as:

An illegal reproduction that appears identical to a legitimate product in appearance, packaging, trademarks, and labeling

(Ang, Cheng, Lim & Tambyah, 2001)
What is a counterfeit?

This unit specifically discusses fashion counterfeit goods. Fashion counterfeit goods can include, but are not limited to the following:

- Handbags/Wallets
- Clothing
- Shoes
- Jewelry
- Sunglasses
- Perfumes/Colognes
- Watches
- Fashion Accessories
The Facts on FAKEs

Since 1982, the global trade in illegitimate goods has increased from $5.5 billion to approximately $600 billion annually (International Anti-Counterfeiting Coalition).

Counterfeiting has been estimated to cost businesses in the United States approximately $250 billion each year (Norum & Cuno, 2011).
The Facts on FAKES

Approximately 5%-7% of the world trade is in counterfeit goods  (International Anti-Counterfeiting Coalition)

U.S. companies suffer $9 billion in trade losses due to international copyright piracy  (International Anti-Counterfeiting Coalition)

Counterfeiting is a problem that has grown over 10,000% in the past two decades, fueled in part by consumer demand  (International Anti-Counterfeiting Coalition)
The Facts on FAKES

According to Harper's Bazaar:

$20 Billion: Estimated loss to American companies from counterfeit products

$1 Billion: Estimated annual loss in New York City tax revenues due to counterfeiting

750,000: Number of jobs lost due to intellectual property theft in the United States

10%: Estimated percentage of fakes among all goods produced worldwide every year
Counterfeits in the Marketplace

Deceptive Counterfeiting: Consumers believe they have purchased a genuine product, when in fact, the product is fake (Grossman & Shapiro, 1988)

Non-Deceptive Counterfeiting: Refers to situations where consumers are fully aware that they are buying a fake product at the time of purchase (Grossman & Shapiro, 1988)
Counterfeits in the Marketplace

Nightline from ABC News: Faking It: Knockoff Luxury Goods

So, Why Are Counterfeits Bad?

6 primary reasons why you should not engage in purchasing fakes:

1. Counterfeiting is illegal and purchasing counterfeit products supports illegal activity.

2. Counterfeiters do not pay taxes meaning less money for your city’s schools, hospitals, parks and other social programs.

3. Counterfeiters do not pay their employees fair wages or benefits, have poor working conditions, and often use forced child labor.

4. Counterfeit goods are often made using cheap, substandard, and dangerous components that put the health and safety of consumers at risk.

5. The profits from counterfeiting have been linked to funding organized crime, drug trafficking and terrorist activity.

6. When you purchase a fake, you become part of the cycle of counterfeiting and your money directly support these things you would never want to support.
The Impact of Purchasing Counterfeits:
Supporting Child Labor

Deluxe: How Luxury Lost Its Luster
By: Dana Thomas (2007)

“I remember walking into an assembly plant in Thailand a couple of years ago and seeing six or seven little children, all under 10 years old, sitting on the floor assembling counterfeit leather handbags. An investigator told me... ‘The owners had broken the children’s legs and tied the lower leg to the thigh so the bones wouldn't mend. [They] did it because the children said they wanted to go outside and play.’
Impact of Purchasing Counterfeits: Supporting Terrorism

• Specific terrorist incidents appear to have been funded by counterfeit operations:

• The FBI has compiled evidence that the terrorists who bombed the World Trade Center in 1993 financed their activities with counterfeit textile sales from a store located on Broadway in New York City. (Pollinger, 2008)
Impact of Purchasing Counterfeits: Supporting Terrorism

An investigation, into a shipment of fake goods from Dubai to Copenhagen, suggested that Al Qaeda may be funding itself by trafficking in counterfeit goods:  (IAAC White Paper, 2005)

Danish customs, examined one of the shipping containers and discovered that it contained over one thousand crates full of counterfeit shampoos, creams, cologne and perfume.

- The United Kingdom later revealed that the sender of the counterfeit goods was a member of Al Qaeda.
- This connection was later confirmed by the European Commission’s Customs Coordination Office
Impact of Purchasing Counterfeits: Supporting Terrorism

A raid of a souvenir shop in mid-town Manhattan
• Found flight manuals for Boeing 767s, some containing handwritten notes in Arabic  *(IACC White Paper, 2005)*

A similar raid on a counterfeit handbag shop in New York
• Uncovered faxes relating to the purchase of bridge inspection equipment  *(IACC White Paper, 2005)*

Recovered Al Qaeda terrorist training manuals have stated that the organization recommends the sale of fake goods to raise funds for terrorist operations  *(von Radowitz, 2002)*
Impact of Purchasing Counterfeits: Supporting Terrorism

Raymond Kelly, New York City Police Commissioner, reported that the sale of counterfeit merchandise (mostly pirated CDs) was responsible for funding the 2004 bombing of a Madrid train, an incident that resulted in the deaths of 191 people. (IACC, n.d.; Pollinger, 2008)
Impact of Purchasing Counterfeits: Supporting Terrorism

Connections to the Hezbollah have been reported with counterfeiters based in Los Angeles County. (Pollinger, 2008)

Authorities have found case-specific evidence of these connections in the homes and on the persons of numerous convicted counterfeiters.

- Examples include: Hezbollah flags, tattoos, and pamphlets
Why are Terrorists Seeking Funds from the Sale of Counterfeits?

Terrorist organizations often fund themselves through counterfeiting for a few reasons. (Pollinger, 2008)
- Fast, easy, plentiful cash source
- Counterfeiting and piracy are easy industries to enter
- Allows terrorists to maintain a certain level of anonymity

The profits from counterfeit sales significantly outweigh those of other illegal products (Schenker, 2002)
- While the sales of cocaine might yield an entrepreneurial criminal a 100% profit margin, sales from pirated/counterfeit goods could earn a counterfeiter profits of up to 900%
The Impact of Purchasing Counterfeits: Negative Health Risks

Counterfeit fashion goods, such as counterfeit fragrances, have been associated with severely negative health risks.

What's really in your counterfeit perfume?
http://abcnews.go.com/Video/playerIndex?id=9673851
Educational Campaigns

Global Public Service Ad Campaign

- IACC
- City of New York, Mayor's Office of Special Forces
Educational Campaigns

Harper’s Bazaar

- Fake’s Are Never in Fashion campaign
- Luxury Report
- Annual Anti-Counterfeiting Summits
The Real Deal: How to Spot a Fake

Use 8 tips from Harper’s Bazaar as a guideline to avoid buying counterfeit merchandise:

1. Location, Location, Location
2. The Price is Right
3. Construction Sites
4. Package Deal
5. Spell-check
6. Check the Hardware
7. Read the Label
8. Timely Tips
References


Thank you for your interest in this educational unit!

Questions?
APPENDIX C: Tables for Individual Mean Scores
Table 3

*Means Scores for Items Assessing Perceived Knowledge, adapted from Marcketti & Shelley (2009)*

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<tr>
<th>Questionnaire Item</th>
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<td>M</td>
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<td>M</td>
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<tr>
<td>I am familiar with counterfeiting</td>
<td>4.37</td>
<td>1.91</td>
<td>323</td>
<td>5.95</td>
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<td>I am knowledgeable about fashion counterfeiting</td>
<td>3.41</td>
<td>1.85</td>
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<td>5.35</td>
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<td>I am familiar with the efforts to stop fashion counterfeiting</td>
<td>2.94</td>
<td>1.74</td>
<td>322</td>
<td>5.06</td>
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<td>Questionnaire Item</td>
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<td>I would be proud to own a fashion counterfeit good</td>
<td>2.50</td>
<td>1.39</td>
<td>321</td>
<td>1.94</td>
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<tr>
<td>I would buy a fashion counterfeit good if no one could tell it was counterfeit</td>
<td>3.44</td>
<td>1.69</td>
<td>323</td>
<td>2.55</td>
</tr>
<tr>
<td>I like fashion counterfeits</td>
<td>2.61</td>
<td>1.38</td>
<td>321</td>
<td>1.94</td>
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<td>I will buy a fashion counterfeit good in the next 12 months</td>
<td>2.29</td>
<td>1.36</td>
<td>321</td>
<td>1.75</td>
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<td>There is nothing the matter with purchasing fashion counterfeit goods</td>
<td>2.70</td>
<td>1.50</td>
<td>323</td>
<td>1.94</td>
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*Table 4*

*Means Scores for Items Assessing Attitude, adapted from Marckett & Shelley (2009)*
Table 5

Means Scores for Items Assessing Purchase Intention, adapted from Bian & Veloutsou (2007)

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<th>Questionnaire Item</th>
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<td>I am willing to buy fashion counterfeit goods for my own use</td>
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<td>I often buy fashion counterfeit goods for my own use</td>
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<td>1.34</td>
<td>322</td>
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Table 6

Means Scores for Items Assessing Purchase Intention, adapted from Kim & Karpova (2010)

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<tr>
<th>Questionnaire Item</th>
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<td>1.77</td>
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<tr>
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<td>1.39</td>
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<td>1.68</td>
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