EMPOWERING CONSUMERS AS CAPABLE GUARDIANS TO PREVENT ONLINE
PRODUCT COUNTERFEITING VICTIMIZATION IN THE ATHLETIC FOOTWEAR
INDUSTRY: A ROUTINE ACTIVITY PERSEPCTIVE

By

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ABSTRACT

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E-commerce has given consumers an advantageous medium to shop for brand name consumer products. Criminals have too realized these advantages, and use the criminogenic environment of the Internet to defraud consumers using centuries old schemes – such as product counterfeiting (Newman and Clarke, 2003; OECD, 2008). Research on the role of the consumer in self-protection and guardianship to prevent online product counterfeiting victimization is limited. This exploratory qualitative study applied the guardianship element of Routine Activity Theory (Cohen and Felson, 1979) to explore how members of *independent virtual brand communities* (IVBC) share brand, product, and seller specific knowledge and experiences to learn and educate others on how to differentiate between counterfeit and genuine sellers and products online (before and after making a purchase) – helping the consumer be well-informed when evaluating a product and making a purchasing decision. An IVBC for a leading athletic footwear brand was selected as the data source for a content analysis. Using the three-stage coding process of grounded theory analysis (Corbin and Strauss, 1990), 100 threads were coded and analyzed to assess the key indicators that were most frequently used to distinguish counterfeit and genuine products and sellers, as well as the guardianship potential of the IVBC and its members to serve as a protective factor against this form of victimization online. Findings, limitations, and implications are discussed in depth.

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CHAPTER 1: INTRODUCTION

A counterfeit product is "any good or packaging that bears a trademark that is virtually the same as one registered to an authorized trademark owner (Wilson and Kinghorn, 2014)." The trade in counterfeit products (and the illicit markets in which they operate) is a multibillion dollar crime that affects multiple industries, brands, and products (Staake, Thiesse, Fleisch, 2009). Well-known globally branded luxury and consumer goods are attractive to counterfeiters due to the availability of the means and technology needed to produce high quality and deceptive counterfeits, such as advanced printing and packaging equipment (Staake et al., 2009). In addition, it is now convenient to market and distribute these products through the internet (Staake and Fleisch, 2008, p. 10, 12; OECD, 2008).

Knockoff, counterfeit, and imitation (often used interchangeably, although each have their own meaning) products are problematic for multiple reasons. Consumers may suffer from physical harm due to counterfeit product use, or economic and emotional losses. They are often placed at a disadvantage when shopping online as they may not easily be able to discern whether the product they intend to buy is genuine or a counterfeit. Staake and Fleisch (2008) note the difficulty in assessing the legitimacy of deceptive counterfeits on behalf of consumers. In addition, they note that the number of deceptive counterfeit cases is on the rise, but there is the chance that this number is inaccurate due to potential underreporting (Staake and Fleisch, 2008, p. 12).

With the emergence of e-commerce sites as a preferred shopping avenue, the ability for a consumer to physically verify the authenticity of a product pre and post purchase has been greatly reduced. Deceptive counterfeits are now increasingly prevalent as consumers try to shop for legitimate products online. While shopping from the authorized brand retail website would be

the ideal place to buy genuine products, many consumers often find themselves searching for them on other auction and non-auction sites due to limited product availability. Consumers need to be able to educate themselves on ways to know where to buy legitimate products, and how to verify product and seller legitimacy prior to purchasing a product online, when there is a lack of the ability to have a face-to-face transaction and physically examine the product for legitimacy.

Grossman and Shapiro (1988a) stated that "deceptive counterfeiting can arise only in markets with imperfectly informed consumers," and that "if consumers could immediately and costlessly observe all the attributes of goods available for purchase, it would be impossible for an imitator to pass off a product of inferior quality under a false label (Grossman and Shapiro, 1988a, p. 60)." The internet removes the ability of consumers to physically observe product attributes, making it necessary to understand how consumers are currently being informed and educated on what brand specific product and seller authentication and verification cues they can use when shopping online.

Hollis and colleagues (2015) noted that two indicators that can be used to study product counterfeiting are consumer attitudes towards counterfeiting, and potential target guardians (Hollis et al., 2015). This current research takes this charge. More research on consumer attitudes regarding product counterfeiting should be examined as a first step to developing an in-depth understanding of the "consumer's desires and ability to purchase authentic products," and "knowledge of product authenticity (Hollis, Fejes, Fenoff, and Wilson, 2015, p. 10)." Knowledge of these consumer attitude dimensions allows for researched based prevention and policy measures to be developed.

In an online shopping scenario in which a consumer is deceived into buying a counterfeit product, the consumer is the target/victim, as well as the product itself. As a result, we have to

identify target-guardians (Hollis et al., 2015; Hollis and Wilson, 2014) for consumers as targets, and tools that the consumer can use to prevent purchasing a counterfeit product when shopping online. This research is focused on improving the consumer's ability to recognize a counterfeit product, fraudulent sellers, and rogue websites during the search process prior to making an online consumption choice through facilitating consumer-to-consumer information sharing and feedback (a form of online guardianship). Authenticating and verification information aids in counterfeit detection during the consumer search process and victimization prevention by reducing sales (Heinonen and Wilson, 2012), ultimately reducing or removing the criminal opportunity (Fejes and Wilson, 2013). Deception detection, deterrence, and prevention mechanisms need to be researched and developed in order to empower consumers as guardians, and to be able to make more well-informed purchasing decisions in physical or virtual environments (Xiao and Benbasat, 2011).

Due to the various theoretical insights and contributions from multiple disciplines in the prevention of product counterfeiting, it is useful to outline a research roadmap for this type of exploratory research. This paper begins with an examination of the contextual and definitional issues regarding Intellectual Property (IP) and product counterfeiting. Counterfeit athletic footwear (specifically Jordan brand footwear products), will then be examined to provide a deeper look into the counterfeiting of a specific product and industry that is a hot target for counterfeiters and infringes on multiple intellectual property rights.

The athletic footwear industry and its associated brands face a huge and constantly growing problem posed by the product counterfeiting phenomenon, ranking fifth in total seizures by the U.S Customs and Border Protection agency (U.S CBP, 2015). "Loss of market share, lower profits for diverted goods, loss of brand integrity, growing market appeal for poor quality

imitations, and potential warranty issues for low quality fakes (Hill, 2013)" are just a few of the potential losses and issues that can stem from footwear brands having their products counterfeited. There are some estimates that the market value of the global athletic footwear business could be $84.4 billion by 2018; up from $74.7 billion in 2011 (Bell, 2015). This is a growing business segment that counterfeiters will continue to seek to exploit.

The impact of the internet on the globalization and proliferation of these counterfeit products will be discussed, due to the need for increased consumer awareness and education of product counterfeits and deceptive tactics used online. The American Apparel & Footwear Association (AAFA) has called the ever growing presence of rogue websites "the most pressing problem facing the apparel and footwear industry," due to their ability to assist with intellectual property theft and deceive consumers who are seeking to purchase a genuine product (AAFA). Consumers may come across counterfeit athletic footwear in physical spaces (such as flea markets), or online at auction (ex: Ebay) and non-auction retail sites (ex: Direct-to-consumer and consumer-to-consumer sites) (Xaio and Benbasat, 2011; Heinonen and Wilson, 2012). Consumers need to know how to correctly identify genuine products relative to fakes while routinely shopping online due to the use of sophisticated and deceptive techniques by counterfeiters.

The theoretical framework and research objectives that guide this research will be examined in-depth. Little criminological research has considered the role of the internet user and consumer-to-consumer information sharing in self-protective target hardening and extending guardianship over others to prevent this specific form of victimization in online spaces. The purpose of the current research agenda is to apply the guardianship element of Routine Activity Theory to the prevention of athletic footwear counterfeiting (a popular type of counterfeit

product) deception and victimization online. This will be done by examining the guardianship potential and nature of information seeking and sharing in Independent Virtual Brand Communities on educating fellow community members on how to verify the legitimacy of sellers and products online pre and post purchase.

Studies on techniques of Situational Crime Prevention provide promise for preventing this specific type of e-commerce crime (Newman and Clarke, 2003). Situational Crime Prevention (SCP) (Clarke, 1997) is a framework that can reduce criminal opportunity and prevent victimization by increasing the risk and effort, reducing rewards and provocations, and removing excuses that are associated with product counterfeiting (Heinonen and Wilson, 2012). Its opportunity reducing techniques have been applied successfully applied to reducing various criminal opportunities in online settings (Newman and Clarke, 2003; Hinduja and Kooi, 2013). The exact role of, and platforms for, the consumer in applying these techniques has lacked additional scholarly attention.

Independent virtual brand community members can extend guardianship to control crime and prevent product counterfeiting victimization through information and experience seeking and sharing in discussion forums. These are online communities full of users with specific brand and product knowledge sharing information and experiences that can be used to make well informed product purchases. Physical community members are able to increase capable guardianship and provide natural surveillance, making it theoretically possible that virtual communities and users will be able to do the same (Clarke, 1997; Newman and Clarke, 2003). One advantage that online communities offer is the ability for consumers to become educated pre and post purchase on products they would normally be able to physically investigate in person.

Consumers providing feedback on experience goods through detailed product reviews on forums is an example of this education (Huang, Lurie, Mitra, and 2009). This feedback can be useful in informing and training them on what cues and indicators make a genuine product or counterfeit (Xiao and Benbasat, 2011). In addition, warning consumers of potential sellers of counterfeit products will heighten their awareness when shopping online (Xiao and Benbasat, 2011). The potential of these virtual communities to foster guardianship, education and information sharing between consumers is discussed.

Prior criminological research has shown that organized criminals use online forums to find and communicate with like-minded individuals, share and exchange information, and sell illicit products (Holt and Lampke, 2010; Soudijn and Zegers, 2012). Forums exhibit great qualities that are advantageous for offender groups: no physical contact is required; anonymity can be maintained if wanted; and they are not bound to time and space dimensions or user capacity requirements (Soudijn and Zegers, 2012). If criminals are able to exploit this type of online communication for their criminals benefits, then it is very possible that consumers can (and already are) use online forums to prevent various forms of crime victimization through information sharing with like-minded individuals.

NikeTalk, an independent virtual brand community for Nike and Jordan brand footwear, will be will be explored for guardianship potential and to better understand the segment of consumers that are most likely to encounter counterfeit athletic footwear in the e-commerce market. The fact that this site's users are dedicated to purchasing a popular product and brand (Nike brand footwear) that is often a hot target of theft (Clarke and Eck, 2005) and counterfeiting (Wisbey, 2010), and because shopping online is viewed as a risky routine behavior (Reyns, 2013), these consumers may find themselves in a situation in which they may be unable to tell if

a product is counterfeit or if a website and seller is legitimate. They need to be able to go online and find legitimate products when the ability to physically assess sellers and products is removed. This IVBC has subforums specifically dedicated to "Price/Fake Check" inquiries by members and guest that can be utilized to share and gather information pre and post purchase to assess products and sellers. Open source data collection and analytical methods used to qualitatively analyze the textual data and results will be discussed, as well as study limitations and final conclusions.

Narcum and Coleman (2015) noted the need to focus on consumer's current perceptions of item authenticity and their ability to distinguish genuine items from counterfeit versions when shopping online. One reason is that consumers need to be better educated on which "red flags" indicate a product may be counterfeit (Mavalanova and Benbunan-Fich, 2010). Knowing which "red flags" various segments of consumers for different brands and products are using to try and differentiate genuine and counterfeit products is a needed starting point for brands and marketplaces to better educate their consumers, in hopes of curbing the demand for counterfeit products through a reduction of sales (and victimization). Research from a consumer-centered perspective (Amine and Magnusson, 2007), consumer-search perspective (Gentry et al., 2006; Staake et al., 2009, p. 335), and consumer-focused approach (Bazerman, 2003; Xiao and Benbasat, 2011) are necessary to better understand and aid the consumer search and product authentication (Fejes and Wilson, 2013) processes. Approaching the situation from these perspectives allows insights that are beneficial to Criminal Justice practitioners and policymakers, industry, consumers and the consumer behavior and marketing fields. The consumer is able to learn how to make better informed purchasing decisions, and marketers gain insight into the factors consumer use to make purchasing decisions (Bazerman, 2003; Xiao and

Benbasat, 2011). These insights will work to keep the e-commerce strong, legitimate, and

growing by reducing the consumer's susceptibility to counterfeit deception online. Future

research and policy implications conclude the research.

CHAPTER 2: LITERATURE REVIEW

2.1: Intellectual Property Theft and Product Counterfeiting: **Scale, Scope, and Threat**

The National White Collar Crime Center defines intellectual property (IP) as "any product of the human intellect that is deemed unique and potentially valuable in the marketplace, including an idea, invention, literary creation, unique name, business method, industrial process, chemical formula, and computer program (National White Collar Crime Center, 2004)." Intellectual property has been called the "cornerstone of economic growth, job creation, and American competiveness" (Schornstein, 2013), with almost all industries having some form of involvement with IP (Schornstein, 2013). It has been a driving force for crime and target of theft due to high profit potential (Felson and Boba, 2010). IP theft can occur in various forms, such as contracted manufacturers stealing proprietary design plans and technology for various products, and then using those to create unauthorized replicas or knock-offs of the legitimate branded product.

Due to the importance of IP to economic innovation and its sociocultural impact, patent, trade secret, copyright, and trademark laws have been developed and enforced to protect the owners of intellectual property rights. Each of these laws have different applications and offer various protections. Patents are used to protect new and useful inventions, discoveries, or processes. Inventors may place a patent on a plant, design, or utility (process). Copyright laws protect authors and originators of original and unique works, and grants exclusive reproduction and distribution rights to the rights owner.

Trade secret rights protect confidential corporate, military, and government proprietary information from being stolen and used to create unfair competitive and economic advantages. An example would be a unique formula a country has researched and developed. Trademarks are

distinctive names, markings and logos used to distinguish a brand and help customers identify genuine products in a marketplace (Schornstein, 2013; NW3C, 2004). A known example is the Nike Swoosh logo. These laws are important because they promote continued creativity and innovation by allowing individuals to protect and profit off their work for a certain period of time, and protect against illegal market competition practices.

Product counterfeiting is a specific form of intellectual property (IP) theft (Heinonen, Spink, and Wilson, 2014) and trademark infringement (World Intellectual Property Organization). An illicit activity that infringes on the IP rights of material goods (Heinonen and Wilson, 2012; Wilson and Fenoff, 2014), almost all industries and products are subject to counterfeiting (OECD, 2008). Examples include infant formula, athletic footwear, or even airplane parts. Described as the "crime of the 21st century" (Denis, 2014), it is a criminal scheme dating back well over 300 years ago (Chaudhry and Zimmerman, 2009; 2013). While figures regarding the scope and scale of the crime are estimates at best, it is clear that this is a lucrative phenomenon that seems to be growing daily (Heinonen and Wilson, 2012; Heinonen et al., 2014; Spink et al., 2013).

The victims of counterfeit goods market are consumers, the home country (the country where the company is headquartered and receives tax revenues), host country (the foreign country and international market where the counterfeits are being sold), Intellectual property rights (IPR) owners (such as brand owners), wholesalers, and retailers (Chaudhry and Zimmerman, 2009; 2013). Consumers can be damaged from poor product performance and injury as result of using a counterfeit product (Chaudhry and Zimmerman, 2013). Even worse, products such as counterfeit and substandard pharmaceuticals or food can be lethal. Brands can face harm to their bottom line and reputation, governments suffer from losses to tax revenue, and

national security can be put at risk. Brands lost $350 million to counterfeiting and piracy in 2013 (MarkMonitor, 2015). Job growth can even be impacted (Wilson and Kinghorn, 2014). Along with these harms, previous research has found links between product counterfeiting, organized crime, and even terrorism (Sullivan, Chermak, Wilson, Freilich, 2014; Chaudhry and Zimmerman, 2013).

Quantifying the economic impact of IP theft and infringement is extremely difficult (GAO, 2010; Spink and Fejes, 2012). With so many different products, industries and countries being involved in this phenomenon, coming up with a legitimate methodology that can account for the total economic impact becomes almost impossible (Schornstein; 2013; Spink and Fejes, 2012; GAO, 2010; Chaudhry and Zimmerman, 2013). It is estimated that product counterfeits make up about 5–7% of the global trade (International Chamber of Commerce; Wilson and Chermak, 2012), with estimates of annual monetary damages ranging from $200 billion per year (OECD, 2008; Schornstein, 2013) to $1.77 trillion (IACC; BASCAP, 2011).

While many have considered this to be a white-collar crime, recent research has shown that it may be best to classify product counterfeiting as a specific and distinct crime event, and devise preventative measures to address the issue as such (Heinonen, Spink, and Wilson, 2014). A recent study found that product counterfeiting may simultaneously exhibit properties that are both consistent and inconsistent with traditional white-collar crime incidents, showing that this is a crime that should not be broadly classified (see: Heinonen, Spink, and Wilson, 2014).

2.1.1: Supply and Demand of Counterfeits

Research on product counterfeiting is often addressed from the supply side or the demand side (Hollis et al., 2014; OECD, 2008). The supply side has been the focus of limited research, but it is important to note that no supply will exist where there is no demand (Bloch, Bush,

Campbell, 1993; Shultz and Saporito, 1996; Hoe et al., 2003). The current research will address

this phenomenon from the demand side, which has received majority of the research attention

(Hollis et al., 2014; Staake et al., 2009). Any exploration that focuses on the role of a consumer

or individual in this phenomenon will ultimately work towards reducing the demand side of

counterfeiting.

2.1.2: Deceptive and Non-Deceptive Counterfeits

An important distinction to make is in regards to the purchasing intent of the consumer.

Prior research suggests that consumer demand for luxury brand products and consumer goods

enables the growth of the counterfeit trade (Wall and Large, 2010). Distinguishing between those

who are knowingly buying counterfeits opposed to those who were deceived into unknowingly

buying them allows for better responses to be developed.

An examination of the literature reveals that the non-deceptive counterfeiting market

(Wall and Large, 2010; Prendergast, Chuen, Phau, 2002; Hoe et al., 2003; Grossman and

Shapiro, 1988b) has been discussed and researched in depth more than deceptive counterfeiting

market (Commuri, 2009; Grossman and Shapiro, 1988a; Mavlanova, Fich, Kumar, 2008).

Commuri (2009) notes that genuine-item consumers have been of little attention to research,

although their loyalty and interest in a brand can be reduced if they perceive a brand is heavily

counterfeited and the products will not provide the expected utility.

Non-deceptive counterfeiting consumers often know (or strongly suspect) when they are

purchasing a counterfeit (Grossman Shapiro, 1988b, p. 80). This is also referred to as the

secondary market (OECD, 2008). Non-deceptive counterfeits are dangerous to consumers

(although they may not be aware), offer some utility to consumers, and have a minimal impact

on brand power. (Green and Smith, 2002). Grossman and Shapiro (1988b) defined the deceptive

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counterfeiting market as one in which "consumers cannot readily observe the quality of the goods that they purchase, nor can they easily distinguish copies from authentic merchandise (Grossman and Shapiro, 1988b, p. 80)." Sold in the primary market (OECD, 2008), deceptive counterfeits are sold and marketed with the intent to deceive unsuspecting consumers into buying what they believe to be genuine products. They harm brands and governments, and consumers can face health or safety risks from use (Green and Smith, 2002, p. 90).

Deceptive counterfeiting is where the reality of victimization begins to be seen. Victims of deceptive counterfeiting can be classified as genuine-item consumers based on their intention to purchase a genuine product (Commuri, 2009). Consumers that value authentic products over fake products are most often unable to distinguish them from counterfeits (Nguyen and Gunasti, 2011). Due to limited awareness, counterfeiters are able to exploit potential consumers by duping them into buying a product they deem as genuine. A better understanding of deceptive counterfeiting will help us understand the different types of victims, why some products are able to deceive more than others, and devise ways in which individuals can become better with identifying and preventing deception and victimization in both physical and virtual situations. Commuri (2009) states that "the impact of counterfeiting on consumers of genuine items has not received much attention so far because of the undetermined status, both conceptually and legally, of their loss in utility (Commuri, 2009, p. 86)." A better understanding of this type of consumer's views and responses to counterfeit products is essential to brand owners success in curbing this issue (Commuri, 2009).

2.1.3: Consumers as Stakeholders

Amine and Magnusson (2007) developed two new analytical frameworks to help better understand the cost/benefits of the counterfeiting industry to stakeholders, and marketing

responses aimed at curbing the issue in various consumer segments (Amine and Magnusson, 2007). The first framework was designed to show the complex web and interrelationships of costs and benefits between IP owners and consumers, while the second was developed to present potential marketing strategies. They identified what they described as "two distinct and largely competing groups of stakeholders who are involved in the counterfeiting industry," resistors and promoters (Amine and Magnusson, 2007, p. 67).

Resistors are defined as stakeholders who "try to minimize the costs, losses, and harm caused by counterfeiting," and includes corporate IP owners, national and international government bodies, and the actual victims of counterfeit purchases and usage (Amine and Magnusson, 2007, p. 67). Promoters are defined as those who "intend to gain from involvement in the counterfeit market by promoting or supporting supply," and includes counterfeiters (and all who benefit from their income and operations) and global consumers who purposely buy counterfeits (also known as accomplices (Amine and Magnusson, 2007, p. 67).

Consumers are in a unique position based on this classification system. On one hand, we have willing consumers who are seen as promoters. On the other hand, we have those consumers who are fearful of potential victimization due to counterfeiting and will not knowingly buy counterfeits. Here, the consumer is viewed as a resistor. This opposing role that consumers can play highlights the need to better understand those consumers who can be grouped as a resistor or a potential victim. Amine and Magnusson (2007) felt that this potential variance of roles as a consumer (being on both the supply and demand side) makes them "caught in the middle (Amine and Magnusson, 2007). They note that this variance "is a further argument in favor of examining counterfeiting from a consumer-centered point of view (Amine and Magnusson, 2007)."

Consumers as resistors "support greater IP legislation, policing, and punishment (Amine and Magnusson, 2007)." Consumers are at times promoters due to a lack of awareness and simply their desire to search for the best available deal on a desired product. Some consumers may actually be willing to buy a counterfeit if they happen to feel it is of high quality, a great price, or when they associate status with the brand logo (Chaudhry and Zimmerman, 2013; Shultz and Saporito, 1996). This two-sided relationship is further complicated by the fact that consumers believe they have the ability to distinguish between genuine and counterfeit items, when research tends to show that they do not have the ability (Amine and Magnusson, 2007; Prendergast, et al., 2002). This may place consumers who are looking to buy a legitimate product at a disadvantage. The lack of awareness of deceptive counterfeits, coupled with the overestimation of individual ability to authenticate the legitimacy of products also shows the need to research the role and ability of the consumer in distinguishing between counterfeit and genuine products (OECD, 2008).

2.2: Counterfeit Athletic Footwear

"Counterfeiting always seems to be the gateway into something else. If these guys think they can get counterfeit shoes into the country, pretty soon they think they can get anything in. And that's a problem – Special Agent Ron Pascale (FBI, 2014)."

The global athletic footwear market segment is comprised of four categories (shoe inserts, hiking shoes, sports, and backpacking boots), with products being marketed to men, women, and children. The sports shoes category is expected to grow the fastest through the year 2020, and is a very profitable market in itself (Weinswig, 2016). For example, the U.S basketball (sports) footwear market alone was valued at $4.2 billion in 2014 (Badenhausen, 2015). Between June 2014 and June 2015, $34 billion worth of sneakers were sold in the U.S (Reed, 2015).

According to recent research by the NPD Group (a global information company), The U.S. athletic footwear industry grew by 8% in 2015 ($17.8 billion), with increases in both unit sales (3%) and average selling price per product (up 5% to $61.15) (NPD Group, 2016). A report by the research company Transparency Market Research has estimated that the global athletic footwear market could be worth $84.4 billion by 2018 – up from $74.7 billion in 2011 (Bell, 2015). 85% of all athletic shoes are not worn for their intended purposes, showing that there is a desire for fashion and conspicuous consumption that plays a part into the demand for these products (Powell, 2014).

One glaring hindrance to the growth of this market will be the increased production of counterfeit products by local manufacturers (Transparency Market Research, 2016). 99% of athletic footwear sold in the United States is imported from outside the country (Reed, 2015). Over 75% of those shoes imported into the U.S in come from China and Vietnam combined; known homes of counterfeits (Rodriguez, 2015). The United States International Trade Commission (2011) noted that counterfeits that come from China can be considered "super fakes," due to their superior quality as a result of technological innovations, skills, and sometimes proprietary knowledge of manufacturing that can be used by counterfeiter footwear makers (United States International Trade Commission, 2011, p. 2-7). This makes athletic footwear a very profitable and attractive product for counterfeiters.

Trade in counterfeit athletic footwear infringes on various intellectual property rights. Trademark infringement on counterfeit footwear deceives consumers, due to the fact that trademarks are used to distinguish and authenticate genuine branded products (Grossman and Shapiro, 1988b; OECD, 2008). These trademarks rights help protect the reputation of the product, brand, and company. Design patents will protect the look of the shoe, while utility

patents will protect developmental technology used during manufacturing. Even copyright laws apply, as artwork may accompany the product in the package (World Intellectual Property Organization). An example would be the "retro cards" that are sometimes placed in new models of Retro Air Jordan shoes. Copyright infringement is also committed when a counterfeit footwear seller uses copyrighted images or intentionally copied product descriptions from the brand (trademark) owner's e-commerce site or that of an authorized retailer to market their illicit products (Elings and Keith, 2015).

The ultimate problem with counterfeit footwear is that these products are not up to the manufacturers standards, meaning that the expected support and results from using or wearing the shoe is automatically in jeopardy. The consumer will not receive the expected utility that they would with a genuine product, and they also may face health and safety risks (OECD, 2008). Counterfeit footwear can be dangerous and lead to injury to consumers due to not being produced to the intended specifications. For example, a person participating in a rigorous sport such as basketball while unknowingly wearing counterfeit athletic footwear could be injured due to the poor construction of the shoe and lack of proprietary technology used in some products to add cushioning, responsiveness, and support throughout the game. Research has found that replica running shoes are less protective against injury during locomotion when compared to genuine running shoes due to their ability to increase the force of impact when the foot makes contact with the ground, increase in peak plantar (a portion of the foot) pressure, and reduce the contact area (Azevedo, Brandina, Bianco, Oliveira, Souza, Mezencio, Amadio, and Serrao, 2012). The shoe could also not provide the same traction and floor grip of the genuine shoe, causing the player to slip (which could lead to injury).

Although these products have the potential to pose health and safety risks to those who use them, this harm may be of less magnitude when compared to counterfeit pharmaceuticals (United States International Trade Commission, 2011, p. 2-7). The greater detriment of counterfeit footwear may be the fact that the consumer loses trust in the brand and may suffer economic losses due to not being able to recoup the lost monetary funds from the differential between the value they paid and what the product received is actually worth. Brand owners face the potential of a damaged reputation and loss of loyal customers who may feel like the brand is not taking needed measures to prevent their products from being counterfeited. The brand also loses time and dollars spent in research, development, and manufacturing. The designer of that shoe is not able to reap the full profits they normally would for their innovation. More concerning, these funds gained from this type of product counterfeiting may be used by criminals to fund their other criminal operations, such as terrorism (Spink, 2015).

2.2.1: Nike and Jordan Footwear Counterfeits

Nike is the most valuable sports brand in the world, and the leading athletic footwear brand in the U.S with a 95.5% market share in the country. Nike earned $30.6 billion in the 2015 fiscal year, and is looking to grow the business to $50 billion by 2020 (Nike Inc., 2015). Its subsidiary Jordan Brand has a 58% market share, and is the most profitable division of Nike (Badenhausen, 2015). Jordan Brand footwear products specifically are often in high demand, as new product releases generate the attention of fans of all ages. Jordan shoes are named after Michael Jordan, who is perceived to be one of, if not the, greatest basketball players of all-time. Even long after his retirement from the National Basketball Association, his "retro" sneakers are still so popular and in high demand that they have led to killings as a result of altercations

between individuals who either could not afford or obtain a pair of the coveted sneakers and have tried to rob others for their pairs.

The Jordan Brand made $2.6 billion in 2014, and sells more than current NBA superstar LeBron James's signature show (Badenhausen, 2015). The brand expects revenues to reach $4.5 billion by 2020 (Butler-Young, 2015). Retro Jordan's (re-releases and updated versions of original colorways of the shoes actually worn in-game by Michael Jordan) are extremely popular (half of Jordan brand income) and are the most counterfeited Jordan's. The shoes usually retail between $150-$200, and can immediately double (or even more than triple) in value on the secondary sneaker market depending on the popularity of that release.

Shoes that are extremely limited and rare often retail for more than average. For example, the Pinnacle Jordan Retro 1's retailed in 2015 for a price of $400. Over time, these extremely limited releases gain value due to the wants and demands of collectors and enthusiast. Popular culture, regional differences in taste, and celebrity influence all play a large part in the demand for Jordan footwear. The Jordan brand has collaborated with celebrities, athletes, and popular street wear brands to release limited editions of the Retro Jordan's that have only helped to increase the revenue of the brand. Rapper Drake's OVO Retro Jordan 10 sneakers released in September of 2015 at a retail price of $225, and have a deadstock (not used or worn) price of over $4000 (www.stockx.com).

Jordan brand footwear accounts for roughly 25 percent of Nike's overall shoe revenue. The brand has been referred to as a "top-end, conspicuous-consumption brand (Mullman, 2009)." Consumers view these products as status symbols in society, and are willing to go to dire lengths (including paying high prices) to obtain them. "Brand and fashion consciousness" are two factors that increase the profitability of footwear for men specifically, and the easiness of

online shopping is helping drive the footwear market overall (Transparency Market Research). As e-commerce has grown, so has the presence of the Jordan brand online. There are estimates that Jordan brand footwear accounts for roughly half of all footwear sold on eBay (Chow, 2014).

Nike sneakers are often a hot target for theft (Clarke and Eck, 2005) and it is perhaps the most counterfeited footwear brand (Wisbey, 2010; Frohlich, Hess, Calio, 2014). The 2013 edition of the World Customs Organization Illicit Trade Report named Nike the most counterfeit brand in the world across all industries (WCO, 2014). There have been killings linked to theft of Nike and Jordan footwear products due to their popularity and symbolic meaning to some individuals and gangs (Telander, 1990; Kollars, 2015). This problem is large in part due to Nike's supply and demand strategy, which is selling high demand shoes in limited quantities. This unrequited demand increases the perceived value of the brand, which is something Nike has been very successful at doing through unique and targeted marketing and advertising (Chow, 2014). Releasing a certain amount of highly in-demand products at a limited number of authorized retailers (brick-and-mortar and e-commerce), there is always the possibility that a newly released Nike footwear product can sell out in a matter of minutes or hours (Chow, 2014; Badenhausen, 2015). Brand-dedicated consumers are then unable to purchase the product from an authorized retailer.

These remaining individuals often seek to buy shoes from the estimated billion dollar US secondary sneaker market[1], such as from a consumer who bought multiple pairs to resell through online auction sites (such as Ebay), shoe trading with others on social media, or at sneaker conventions (such as Sneakercon) (Weinswig, 2016). Secondary sneaker market prices may

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[1] Keep in mind that this use of the term "secondary sneaker market" refers to shoes that are being sold to consumers through channels besides the authorized e-commerce retailers of a brand's footwear (such as EBay), and does not refer to the previously mentioned term "secondary market" that is used by the OECD (2008) to describe the non-deceptive counterfeiting market where consumers are knowingly buying counterfeit products.

range from the hundreds to over $5,000; sometimes more than triple the original retail value. This includes both new and used pairs of Nike shoes. Nike brand footwear products are unique when compared to luxury brand footwear brands (Gucci, Prada, Balmain, etc.), in the sense that certain pairs are so rare and hard to obtain that even the used pairs can possibly double in value (Chow, 2014). The original models of most Jordan footwear models are often the highest priced due their originality and significance to the basketball, sneaker, and popular culture. Consumers of these products often have an innate desire to have models that no one else has (Chow, 2014), and are willing to pay to a premium price to obtain them.

This unrequited demand strategy employed by Nike has also helped counterfeiters capitalize on the popularity and value of Jordan footwear. Counterfeiters exploit the consumer's desire to obtain Jordan brand by creating counterfeit versions and selling them online to unsuspecting consumers using deceptive marketing tactics. Sneakerhead data company StockX values the global secondary (resale) market of athletic footwear at over $6 billion (www.stockx.com), meaning that there is a lot of money for criminals to obtain through illicit schemes. Counterfeit Nike and Jordan footwear are frequently submitted to law enforcement for examination due to popularity (Wisbey, 2010).

Nike brand counterfeits are big business for criminals, and there have been many crackdowns conducted in recent years that highlight this fact. In 2006, federal law enforcement seized 77 cargo containers of counterfeit Nike Air Jordan sneakers along with one container of clothing from another brand. The total value was near $19 million, with this figure accounting for nearly 12 percent of the total domestic seizure value for fiscal year 2006 (GAO, 2010). In August of 2014 the Federal Bureau of Investigation (FBI) uncovered a massive counterfeit goods smuggling ring which included cigarettes, Gucci handbags, and counterfeit Nike footwear. The

FBI confiscated over $300 million worth of goods at retail value (FBI, 2014), highlighting the prevalence and financial profitability of Nike brand counterfeit footwear.

2.3: The Growth of Internet Use and E-Commerce

The increasing number of global internet users has risen consistently over the past 20 years, and we have seen the functionality of the World Wide Web improve drastically as technology has gotten more sophisticated. The number of internet users has risen to over 3 billion in 2015, meaning 43% of the global population has internet connectivity (ITU, 2015). Businesses have realized this growth in internet use and have capitalized on the access, convenience and consumer reach offered by the internet to take their retail businesses from being strictly brick-and-mortar locations to online. The sale of goods and services through the internet can be referred to as e-commerce (Newman and Clarke, 2003, p. 3), and this a quickly growing business segment.

IBM noted that online retail sales grew by 14.6% between the 3rd quarters in 2014 and 2015 (IBM, 2015). US online holiday sales are expected to be greater than $95 billion in 2015, 11% greater than the 2014 holiday season (Mulpuru, 2015). With current estimates upward of 200 million online consumers (eMarketer Research, 2011), U.S. e-commerce sales are expected to reach over $400 billion by 2018 (Mulpuru, 2014). Mobile shopping has seen an increase as well, especially between Black Friday and Christmas when it can account for more sales than desktop computers (IBM, 2015). This category is expected to grow to $142 billion in 2016, increasing overall consumer spending online (Mulpuru, 2015).

2.4: Product Counterfeiting and E-Commerce

While the growth and power of the internet as a shopping avenue has been great for consumers, the growing acceptance and use of it as the preferred consumer shopping channel has

made a criminal's job easier. The nature of the virtual environment (particularly with regard to the way that it distances time and space) has engendered entirely new forms of harmful activity, while allowing old crimes to operate on a transnational level (Wall, 2001). The internet is used as a distribution channel and tool for selling counterfeit products (OECD, 2008). Criminals who aim to profit from product counterfeiting now have a more efficient medium to operate through, as opposed to age old flea markets and street shops (Wilson and Kinghorn, 2015; Chaudhry and Zimmerman, 2013). A 2014 report on trends and developments in Intellectual Property Rights Protection and Enforcement by the Office of the United States Trade Representative (USTR) states that the "continued growth in the online sale of pirated and counterfeit hard goods that will soon surpass the volume of such goods sold by street vendors and in other physical markets (USTR, 2014, p. 19)."

This new avenue has helped globalize product counterfeiting (Wilson and Kinghorn, 2015) with websites being operated in foreign countries, and shipping counterfeited products to consumers who think they are being given the deal of lifetime on a product they truly desire (Schornstein, 2013). Counterfeit products are increasingly being distributed to consumers using the internet as a main channel. The Internet is a conducive and ideal environment for product counterfeiting to flourish, due to the accessibility and anonymity it offers criminals. In an analysis of the factors that make the online environment an ideal medium for counterfeiting and piracy, the OECD (2008) listed anonymity, flexibility, market size and reach, and the overall deceptive nature as the key factors that attract criminals. The digital environment, ease of access and entry, and spatial and temporal distance are unique factors that make the Internet a hub for counterfeiting and deception (Xiao and Benbasat, 2011, p. 170).

2.4.1: Product Counterfeiting as Cyber-Deception/Theft

Turban and colleagues (2015) defined fraud as "any business activity that uses deceitful practices or devices to deprive another of property or other rights (Turban, King, Lee, Liang, & Turban, 2015)." Product counterfeiting and all forms of fraud in online environments fall under one of Wall's four types of harmful activities that occur online: Cyber Deception/Theft (Wall, 2001, p. 4). Cyber deception occurs when a crime is committed using deceptive techniques, such as marketing and selling a counterfeit Nike shoe on a website in which the consumer is unaware of the illegitimacy of the product. In cyberspace, large numbers of individuals can all at once be the victims of fraud at the hands of one individual (Pease, 2001, p. 23).

2.4.2: Criminogenic Elements of E-Commerce

E-commerce can be online or offline, as long as technology is used. Newman and Clarke (2003) noted three criminogenic aspects of the overall e-commerce environment. The first is that the internet is a lawless "wild frontier" of sorts, in the sense that the globalized nature of the internet makes regulating it on an international scale virtually impossible. This lawlessness allows cross border crimes (such as product counterfeiting) to occur without criminals having much fear of being caught or punished (Newman and Clarke, 2003).

The second aspect is in regards to the overall nature of the computing environment. It should be noted that the computing environment is the information system that enables e-commerce. While the environment has provided retailers and businesses great benefits, criminals have exploited these features for their benefit as well. Newman and Clarke (2003) use the acronym SCAREM to describe the criminogenic elements of information systems. SCAREM stands for the stealth, challenge, anonymity, reconnaissance, escape, and multiplicity the computing environment offers criminals (Newman and Clarke, 2003, p. 61-63).

Stealth is the ability to act in secret while being online. Challenge is the ability to beat a computing system. Hacking by groups who feel they are serving a purpose is a key example. Anonymity (related to deception) is the ability to hide your identity while online. This is useful in making sure your tracks are untraceable back to you. Reconnaissance is the ability of criminals to scan the Internet for suitable targets. This process is automatic is some cases, depending on the technology used. Escape is related to anonymity, in the sense that the benefit is the ability to leave the scene of the crime uncaught, untraceable, and unidentifiable. Multiplicity is the ability to victimize multiple individuals with one attack (see Newman and Clarke, 2003, p. 61-63 for a full analysis).

The third criminogenic aspect is the fact that "information" is a hot product and target in virtual spaces, based on the elements of CRAVED framework (Felson, 1998; Newman and Clarke, 2003). Information is found in all products of e-commerce, including consumer goods such as footwear. Hot products are those which are concealable, removable, available, valuable, enjoyable, and disposable (Felson, 1998; Clarke, 1999). Being concealable refers to the ability to hide stolen information in cyberspace. Removability is the ability to constantly intercept, deflect, or move information from its original home online. Availability refers to the idea that all information online is generally viewed as potentially available to everyone. Valuable refers to the idea of viewing information as money in the information age. For example, credit card information can be stolen and used to profit. Enjoyable refers to the pleasure or acclaim gained from committing a crime. Disposability relates to the opportunity the internet has given criminals to sell or get rid of stolen property (Newman and Clarke, 2003, p. 70-72). The CRAVED framework will be revisited in a later section of the current research.

2.5: Consumer Product Search Process and Deception

Heinonen, Holt and Wilson (2012) stated that "virtual environments do not allow consumers to inspect and fully validate the authenticity of items before purchasing them (Heinonen et al., 2012)." Consumers search for products and buy them using any device with web access and working internet – a desktop computer, laptop, tablet, or smartphone. Consumers come across counterfeit products on existing legitimate auction and non-auction sites, or on fraudulent sites created by counterfeit product sellers (Newman and Clark, 2003; Wilson and Fenoff, 2014). Unregulated fraudulent and rogue sites are particularly troubling due to the fact that they may resemble brand authorized retail sites, and further deceive consumers looking to purchase from a legitimate site.

Research conducted on consumer behavior and purchasing intent online by the online brand protection company MarkMonitor shows estimates of the ratio of bargain hunters vs. counterfeit item to be 28:1, up from the 20:1 ratio they found in previous research. One out of every six genuine-item bargain shoppers in their study came across rogue websites by accident and was deceived into thinking it was a legit site to purchase from (Smith, 2014). A recent study found that 20% of Google search-engine results for Nike products lead consumers to a counterfeit website, no matter if they were intending to buy a genuine or counterfeit product. The average sales price of the counterfeits was $88. In the same study, Nike was found to have the highest turnover rate (4.6) for the average number of counterfeit stores per week by brand, with 32.4 counterfeit websites being added per week in contrast to 27.8 counterfeit websites being taken down (Wadleigh, Drew, and Moore, 2015). The takeaway is that while there are a high number of legitimate bargain hunters online, they have a high chance to be deceived and come across counterfeit listings. Deception tactics used in the online sale of counterfeit products

ultimately affect the overall health of e-commerce systems, due to the fact that trust is lost on behalf of the consumer (Grazioli and Jarvenpaa, 2003).

The American Apparel & Footwear Association (AAFA) has called the ever growing presence of rogue websites "the most pressing problem facing the apparel and footwear industry," due to their ability to assist with intellectual property theft and deceive consumers who are seeking to purchase a genuine product (American Apparel & Footwear Association). Criminals have found a way to profit on the desire for Nike products by marketing and selling fraudulent products on the internet. Consumers may be searching the internet for these products and come across a variety of counterfeit product ads and fraudulent sites offering the desired product, leading to potential deception and victimization. Some estimates have stated that about 10 percent of the sneakers sold on eBay are counterfeit (Chow, 2014). This is an issue due to Nike's Direct-to-Consumer and e-commerce growth plans through 2020, as the company plans to grow the categories by $16 and $7 billion, respectively (NIKE Inc., 2015). Counterfeit products flooding the e-commerce marketplace could take-away from their direct profits by taking sales and potentially causing consumers to lose trust in the ability of the brand to meet their needs.

Product and seller authentication (or verification) in an online environment is vastly different than it would be in a physical and traditional environment. Deception used in e-commerce negatively affects the ability of the consumer to assess products and sellers for quality and legitimacy before buying. The "try before you buy" advantage offered by physical retailers for clothing and footwear is removed, as it is virtually impossible to physically pre-examine (touch, feel, look up close) a tangible product while shopping online (Newman and Clarke, 2003, p. 30). With the ability to physically inspect a product now removed, the consumer is left to

focus on product level and seller level information (verification cues and indicators) to detect deception pre-purchase (in order to make a well informed purchasing decision) (Fejes and Wilson, 2013; Mavlanova and Benbunan-Fich, 2009). The internet has made price comparison shopping for these products much easier, but criminals can exploit this by offering competitive prices to be more attractive than the legitimate product.

There is a need for an exploration into the genuine-item product and seller search process that consumers of various products and brands currently use when shopping for legitimate highly in-demand products that may be sold out or unavailable on brand-authorized retail sites. There has been some research done on consumer product search and authentication (Prendergast, Hing Chuen, and Phau, 2002; Stumpf, Chaudhry, and Perretta, 2011; Fejes and Wilson, 2013; Hoe, Hogg, and Hart, 2003; Gentry, Putrevu, Shultz, and Commuri, 2001; Eisend and Schuchert-Guler, 2006; Yoo and Lee, 2012). The search process is further complicated by the fact that product type influences a consumer's ability to be deceived online. Athletic footwear exhibits qualities of both a search product and experience product. Search products are those in which color, size, and price are dominant purchasing factors. Experience products, such as clothing, are those in which the user often needs to physically touch and examine the tangible product prior to purchasing. Without the ability to physical examine an experience product pre purchase, information generation can be manipulated to increase the consumer's perceived value and deceive the consumer (Newman and Clarke, 2003; Xiao and Benbasat, 2011).

Trust in a brand has been found to reduce the time spent on the path to purchase for a consumer, due to reliability and quality being associated with that brand's products from past experiences. A consumer who has had great experiences with a brand's products will be less likely to spend an extensive amount of time assessing a products quality before making a

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purchase, because they have little reason to doubt that the product from that brand will meet their

needs. Search costs and time are reduced, and a more efficient shopping experience takes place

(Calatone and Griffis, 2015). This trust leads to deception susceptibility.

If the only available information to make a complete decision is provided by the seller's

advertisement online, there is the chance that the seller could be using advanced product

presentation techniques and manipulation (ex: using authentic product images to represent their

fake products; sophisticated video marketing techniques) (Mavlanova and Benbunan-Fich, 2009,

p. 2) to deceive the consumer. This deception and manipulation can be better explained using the

theory of deception by Johnson, Grazioli, Jamal, and Berryman (2001). Their theory took into

account the fact that a deceiver seeks to victimize individuals by exploiting their lack of product

and domain specific knowledge and experience by disrupting their ability to accurately assess

information they have sought to use in their authentication process through product presentation

concealment or simulation and enhancement (Johnson et al., 2001; Mavlanova and Benbunan-

Fich, 2009, p. 2).

2.6: Independent Virtual Brand Communities

Physical communities offer the ability to help protect against victimization (based on

proximity, sense of unity and belonging to the community, etc). Due to the fact that communities

are defined by social interactions and not a physical place (Andrews, Preece, Turoff, 2002), it

can be assumed that online communities should be able to do the same. Consumer-to-consumer

(C2C) information sharing in virtual (online) (Porter, 2004) communities has received attention

2in the consumer behavior and marketing fields (Adjei, Noble and Noble, 2010; Sinkovics, Penz,

Molina-Castillo, 2009), with a heavy focus on its role in innovation and the enhancement of

branded consumer goods (Fuller et al, 2007; Marchi, Giachetti, and de Gennaro, 2011). Porter

(2004) defined virtual communities "an aggregation of individuals or business partners who interact around a shared interest, where the interaction is at least partially supported and/or mediated by technology and guided by some protocols or norms (Porter, 2004)." Virtual communities exhibit similar characteristics of the traditional physical community. These include shared common interests and cultural norms, and voluntarily improving member and collective welfare free of charge (Sproull and Arriaga, 2007; Porter and Donthu, 2008; Park and McMillan, 2015). However, they have an advantage in the fact that they are not bound to a geographic location, such as a neighborhood in a city.

In the consumer research field, the term "consumption oriented collectives" is used to describe "groups of consumers who self-select into a group that shares a commitment to a product class, brand, consumption activity, or consumer-based ideology (Thomas, Schau, Price, 2001, p. 271)." One example of these collectives is a brand community (Muniz and O'Guinn, 2001) – a specific type of virtual community. Albert Muniz and Thomas O'Guinn (2001) define a brand community as "a specialized, non-geographically bound community, based on a structured set of social relationships among admirers of a brand (Muniz and O'Guinn, 2001)." Centered on a branded good or service, these communities are characterized by three key elements (Muniz and O'Guinn, 2001): "the creation of a sense of moral responsibility or commitment among virtual community members; 'consciousness of kind', which is the feeling that binds every individual to the community members and the community brand; and rituals and traditions carried out by community members that help to reproduce and transmit the community's meaning in and outside of the community (Royo-Vela and Casamassima, 2010, p. 519)."

Brand communities can be independent (consumer owned/created) or firm-generated

(brand owned/created) (Sloan, Bodey, Gyrd-Jones, 2015; Basu and Muylle, 2003). Independent

virtual communities are those which are not created nor owned by the brand. They are usually

created, owned, and operated by loyal brand consumers who want to connect with others with

interests and knowledge of a brand, product, or service. Independent virtual communities have

the potential to be effective partners for preventing product counterfeiting through increasing the

ability of consumers to detect counterfeit deception online (Basu and Muylle, 2003, p. 163).

Consumers participate in brand communities to gain external insight into the quality of a

potential purchase; product maintenance and repair; or to share product usage experience (Millan

and Diaz, 2014). A brand community can be either be created by a consumer, or brand marketer

to facilitate brand engagement with consumers. These communities can exist physically, strictly

online, or a combination of both. Royo-Vela and Casamassima (2010) defined a virtual brand

community as "a brand community developed online with the characteristics of a virtual

community (Royo-Vela and Casamassima, 2010, p. 519). Individuals in virtual brand

communities seek information from others to gather information before purchasing a product

(Royo-Vela and Casamassima, 2010).

Basu and Muylle (2003) noted that for an independent virtual community to have

authenticating power, the product category that the seller is offering must be the focus of the

independent virtual community in order to be effective. This is where the power of focusing on a

brand comes in. The concepts of a brand community and independent virtual community can be

merged together to form a new concept, *independent virtual brand community*. Independent

virtual brand communities may be able to increase awareness of potential deception and train

consumers in the recognition of authentication cues. Just as the virtual nature of the internet

allows counterfeiters to thrive and infringe on IP rights, its transparency also allows stakeholders

such as consumers the ability to identify infringement and to protect against victimization (OECD, 2008). These communities have the ability to increase visibility and defend the space within the confines of the virtual community based on their design, and community members (as guardians) can take part in crime prevention. Independent Virtual Brand Communities have yet to be examined through a criminological lens as having guardianship capabilities and serving as a protective factor during the consumer path to purchase.

The community policing model allowed citizens to identify and solve problems in order to actively police their communities. This is in large part due to those citizens having a common interest and goal (Jones, 2007). Virtual community policing strategies, such as virtual neighborhood watch, have been found to be able to potentially prevent cybercrime victimization (Jones, 2007; Chua and Wareman, 2004). Intermediation, collective action, education, and vigilantism have been found to be effective strategies (Chua and Wareman, 2004.) Independent virtual brand communities can employ all four of these strategies in stopping product counterfeiting through their forums. In addition, they can be viewed as a special form of a volunteer social network, which also have the potential to prevent online auction fraud through education and information sharing (Chua and Wareman, 2004).

Independent virtual communities have been found to support seller and product identity information authentication; seller and product identity trust authentication; seller and product quality information authentication; and seller and product quality trust authentication (Basu and Muylle, 2003, p. 163). In doing so, these communities help consumers become aware of – and better at identifying – "red flags" (or counterfeit indicators) that indicate to the consumer that a product may be counterfeit and should be assessed more in-depth, and the trustworthiness of a potential seller or website (Mavalanova and Benbunan-Fich, 2010; Narcum and Coleman, 2015).

More research is needed on the ability of consumers to distinguish and authenticate legitimate products from counterfeit products (Fejes and Wilson, 2013), and independent virtual brand communities can potentially serve as a protective factor against victimization, by providing an online platform where users can share authenticating cues and evaluative knowledge to aid in the consumer search process. Discussion forums on these sites can potentially facilitate learning of extrinsic and intrinsic cues to be used in gathering authenticating information pre and post purchase, and help protect themselves from being victimized in an online setting (Fejes and Wilson, 2013).

Independent virtual brand community members and users represent a population focused on one brand, which increases the chances of them having product knowledge and experience. The brand community web forum users "represent a large pool of product know-how and consumption experience (Füller, Jawecki, & Mühlbacher, 2007)," due to the fact they help make a target less suitable to being a target of crime through helping them become aware of legitimate products and sellers. This information is crucial to informing "e-consumers" and ensuring that they have as much information needed to make an informed purchasing decision (Sharma, Srivastava, and Bhadoria, 2014). Independent virtual brand communities actually have an advantage over virtual communities owned by the brand, due to the potential for the site to be biased (Basu and Muylle, 2003). Tamoschus (2014) states that "unsurprisingly communities which are not sponsored or hosted by firms but which have a univocal interest in a producer or product can likewise be valued knowledge sources for innovation (Tamoschus, 2014)." This shows the value of this information sharing in the IVBC's to both consumers and brands.

The role of information sharing between members and visitors of independent virtual brand communities to serve as a protective factor against product counterfeiting victimization

has not been examined in the criminological literature. There is some research showing that online community members and users are more likely to assist each other and share information regarding products (Ogawa and Pongtanalert, 2013), providing some promise that members of brand communities may be willing to help their members out. Brand communities often exist and thrive online using consumer-to-consumer (C2C) communication, usually in the form of discussion forums. Knowledge sharing using C2C communication in independent and firm generated online brand communities has been found to influence decision making pre-purchase and reduce risk (Sloan, Bodey, Gyrd-Jones, 2015; Adjei, Noble and Noble, 2009). Online brand community members value the information provided and shared by other community members.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1: Routine Activity Theory

The Routine Activity Theory was originally used to analyze crime rate trends and cycles (Cohen and Felson, 1979). The Routine Activity Theory says that for a crime to happen there must be a physical convergence in time and space of a willing offender, suitable target, and a lack of guardians capable of preventing the crime (Cohen and Felson, 1979). This is also known as the Crime Science Triangle (Felson, 2008). This theory shifted the focus from the characteristics and decision making process of an individual offender, to the process and opportunity structures of a criminal act, and the components needed for the successful commission of a crime (Cohen and Felson, 1979). Routine activities can be simply defined as normal day-to-day activities we do, such as going to school or work. The constant exposure of personal information online (and the increasing number of criminals in cyberspace) places citizens at an increased risk of victimization when engaging in routine activities online, such as shopping on e-commerce websites (Holt et al., 2015; Reyns, 2013; Holtfreter, Reisig, and Pratt, 2008; Baer, 2010; Recupero, 2008; Yudecal, 2010; Pratt, Holtfreter, and Reisig, 2010).

RAT has recently been applied to understanding and preventing the product counterfeiting phenomenon through an examination of each of the three aforementioned elements (Hollis et al., 2015; Hollis and Wilson, 2014). Eck and Clarke (2003) adapted the elements of the crime triangle to account for crimes that occur over long distances and do not require a convergence in time and space of offenders and targets. They termed these unique situations "systems problems", and helped create what Reyns and Henson (2015) now call the network –based crime triangle (Reyns and Henson, 2015, p. 3-4; Eck and Clarke, 2003). This triangle may apply in the case of product counterfeiting deception and victimization that occurs

online, where offenders who set up fraudulent websites may not actually need to be on the same network at the same time to successfully victimize or deceive an individual. The archived and catalog nature of most retail sites allows users to shop for available products any time, any place.

Online auctions usually have a bidding period (sometimes lasting days) that may not be monitored around the clock by criminals, meaning that criminals may not actually be online when the order for a counterfeit production is placed. They may not check their online storefront and steal the payment information or ship out a counterfeit product until the target/victim is offline. This is because of the global reach of the internet one individual is unlikely to be the initial target of these crimes. Instead, a "net" in the form of the fraudulent and deceiving websites or counterfeit advertisements may be cast to catch as many potential victims as possible. When the target becomes victimized (deceived), it can be said that they have temporally overlapped with the offender (Reyns et al., 2011).

Of importance to the current research agenda are the elements of the suitable targets and capable guardianship. From the theoretical standpoint of Routine Activity Theory (Cohen and Felson, 1979), the best way to prevent direct contact predatory crime victimization is to devise ways to keep a motivated offender away from a suitable target through a) making that target less suitable by b) increasing capable guardianship or target hardening measures. However, product counterfeiting may be viewed as a non-predatory with no direct contact (Hollis and Wilson, 2014). It is therefore useful to identify the potential targets/victims and guardians of athletic footwear counterfeiting.

3.1.1: Suitable Targets

A suitable target can be viewed as any person, place, or thing that will "invite" or entice an offender to commit a criminal act against it (Cohen and Felson, 1979). Newman and Clarke

identified seven types of targets online: prime, transitional, proximate, convertible, attractive, incidental, and undifferentiated (see: Newman and Clarke, 2003, p. 50). Product counterfeiting is an illicit activity that can have a wide range of suitable targets and victims (Hollis et al., 2015). When an actual athletic shoe is counterfeited in the physical sense, it is viewed as the prime target. Additional targets/victims here may be the brand owner, shoe designer, and consumers who purchase and use the counterfeit product. In the case of attempting to sell a counterfeit product online to an unsuspecting consumer using deceitful tactics (a cross-border crime), the trusting consumer is both a prime and attractive target (Newman and Clarke, 2003, p. 56-57).

The unknowing and unaware consumer is a perfect target/victim for deception for counterfeiters online if the offender is motivated by economic gain. This is because the unaware consumer is available, may be naïve to the potential to being deceived, and may not go through the product and seller authentication process during the product search process. In turn, they may offer up credit card payment information (convertible to cash) on a fraudulent retailing site, place a bid on a counterfeit product during an online auction, or fall victim to the many vulnerabilities of online auctions and peer-to-peer transactions (ex: misrepresentation of goods, bid shilling; non-delivery; See Newman and Clarke, Ch. 5, for a detailed analysis of the risks of online shopping). An auction site used to commit this type of fraud (selling counterfeit goods) can be viewed as transitional target, because it was used to access a potential victim. This also applies when the internet is used to create fraudulent websites (Newman and Clarke, 2003, p. 49).

3.1.1.1: CRAVED Targets and Products

The CRAVED framework (Clarke, 1999) was created to identify which design elements and factors left certain consumer products vulnerable to theft or fraud. Targets/victims can also be attractive to criminals based on the elements of the CRAVED model (Felson, 1998). Newman

and Clarke (2003) argued that in an e-commerce environment, "information" is the ultimate "hot product" that criminals target through various criminal means (Newman and Clark, 2003). Intellectual property, intelligence, systems, and services are the four kinds of information we see in an e-commerce environment. Due to the specific scope and exploratory nature of this research, only intellectual property and services as information targets will be discussed.

Intellectual property is often targeted and stolen (victim of theft) in the physical sense through the manufacturing and distribution of counterfeit consumer products. As previously discussed, these counterfeit products may infringe on design, patent, and trademark rights and harm consumers. IP is valuable and can be used to gain economically. A virtual element is added when these consumer products are sold online.

Intellectual property may also be a victim of theft and disposal in the form of criminals deceptively advertising, marketing, and selling these counterfeit and stolen goods using e-commerce services (a type of information) (Newman and Clarke, 2003; Bocji, 2006; Chua and Wareman, 2004). These online services may include online auction (EBay) and e-commerce (non-auction) sites (ex: business-to-consumer, consumer-to-consumer, peer-to-peer), and email (OECD, 2008, p. 83). These services being offered in the criminogenic computing environment place them at risk to fraud and crime (Newman and Clarke, 2003, p. 48). Internet users are often a target when services are the information type targeted by crime (Newman and Clarke, 2003, p. 68-69).

Elements of this framework may apply to understanding how online consumers and internet users can be hot targets as well. Online consumers can be an attractive target to counterfeiters due to the fact that they the temporal and spatial distance the internet offers allow them to remove themselves from the victim. This is the entire purpose of a criminal using

deceptive marketing tactics online. In fact, the removable part may never come into play because of this temporal and spatial distance. These individuals may actually never know who the offender is where they came from. This shows the concealable aspect of the crime aspect as well. By shopping online routinely, a consumer is available for online fraud victimization (van Wilsem, 2013). By being willing to pay various amounts to obtain this status item, the deceived consumer offers economic value to the offender. The offender may enjoy the profits from this crime, and may even enjoy knowing that they successfully deceived someone. Disposability may be shown in the form of the criminal taking down a fraudulent website or counterfeit product auction posting.

3.1.1.2: Jordan Brand Footwear as CRAVED

It is assumed here that Jordan footwear products are a hot product (and target) and that the CRAVED information framework applies to these products, since: 1) These are the highest profiting products of Nike footwear (a known hot product and favorite brand of counterfeiters); and 2) the counterfeiting and selling of these products online represents a dynamic crime against both intellectual property and services information types (Newman and Clarke, 2003, p. 69-70). The Jordan "Jumpman" symbol and Air Jordan brand shoes are protected by IP rights. When a Jordan footwear product is counterfeited, these rights are violated and owners lose. Consumers searching for these products may view the symbol as a sign of authenticity and place trust in the brand when making a purchasing decision. This can lead to deception.

When counterfeit Jordan footwear products are sold online, they are being easily concealed and disposed of. Removability may come in the form of trademark logos or legitimate brand images being copied and pasted from places on the internet and used to deceptively advertise on fraudulent retailing sites. This is an example of the replicable nature of information.

The high demand for these products and increasing number of online shoppers suggest that there may be many available victims searching for these products online. Jordan footwear products often retail for over $150, making the resell potential even higher (sometimes upwards of $500, varying by shoe). This shows that this is definitely a valuable product. Criminals will most likely enjoy reaping these economic benefits, and may even like the idea of successfully counterfeiting a Nike brand product.

3.1.2: Prior Research on Capable Guardianship and Target Hardening

"Guardianship can be defined as the presence of a human element which acts - whether intentionally or not - to deter the would-be offender from committing a crime against an available target" (Hollis et al., 2013)

The guardianship component of this theory is of important note here. It has been revised to not only include target-guardians (Hollis et al. 2014), but to also distinguish and include handlers of offenders (Felson, 1986), and place managers (Eck, 1994) as having the potential to interfere with a person becoming a victim due to a crime. Directly or indirectly, capable guardianship has the ability to stop a motivated offender from successfully victimizing a suitable target (Hollis-Peel and Welsh, 2014). Hollis-Peel and colleagues (2011) recently conducted a very thorough review of the current state of the literature on guardianship (Hollis-Peel, Reynald, Bavel, Elffers, and Welsh, 2011).

Recent research has begun to reconceptualize the current understanding of this concept as being inherently social (Hollis, Felson, and Welsh, 2013) and having levels (Reynald, 2009). Reynald (2009, 2010) developed the Guardianship in Action construct to directly observe guardianship behavior in residential spaces, and the impact of levels of guardianship on crime and victimization. This construct notes that guardians can operate and be effective by being

available, supervising and monitoring, and intervening (Reynald, 2009; 2010). However, this construct currently lacks applicability to online spaces (Reyns and Henson, 2015).

Guardianship has been examined in both physical (Hollis et al., 2011, Meithe and Meijer, 1990; Cohen and Felson, 1979; Mustaine & Tewksbury, 2003; Spano and Nagy, 1995) and virtual (cyber) (Bossler & Holt, 2009; Reyns, Henson, & Fisher, 2011; Vakhitova and Reynald, 2014) spaces as being able to reduce or prevent victimization or abuse. In cyberspace, research has used measures to examine guardianship against victimization that may be personal (using passwords), social (online deviance), human, or physical (firewalls) (Reyns et al., 2011; Bossler & Holt, 2009; Reyns and Henson, 2015). It is important to note that guardianship and target-hardening are distinct concepts, although guardianship if often operationalized as increased target hardening (Reynald, 2011; Hollis et al., 2011; Hollis et al., 2013). Some of these measures are actually techniques for target hardening and not guardianship, theoretically, speaking. This will be revisited in the next section.

To protect product-targets, technological and target-hardening solutions (design and product improvements; supply chain tracking) are often used. With the importance of e-commerce to our economy, and the use of the internet to deceive consumers and facilitate product counterfeiting, it is important to gain insight to how end-users can protect others and themselves online. Non-technical solutions may be useful in making a consumer-target (unknowledgeable, trusting consumer) less suitable to victimization and increasing end-user capable guardianship.

3.1.2.1: Internet Consumers as Capable Online Guardians

While recent research has focused on the application of Routine Activity Theory – and specifically the guardianship element – to preventing product counterfeiting (Hollis et al., 2015;

Hollis and Wilson, 2014), no research to date has focused solely on the applicability of the guardianship element to preventing product counterfeiting victimization online. Such work could empower consumers to guard themselves and others against online product counterfeiting victimization. Having identified the consumer as a suitable target and potential target-guardian (Hollis et al., 2015; Hollis and Wilson, 2014), it is useful to explore how the consumer can be provided guardianship and protected when shopping online. Target-guardians have the ability to provide a watchful eye over targets and victims of product counterfeiting. Internet consumers have the ability to act as online target-guardians for other consumers, and aid in self-protective target-hardening (self-guardianship) of themselves. Consumers have to be "available, monitoring, and intervening or reporting when they see product counterfeiting" occur online in order to be viewed as guardians (Hollis et al., 2015).

Consumers have the potential to become capable guardians during the retailer-to-consumer stage of the supply chain (Hollis and Wilson, 2014, p. 179). Ordinary citizens providing capable guardianship over one another is viewed as beneficial in preventing direct contact and predatory crimes (Cohen and Felson, 1979). This type of guardianship can occur online. An example could be consumer-to-consumer information sharing in brand or product dedicated web forums that aims to help users not be victimized when shopping online. In this sense, consumers are providing a watchful eye and directly intervening.

Consumers also have the ability to engage in self-protection, a special form of target hardening in which targets and victims take responsibility for reducing their attractiveness and suitability against potential offenders by making personal changes (Hollis et al., 2011; Hollis et al., 2015; Kennedy, 2015). Target hardening involves using digital or physical barriers to reduce the ability of an offender to commit a crime (Hinduja and Kooi, 2013). An example is only

buying from legitimate retailers, which may be difficult to determine due to the deception that exists on the Internet. Self-protection, in the form of target-hardening measures taken by end-users and employees, has been briefly mentioned in the literature (Mustaine and Tewksbury, 1998; Kennedy, 2015; Hollis-Peel and Welsh, 2014; Hollis and Wilson, 2014), but has yet not been examined in virtual spaces as being applicable to the prevention of product counterfeiting victimization.

Varying from the original definition of a capable guardian as needing to be physically present (ex: in the same room) (Cohen and Felson, 1979), guardians against certain forms of online victimization (ex: hacking) may only be theoretically "present" (Reyns and Henson, 2015). An example is being active in an online forum when a user posts a thread regarding product legitimacy. These individuals are "present" in a virtual "room" together, theoretically meaning that guardianship should be able to take place. How this guardianship will take place and who are capable guardians online are has just begun to receive scholarly attention.

Recent studies have begun to explore the concept of guardians in online spaces. Vakhitova and Reynald (2014) recently examined the individual and situational factors that increase cyber guardianship. They found cyber guardians to be just like normal physical guardians, in the sense that almost anyone can be viewed as one in the right context. They also found that active guardianship in cyberspace is similar to that in the physical world. Computer competency (increases witnessing) and awareness of anti-abuse policies (increases intervention) were found to increase contextual awareness. Cyber guardians who are more contextually aware have a better chance at both witnessing and intervening in cyber abuse, which reduces victimization. This study was the first to empirically examine the concept of cyber guardianship (Vakhitova and Reynald, 2014).

Williams (2015) explored the concept of online capable guardianship in regards to online fraud victimization (identity theft). He created a typology that included passive physical (ex: only visiting trusted websites), active personal guardianship (changing passwords) and avoidance personal guardianship (doing less online shopping). Only individual-level active personal guardianship and passive physical guardianship were found to significantly reduce rates of online victimization (Williams, 2015). A potential extension of the idea of passive physical guardianship that could apply to preventing product counterfeiting victimization online is only buying from and visiting trusted and brand authorized online retailers.

Reyns and Henson (2015) attempted to integrate the distinct concepts of target hardening and guardianship by noting *online self-guardianship routines involving target hardening behaviors* can potentially reduce the risk of online victimization. While their research did not find any of their measures of *online self-guardianship routines involving target hardening behaviors* (using antivirus software; regularly deleting emails from unknown senders; and regularly changing passwords) to be significant in predicting identity theft, they highlighted a new and useful way to conceptualize guardianship and target hardening online. Knowledge seeking of product and seller legitimacy prior to making a purchasing decision online can be viewed as an online self-guardianship routine involving target hardening behaviors (ex: increasing awareness; improving decision-making; making themselves less attractive). The end goal is protecting a target by both watching over it and making it less suitable (easily deceivable).

3.1.2.2: Prior Research on Community Guardianship Capabilities

There has been considerable research on the ability of communities to provide assistance, education, and both physical and social guardianship to potential victims (Bennett, Holloway,

Farrington, 2006; Meithe and Meier, 1990; 1994; Kerley and Benson, 2000; Spano and Nagy, 2005). Oscar Newman's seminal research on defensible space (Newman, 1972) found that making both mundane and structural design changes to the environment could prevent reduce crime. Defensible space is a low social cost form of natural and public area surveillance that increases and offenders' perceived risks of committing a crime (Welsh, Mudge, Farrington, 2010).

Research on collective efficacy by Sampson, Raudenbush, and Earls (1997) found that increased social cohesion had an impact on a reduction of violent crime victimization (Sampson et al., 1997). Lee (2000) also found that community cohesion – "residents of a given community helping each other out when in need (Lee, 2000, p. 685)" – can reduce the risk of individual victimization. Strong informal social control is viewed as a defining characteristic of cohesive communities (Lee and Earnest, 2003). Community cohesion can be viewed as representation of social guardianship (Lee, 2000). Kerley and Benson (2000) state that "a strong community is also one in which residents work together to solve common problems and to help each other out," and that one way to which in they achieve this is through "cooperative security measures (Kerley and Benson, 2000)."

3.2: Situational Crime Prevention and E-Commerce Crimes

Originally influenced by the work of C. Ray Jeffery on Crime Prevention through Environmental Design (CPTED) (Jeffery, 1971; Crowe, 1991) and Oscar Newman on his defensible space theory (Newman, 1972), the Situational Crime Prevention approach combines tenets from both the Rational Choice Perspective (Cornish and Clarke, 1986) and the Routine Activity Theory (Cohen and Felson, 1979) to create opportunity-reducing techniques for crime (Cornish and Clarke, 2008, 2014; Clarke, 1997). The focus of SCP is to practically reduce

criminal opportunity through the secure design of environments and products (Felson and Boba, 2010; Clarke and Newman, 2010; Plant and Scott, 2009). Instead of focusing on deterrence through punishment and mandatory rehab, SCP makes offenders less likely to want to commit crimes by increasing the offender's effort and risks of getting caught; reducing the rewards and provocations for offending; and removing excuses for offending (Platt and Scott, 2009). In comparison to general deterrence theory, it is seen as focusing on making the target less susceptible to victimization, as opposed having a deterrent effect on a potential criminal (Bryant and Bryant, 2014, p. 65).

First introduced in the 1970's by Mayhew and colleagues (Mayhew, Clarke, Sturman, Hough, 1976), this framework has since been further refined and extended (Clarke and Mayhew, 1980; Clarke, 1980, 1983, 1997). Ronald Clarke's 1997 SCP model outlined 16 opportunity reducing techniques that are useful through SCP under each of these main opportunity reducing categories (Clarke, 1997). This model has since been updated and extended to what are now 25 opportunity-reducing techniques (Cornish and Clarke, 2003). The original 16 are highlighted for clarification. These techniques have the potential to overlap, have multiple purposes and can be applied in both physical and virtual environments, due to their highly situational and adaptive nature (Clark, 1997; Newman and Clarke, 2003).

Four fundamental components of SCP are (1) A theoretical foundation drawing principally upon routine activity and rational choice approaches; (2) A standard methodology based on the action research paradigm; (3) A set of opportunity-reducing techniques; and (4) A body of evaluated practice including studies of displacement (Clarke, 1997, p. 6). SCP aims to practically reduce criminal opportunity through the secure design of places and products, and implementing of cost-effective prevention strategies (Clarke, 1997; Felson and Boba, 2010;

Clarke and Newman, 2010; Plant and Scott, 2009). The approach offers a tangible, quick, and cost-effective response to multiple types of crimes and situations (Clarke, 1997; Felson and Boba, 2010). Situational Crime Prevention has been proven to prevent various types of fraud (Clarke, 1997; Felson and Boba, 2010; Newman and Clarke, 2003). An example of this is how barcodes have been added to Superbowl tickets in order to prevent counterfeiting and fraud (Clarke and Newman, 2010, p. 23). Clarke (1997) provided 23 examples of successful case studies in which SCP was shown to be effective (Clarke, 1997).

The Rational Choice perspective is based on six concepts regarding criminal behavior: Criminal behavior is purposive and rational; criminal-decision making is crime specific; involvement and event decisions are the two broad groups of criminal choices; there are separate stages of involvement; and that crime events occur through various stages and decisions (Cornish and Clarke, 2008, p. 24). These concepts are applied and shown through four decision-making models: initiation, habituation, desistance, and the crime event (Cornish and Clarke, 2008, p. 29, 31). This perspective was developed in order to aid in the conceptual understanding and application of SCP, and the role of a motivated offender (Cornish and Clarke, 2008, p. 37; Cornish and Clarke, 2014, p. 2).

Specifically, it influenced SCP by making the point that immediate changes to a setting can potentially alter the decision making process that an offender goes through before deciding to commit a specific type of crime (Cornish and Clarke, 2008, p. 37; Cornish and Clarke, 2014). In turn, an important contribution to SCP by Rational Choice was that it introduced the potential for a diffusion of benefits and reduction of anticipatory benefits (Cornish and Clarke, 2008, p. 37). It also helped address the issue of displacement criticisms, by utilizing their assumptions of criminal decision-making (Cornish and Clarke, 2008, p. 37).

While Situational Crime Prevention was originally focused on reducing the opportunities to commit crime in physical settings, it is fundamentally able to change based on the situation and environment (Newman and Clarke, 2003). The approach is one that has the ability to change and adapt to online environments, not just physical environments. Due to its focus on victim-offender transactions and interactions, the SCP approach aims to prevent crime in both virtual and physical environments (Newman and Clarke, 2003, p. 110). The 16 technique framework (Clarke and Homel, 1997) was successfully adapted and applied to prevention of various Internet and e-commerce crimes by Graeme R. Newman and Ronald V. Clarke (2003), in their book *Superhighway Robbery: Preventing E-Commerce Crime (2003)* (Newman and Clarke, 2003). There has been some research focusing on the application of SCP to forms of various online frauds and crimes (Reyns, 2010), and addressing internet security vulnerabilities (Hinduja and Kooi, 2013; Willison, 2000).

3.2.1: Preventing Online Product Counterfeiting Victimization using SCP

Situational Crime Prevention has the ability to aid in reducing online fraud victimization (van Wilsem, 2013), as well as aiding in product counterfeiting deterrence and prevention (Hollis and Wilson, 2014). Increasing the risks of getting caught is one category that should be explored more. Offenders often view the risks of being caught as a bigger fear than what the punishment may be, since they cannot control what punishment they receive once caught (Clarke and Eck, 2014). Two techniques under this category applicable to the prevention of online product counterfeiting victimization are extending guardianship and natural surveillance.

Natural surveillance has received scholarly attention in physical spaces, but has not been empirically explored in virtual spaces. While Newman and Clarke (2003) noted that this technique could be used to prevent e-commerce crimes, they stated that "the extent of natural

surveillance and how it works on the Internet is unknown (Newman and Clarke, 2003, p. 162)."
Natural surveillance online involves end-users and consumers taking the responsibility as a
stakeholder in this fight.

The concept of natural surveillance may apply to the prevention of deceptive product
counterfeiting victimization. Consumers have the power to provide natural surveillance over
fellow consumers and keep a watchful eye out for counterfeit products and sellers online, and
sharing this information when possible. Newman and Clarke (2003) suggest establishing
community watch on auctions sites as one form of this (Newman and Clarke, 2003, p. 114).
Another form of natural surveillance is through providing customer feedback on auction
transactions.

Capable guardianship, as previously discussed, is one of the key elements of the
chemistry of crime (Cohen and Felson, 1979). Extending guardianship is a concept that may
apply to the prevention of deceptive product counterfeiting victimization online also. Hollis and
colleagues (2014) noted that consumers could extend guardianship through taking self-protective
target hardening measures when shopping for legitimate products, increasing self and others
awareness of counterfeit products, and reporting products that are suspect (Hollis et al., 2015).
An example of both extending guardianship and employing natural surveillance is neighborhood
watch (Clarke and Eck, 2014).

To increase the perceived effort of the criminal committing e-commerce crimes, one
technique Newman and Clarke suggest is controlling their access. The key suggestion for access
control in relation to the current research is through customers being aware and skeptical of grey
market websites (Newman and Clarke, 2003, p. 113). Another key technique is target hardening.

Individuals can employ self-protective target hardening measures by educating themselves on where and what to buy when shopping for legitimate products online (Hollis et al., 2015).

To reduce the anticipated rewards (in this case, financial gain), target removal is suggested as a technique. One form of removing the target is through the target refusing to buy stolen, counterfeit, or unethical items on auction sites. Another technique is to reduce the temptation for the consumer to buy the counterfeit. This is especially important when considering counterfeiting in a deceptive market, where the goal for the consumer may be to get the legitimate product at a discounted price. Customer education is a primary way to reduce temptations to purchase deceptive counterfeits, since both the product and seller authentication information can be disseminated in discussion boards and on brand retail websites. This in turn removes the opportunity for a criminal to harm that person by preventing the sale of a deceptive counterfeit. Education can empower customer independence by providing detailed product and pricing information on a wide range of products that can be used in product, pricing, and seller assessment (Newman and Clarke, 2003, p. 31).

Removing excuses is the last of the four main opportunity reducing techniques proposed by Newman and Clarke. Under this umbrella falls alerting conscience and controlling disinhibitors. Online communities can help facilitate compliance in the forms of publishing the names and links to trusted online merchants and professionals. SCP seems to be the most promising crime prevention strategy to prevent e-commerce crimes, opposed to just strictly technical measures.

3.2.2: Internet Users as Cyber Vigilantes

Wall (2001) states that "internet users and user groups comprise the largest group of individuals to be inducted into policing the Internet," and that "within any user group there may

be a number of sub-groups which have formed around specific issues in order to police websites that offend them (Wall, 2001, p. 171). Huey and colleagues (2012) noted that online community members can act as hybrid or individual forms of "cyber-vigilantes" and "civilian police" if they use they use their knowledge and skills to identify, track, and collect information on potential and suspected criminals (Huey, Nhan, and Broll, 2012, p. 85). Vigilantism would be shown through online crime prevention actions independent of law enforcement, while civilian policing is shown through their joints actions with law enforcement. Through either role, the general public employing their available capital to protect (Huey, Nhan, and Broll, 2012).

Newman and Clarke (2003) proposed the concepts of active (policing) and passive (surveillance) control (Newman and Clarke, 2003, p. 162). Internet users have the ability to be viewed as a hybrid source of these controls. Active control deals with enforcing laws, rules, and regulations, with a focus on rule breakers (Newman and Clarke, 2003, p. 160). Internet users are viewed as active controllers who can employ natural surveillance, identify and flag rule breakers, and extend guardianship (Newman and Clarke, 2003, p. 160).

Passive control is focused on making individuals and groups "conform their behavior willingly to the rules or conform without active awareness of their conformity (Newman and Clarke, 2003, p. 160)." The goal here is to not actually impose on these individuals and groups, but to prevent crime and structure the environment through protocols, education, or design. This relates to the literature on CPTED and designing against crime (Jeffery, 1971; Crowe, 1991; Clarke and Newman, 2005). Internet users can employ this type of control as well by not engaging in too many risky online routine activities, and by not trusting that all advertisements are legitimate.

3.2.3: Consumer Partnerships for Preventing E-Commerce Crime

Partnerships are important to the prevention of crime (Newman and Clarke, 2003, p. 168). Preventing e-commerce crimes requires special and unique partnerships between people with common interests and goals that can employ the techniques of SCP. Various organizations, groups, and individuals are important to the task of modifying criminogenic situations and reducing the opportunities for crime (Newman and Clarke, 2003, p. 168). These partnerships are beneficial, due to the fact that they offer a continuous and open information exchange between diverse organizations and groups of people, who are assuming responsibility for the task of preventing a specific crime of interest. For this collaboration to occur in cyberspace, effective and efficient information exchange is the key to successful partnerships (Newman and Clarke, 2003, p. 168).

Newman and Clarke (2003) used trade associations and consumers groups as potential partners for preventing crime. They were viewed as important sources of passive control due to their ability to provide victimization prevention education to consumers, pressuring brands to make more secure products, and by providing information on new guidelines and security measures (Newman and Clarke, 2003, p. 170). They also stated that these trade associations could aid in prevention by providing forums for "the exchange of ideas and experiences" in a particular field or area of experience (Newman and Clarke, 2003, p. 170). Consumers are viewed as a stakeholder in the product counterfeiting phenomenon, (Amine and Magnusson, 2007), and therefore can be an effective partner in prevention. Simpson (2006) noted that due to lacking regulation and policing of these internet crimes, some consumers have taken matters into their own hands by acting as e-commerce "watchdogs," reporting illicit listings they come across and using educating their fellow consumers about potential frauds and brand specific anti-

counterfeiting information (Simpson, 2006). They may create specific websites dedicated to these causes or use forums on online auction sites to facilitate this education. A practical example and special form of a consumer partnership that has taken place with the emergence of e-commerce as a preferred shopping avenue are virtual communities that discuss ways to identify counterfeit brand name products and sellers online (discussed in great detail later).

3.2.4: Criticisms of SCP

Each criminological theory and perspective comes with criticisms. One criticism of Situational Crime Prevention is the potential displacement of crime (Felson and Boba, 2010; Clarke and Newman, 2010). Crime that has been prevented in one area will not necessarily be displaced to surrounding areas. More often than not, the crime will disappear (Felson and Boba, 2010). Another criticism is that it may be difficult to implement (Clarke, 1997). SCP is also thought to impose on the civil liberties of some individuals (Clarke, 1997; Benson et al., 2009; Benson et al., 2013). One benefit of this type of prevention is the diffusion of benefits, which basically says that one crime prevention strategy and effort will lead to another prevention strategy and effort (Clarke, 1997; Felson and Boba, 2010). The thought is that prevention will lead to more prevention the same way crime can lead to more crime (Felson and Boba, 2010).

Despite these criticisms, Situational Crime Prevention is a promising criminal opportunity reducing method for the prevention of deceptive product counterfeiting victimization online, due its proactive and situation-specific focus on modifying the conditions, setting, and context that allow a crime to occur. The current study will assess how its techniques can be used by consumers to provide surveillance and extend guardianship over themselves and online shoppers of Jordan footwear products through sharing product and seller related knowledge and experiences, to help better identify genuine products and sellers in a market full of deceptive

counterfeits. Namely, consumers can take engage with each other on social media and discussion

forum platforms to aid in the fight against online counterfeits. In doing so, the efforts and risks

associated with a crime can be increased, rewards reduced, and excuses associated with the crime

can be removed.

CHAPTER 4: RESEARCH METHODOLOGY

4.1: Research Questions and Objectives

Although criminologists have recently begun to explore the application of the guardianship element of Routine Activity Theory and Situational Crime Prevention techniques to the prevention of product counterfeiting (Hollis et al., 2014) and cybercrimes (Reyns, 2015; Reyns et al., 2015), no research to date has focused solely on the prevention of product counterfeiting victimization that occurs online. The current study is an exploratory application of the guardianship element of Routine Activity Theory (Cohen and Felson, 1979) and various techniques of the Situational Crime Prevention (Clarke, 1997; Newman and Clarke, 2003) framework to the prevention of product counterfeiting victimization in an online environment. This will be done by focusing on ways in which an *independent virtual brand community* and its members can assist the consumer search and product authentication processes through increasing awareness and facilitating information sharing between brand loyal and genuine-item consumers, which could potentially prevent the purchase of a counterfeit sale. Specifically, this study will perform a qualitative analysis of the ways that participants in an independent virtual brand community forum on-line educate and share information about one product: Jordan Brand basketball shoes. In turn, the findings can demonstrate the ways community members provide specific brand and product knowledge with fellow online consumers in order to potentially prevent victimization.

There has been a simultaneous growth in the number of online communities, online shopping, e-commerce sales for Jordan Brand footwear products, fraudulent sellers of Jordan Brand footwear, and consumers using C2C communications to minimize their pre purchase risk of victimization when shopping online and to evaluate products post purchase (Adjei et al.,

2010). With the continued increase in online shopping for Jordan Brand footwear and the increasing prevalence of counterfeit Jordan Brand footwear products and sellers/websites that secondary sneaker market consumers could come across when searching for genuine and authentic versions and sellers/websites of these products, these consumers need to be armed with knowledge of how to best distinguish genuine Jordan Brand footwear products and sellers/websites from the counterfeits to prevent victimization. In the same breath, these same genuine-item seeking consumers need to be able to evaluate the product post purchase to evaluate if they have received a genuine or counterfeit Jordan footwear product. This suggests that research should be conducted on ways to help consumers utilizing C2C communications minimize their pre purchase risk of buying counterfeit Jordan Brand footwear, and evaluate the authenticity of Jordan Brand footwear products that they have purchased on the secondary sneaker market. The current study takes this charge, with two primary and interrelated research questions guiding the research:

RQ1) **Do athletic footwear Independent Virtual Brand Community members and administrators act as, or have the potential to be, capable guardians against product counterfeiting victimization over the community and its members?**

RQ2) **What key indicators do Jordan Brand footwear consumers using C2C communications in an athletic footwear Independent Virtual Brand Community use most frequently to differentiate between counterfeit and genuine Jordan Brand footwear products and sellers/websites (offering these products)?[2]**

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[2] Based on the prior knowledge of the researcher, this question is based on the assumption that Jordan Brand footwear consumers use C2C communications in online communities to learn how to differentiate between counterfeit and genuine Jordan Brand footwear products and sellers/websites.

The second research question is specifically aimed at assessing the indicators that Jordan Brand footwear consumers using C2C communications in an Independent Virtual Brand Community – who are attempting to authenticate a Jordan Brand footwear product or seller/website offering this product – use most frequently. This is important to specifically examine for a couple of reasons. One key reason is because these individuals are attempting to authenticate a product in an online setting where they can only use visual cues and cannot physically inspect the tangible product to evaluate it. Consequently, the cues that have often been uncovered in previous research when differentiating between counterfeit and genuine products in a physical setting may not be the same, nor used as frequently, by consumers who are attempting to authenticate a product in an online setting.

However, with no prior studies being found to specifically examine this phenomenon before, this was unknown. This research fills this gap. The frequencies for indicators most frequently used to virtually authenticate Jordan Brand footwear products that will be uncovered during this analysis can be used as a first step to more thoroughly understanding the cues used during the product authentication process for these consumers. To further explore this, the preliminary data garnered from this exploratory qualitative study could be used in future research as comparison benchmarks to the most frequently employed indicators during the physical product authentication process for these products.

It could also be the case that the cues used during the physical product authentication process for Jordan Brand Footwear products and sellers/websites may simply not be deemed as being as effective in an online setting. The second question has an underlying goal of gaining initial qualitative insight into which indicators Jordan Brand footwear consumers using C2C communications in an IVBC perceive to be the most effective for virtually assessing product and

seller/website legitimacy. This can, in a sense, be operationalized and expressed by the indicators – and their frequencies – that are discovered during the current analysis. However, the only true way to directly assess an individual's actual perceived effectiveness of an indicator would be through administering surveys and asking the individual directly, which was not a goal of the current study. This too would need to be examined in future research, and this exploratory qualitative study could provide the preliminary data needed to create detailed survey questions. To the author's knowledge, there has been no research done on the guardianship potential of IVBC's and members in preventing consumers from unknowingly buying counterfeits, and these types of online communities specifically being viewed as a platform for the application of Situational Crime Prevention techniques.

4.2: NikeTalk

Web forums (and the internet overall) have been increasingly used as a data source for conducting qualitative research, and are seen as a form of in depth conversation and social interaction in an online environment (Holt, 2015; Holt, 2010; Holt and Smirnova, 2014; Holt, Blevins & Kuhns, 2008). These on-line discussion groups allow like-minded individuals to share information and discuss various topics or concerns they may have. They can be either open to the general public or closed, requiring registration. Due to the ongoing dialogue and archived nature of this this textual web content, both current and past topics can be viewed at anytime from anywhere. This provides unique access to both data that is archived and naturally occurring (Silverman, 2013, p. 55).

An Independent Virtual Brand Community for Nike – NikeTalk – was identified through a web search of Nike discussion forums and prior site experience by the author. The community was conveniently and purposively chosen as the source of data for this analysis due to its users

being loyal, knowledgeable, experienced, and known "e-consumers" of all Nike footwear –

particularly Jordan brand footwear. This makes them more likely to come across advertisements

for counterfeit Jordans online, due to the prevalence of counterfeit Jordan footwear online

(Wisbey, 2010). In a study of five online basketball shoe communities by Fuller and colleagues

(2007), only NikeTalk was found to be a true brand community (Fuller et al., 2007; Marchi,

Giachetti, and de Gennaro, 2011), and it is not owned by Nike. NikeTalk is the most reputable

online sneaker community (Fuller et al., 2007, p. 63). Originating in 1999, this site features

discussion forums and subforums where brand-loyalists can discuss and talk about everything

regarding Nike footwear, experiences with counterfeits (Fuller et al., 2007), or anything of

general interest. Certain forums are strictly dedicated to the Jordan brand of Nike or other

footwear brands.

Individuals can become a member of NikeTalk, or interact on the site as a guest due to its

open nature. With over 40,000 registered members, this is a community full of specific Jordan

product knowledge and interest (Prause and Thurner, 2014). NikeTalk requires that users be at

least 13 years of age, mainly for membership purposes. The website is open to global users of

both genders and all ethnicities and over a million monthly users according to a statement on the

website. NikeTalk has been viewed as an "independently funded, real-time focus group for the

company (Tkacik, 2002)." The site is often frequented by Nike employees (Fuller et al., 2007;

Tkacik, 2002), and has been used by the company to help them make better marketing and

strategic decisions (Prause and Thurner, 2014).

4.2.1: Price/Fake Check Subforums and Legit Checks

With the frequency of Jordan brand footwear being sold online and it being a hot target

for counterfeiters (Chow, 2014; Clarke and Eck, 2005), consumers need a platform to discuss

and evaluate products to make better purchasing decisions. The NikeTalk homepage has various sections and options for members and guests to read articles, buy and sell Nike products, and read product reviews. There is also a forum section entitled "The Kicks," which features individual subforums for Nike, Nike Retro, and Jordan Brand footwear products, amongst others subforum options related to other footwear brands. These Nike and Jordan Brand subforums each contain a subforum called "Price/Fake Checks."

The Price Fake/Check subforums for both the Nike and Jordan brand are dedicated to helping members and guests to answer any questions about the legitimacy of a product or seller they have come across in e-commerce markets. These threads are known in the "sneakerhead" community as Legit Checks, and members share information on which indicators (cues) are best to use when assessing the legitimacy and authenticity of shoes they intend to, or already have, purchased from various outlets, websites, and sellers. By being extremely loyal and familiar with Nike and Jordan brands, NikeTalk users may more effective at identifying counterfeit Nikes and Jordan footwear products. Consumers who have expertise with genuine Jordan footwear products may have a better eye for identifying counterfeit versions (Xiao and Benabasat, 2011), although this ability may vary by person, brand, and product.[3] However, these community members still may be knowledgeable about useful indicators and cues for identifying counterfeits and deception in C2C or B2C transactions, and can share this deception detection information in these Price/Fake check forums to help protect fellow subforum visitors.

Due to the high levels of daily site views, visits, and high number of total posts (Prause and Thurner, 2014), NikeTalk users may be considered to be capable online guardians. Capable

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[3] There is some debate regarding the potential accuracy of even an expert's ability to accurately distinguish genuine and counterfeit products (especially Jordan brand footwear) solely using visual and extrinsic cues without technological or chemical, etc., authentication assistance, given the increasing sophistication and quality of counterfeit products (see Hoe, Hogg, and Hart, 2003; Fejes and Wilson, 2013; Noe, 2015).

guardians are classified by their daily individual routines (Cohen and Felson, 1979), and it can be assumed that those who most feel comfortable enough to post and reply to legit check threads in the forums frequently visit and feel connected to this community. Legit check threads can potentially be viewed as evidence of guardianship in an IVBC, due to the level of information they contain to serve as a source of consumer education on product and seller verification cues they can use during the search process, and increase general awareness of counterfeits sellers and sites.

4.2.2: Stance on Fakes

At this point it is important to further validate the selection of NikeTalk as the data source, given its open nature and ability for anyone to offer information on requested legit checks. NikeTalk does not tolerate the discussion, acceptance, or selling of fakes, and has a very strict policy against fraudulent and fake products and deception. The administrators ban those who use the website for these purposes, which helps keep offenders out of these forums and away from potential victims. This is important to note because it strengthens the case for the NikeTalk Price/Fake check subforums acting as a protective factor against buying counterfeit products online for athletic footwear consumers. Specifically, one NikeTalk administrator states the following policy regarding their forums:

> Promoting illegal conduct - including copyright violations - is and has always been against NikeTalk rules. We don't allow people to discuss pirating music, movies, or pay per view broadcasts. We don't allow people to discuss how to purchase "high quality" fakes. We don't want anyone promoting or discussing where to obtain "unauthorized" products that may or may not have illegally originated from Nike-contracted factories." Remember these products are illegal; we can't tolerate the use of our community to

promote criminal activity, if anyone promotes these sites or posts where to obtain these

illegal products they will be banned from the thread. Please follow the rules; if this thread

gets out of control at all it will be locked. Thanks.

4.2.3: Limitations

There are also downsides to the open nature of these forums. An unevaluated downside to

independent virtual brand communities as guardians is the potential for counterfeiters to use the

information and indicators discussed in the Price/Fake Check forums to make more deceptive

and indistinguishable products (Wisbey, 2010). Here, the counterfeiter could simply be

monitoring these forums for cues that they could incorporate without ever actually having to join

in on a discussion. There is the chance that offenders have increased visibility of potential

victims, and can identify which ones seem to be the most vulnerable to deception outside of the

confines of the community based on perceived nativity or lack of product knowledge (Welsh,

Mudge, and Farrington, 2010). This effect can, however, be controlled or reduced by place

managers monitoring thread conversations and intervening if they notice an offender is present

within community.

The author acknowledges that NikeTalk is not owned by Nike Inc., thus making the

information and legit check forums on this site subjective and opinionated in nature. Due to the

ability for any user to create a profile or start a post as a guest, an inability to check the accuracy

of the information provided by posters, varying levels of product and brand knowledge and

experience by posters, and depending on the amount of replies provided for a legit check, there is

the potential that a consumer could be steered in the wrong direction regarding product or seller

legitimacy when requesting a Legit Check. Based on the level of awareness of counterfeits and

deceptive tactics, these posters could potentially feel that an actual legit product simply is a high-

class fake due to high skepticism of all Jordan footwear products they come across online and in this sub-forum. Recent research has shown that even experts have a hard time distinguishing counterfeit athletic footwear from their real counterparts (Noe, 2015). However, in the athletic footwear community, this site is still viewed as a strong and reputable source to inquire about the legitimacy of Nike and Jordan shoes for those all around the world and it is truly a brand community. Also, while the credibility of the people who shared authenticating information with the help seekers may be of question to some (due to their lack of official affiliation with Nike Inc.), it is argued here that the NikeTalk community members may have "experiential credibility" (Flanagin and Metzer, 2013, p. 1627) based on their (sometimes) extensive brand and product knowledge and experiences.

4.3: Research Design

Most prior research on virtual communities has been qualitative (Annett-Hitchcock and Xu, 2015). This is due to the ability of qualitative approaches to examine textual data in depth and help researchers better understand both individual and group experiences with a phenomenon. Qualitative research also allows data collection and analysis to occur at the same time. The current study employs a mixed methodology due to its exploratory nature and goal of better understanding and interpreting how and what information is shared between individuals.

Due to the inductive and exploratory nature of this research, a content analysis (Berg, 2001) was performed on textual data from the NikeTalk Jordan Price/Fake Check discussion forum. It is an unobtrusive, cost and time efficient qualitative analytical method. A content analysis was useful for interpreting this type of textual data due to its ability to help the researcher understand underlying themes through a step-by-step analysis, which also helped increased the reliability of

the data. This content analysis integrated both qualitative and quantitative steps of analysis, making it a mixed methods approach (Mayring, 2014; Berg, 2001).

Both manifest and latent content were used to best understand and explain the data (Berg, 2001). Manifest content was the data which was quantifiable. Latent content was determined by the researcher's judgements and interpretations of the communication which took place between the individuals (Tashakkori and Teddlie, 1998, p. 122). Frequencies were tallied to reveal the most prominently valued and used indicators in the sample and to better explain the data (manifest content), while the data was also examined for evidence of guardianship (latent content). Content analysis is not aimed at producing causal findings, which supports its use in this exploratory study using archived and textual data from a publicly and openly accessible subforum. This analytical method allowed the researcher to make objective inferences when examining the data and various perspectives of those in the sample (Berg, 2001).

Threads were analyzed by hand using the three-stage inductive and iterative coding process of Grounded Theory analysis (Corbin and Strauss, 1990). Key to any content analysis is its system of categories, which is where the utility of the grounded theory coding methodology comes in to play. Mayring (2001) noted that qualitative content analysis can be combined with other qualitative procedures. Berg (2001) and Mayring (2014) provide support for the use of the inductive coding scheme of grounded theory to assist in the understanding of underlying themes which are supported by empirical data (which are grounded in theory). Forming the categories inductively allowed them to emerge from the data naturally, and is useful for qualitative research due to its ability to allow the researcher to operate without bias (Mayring, 2014, p. 374).

This coding strategy allows the various units of analysis to be placed into categories (Titscher et al., 2000). By using the three phases of coding from grounded theory in conjunction

with a content analysis, the researcher is able to become more immersed in the data is able to provide a more thorough account of what is being observed. The three coding stages are axial, open, and selective. In the open phase, the data begins get broken down analytically and placed into similar categories. The axial stage involves making subcategories, testing relationships against data and, further refining categories. The selective phase is where the coding becomes more unified and the final categories become very detailed (Strauss and Corbin, 1990, 1998; Corbin and Strauss, 1990).

This coding process has been utilized to analyze open source web forums in criminological research (Holt & Lampke, 2010). These criminological studies have mostly focused on stolen market data (Holt and Lampke, 2010; Holt, 2013; Holt and Smirnova, 2014), deviant sexual behaviors (Holt and Blevins, 2007; Holt, Blevins, and Burkert, 2010), and deviant subcultures (Holt, 2007; Holt, 2010), and have not been utilized to examine product counterfeiting. This approach allows the researchers to remain open minded as they are examining the data. The fact that data collection and analysis happen at the same time strengthens validity.

4.4: Sampling and Data Collection

Only threads from the Jordan Price/Fake Check subforum were included in this analysis. The purposive and convenient selection of this subforum allowed for a brand (Jordan) and product (footwear) specific assessment of the product and seller level verification indicators that were most frequently employed and discussed by an easily accessible sample of consumers of the most profitable division of Nike – Jordan brand footwear. Using threads from this subforum was particularly useful for addressing the two key research questions. Users of the Jordan Brand Price/Fake check subforum were potentially engaging in a special form of guardianship by

sharing their experiences, assessing the legitimacy of products and sellers/websites, and educating viewers of this information on indicators that can be used to verify these popular products and their sellers to prevent victimization or assist with a purchasing decision.

Data collection took place early June 2015. A sample of 500 threads was conveniently selected from the Jordan Brand "Price/Fake Check" discussion sub-forum. Due to time constraints, a goal of gaining primary data on the guardianship potential of these consumers, the potential of each thread to yield large amounts of data, and the researcher hand-coding these threads without the use of qualitative analysis software, 500 threads was viewed as adequate for this exploratory project. An advanced search was used in order to list the threads in ascending chronological order by their creation date. This captured the most recent 500 threads dating backwards from the day data collection began.

The randomizer.org Random Number Generator was then used to create a randomized string list of 100 numbers ranging from 1-500. The 100 random numbers were matched with the corresponding numbered NikeTalk threads to finalize thread selection and data collection for the analysis. To create the random list of 100 numbers using the Random Number Generator, parameters were used in order to ensure that no number was included twice, that the list was put in order from least to greatest (for easier analysis), and to make sure that 100 numbers from 1-500 were selected at random. Microsoft Excel was used to manage the final data.

The final threads were chosen randomly instead of purposively in order to allow an equal chance for any of the initial 500 threads to be selected, regardless of their number of replies or the Jordan footwear model in question. Consequently, there may be threads that are not included in the analysis that have a high number of replies and very in-depth discussion between many forum users that could provide greater insight for the analysis. There is also the potential for

some individuals to account for a large amount of the posts, which could misrepresenting the views of the majority of the subforum users. However, selecting the threads at random allowed the researcher to gather unbiased data on the overall nature of information sharing and guardianship in this subforum, which was a key focus of the study. This is of value with this study being exploratory and seeking to understand which indicators are most frequently used and discussed in distinguishing counterfeit and genuine Jordan brand footwear online. Randomly selecting the threads also accounted for a greater number of Jordan brand footwear models.

CHAPTER 5: RESEARCH FINDINGS

The findings of the content analysis are presented in three parts. First, descriptive statistics and member characteristics for the sample are given. Second, the key indicators that NikeTalk community members found most important for product and seller evaluation are discussed, with quotes included to provide further insight. Third, evidence of guardianship that was observed is presented and discussed, highlighted with quotes as well.

5.1: Descriptive Statistics and Member Characteristics

5.1.1: Threads and Posts

The 100 random threads included in this analysis yielded 448 total user replies (n = 4.8 replies per thread), creating a grand total of 548 total posts (n = 548). Thread creation dates spanned 19 days (May 22nd – June 9th) which led to an average of 5.26 threads being created per day based on our small sample.

5.1.2: Thread Classification and Selection

The overall content of discussions in these threads exhibited the way in which subforum members and moderators interact to seek knowledge, educate, and inform each other on how to best verify product authenticity and seller legitimacy. Seven different types of threads were identified based on a coding of the title and frequency of posts. These were identified to highlight the varying types of information sought and shared by those individuals included in the sample and users of the Jordan Price/Fake Check subforum and select the final threads eligible to be included in the analysis based on the research goals.

A majority of the threads were identified as being a *Fake Check*, in which the goal of the thread creator is to seek information regarding the authenticity of a pair of Jordan shoes. Fake Check threads (n = 89) accounted for 92.88% of total posts (n = 509), showing that a large

number of the information shared in this subforum was solely focused on helping consumers

evaluate the authenticity of a footwear product. One member attempted to obtain a Fake Check

on a pair of Retro Jordan Shorts, and did not receive any replies. *Fake/Price Check* threads (n =

4) were those threads in which the individual sought information regarding both the authenticity

of the shoe and an acceptable price range for that shoe, and accounted for 3.83% of total posts (n

= 21). Three threads were titled *Deleted* due to either the individual who created the thread or a

NikeTalk administrator deciding that the thread was no longer needed. Deleted threads

accounted for 1.3% of the total posts (n = 8).

One thread was focused on helping members garner a better understanding of the term

"legit," and this thread accounted for only 1% of the posts (n = 6). This was classified as

Definition Check. One member posted what is categorized as a *Shoe Review*, in which they

simply provided pictures and an overview of what made their rare pair of Jordan's legit. The goal

was to allow others to use the review as a comparison for determining the authenticity of their

product. This thread yielded only one reply. A thread identified as being a *Seller Check* – in

which the goal was checking the legitimacy of a seller or website – yielded no replies to the

initial created thread. There was only one thread identified as being a *Price Check*, with the goal

of determining an acceptable price to pay for a given product. No one replied to this thread.

Due to the current study's focus on helping consumers differentiate between counterfeit

and genuine Jordan footwear products, sellers, and websites, threads needed to be a Fake Check,

Fake/Price Check, Shoe Review, Seller Check, or Price Check focused on Jordan footwear to be

included in the final analysis. Threads titled Deleted were included in the analysis to see if any

useful information could be gleaned. As a result, the one Definition Check thread and only the

Fake Check thread that was focused on Jordan shorts were not included in the final analysis. This meant that 98 threads remained for final analysis, yielding 541 total posts (n = 541).

5.1.3: NikeTalk Community Members

133 unique users were identified from the 98 threads and associated posts. For the current study, users of the Jordan Brand Price/Fake subforum were loosely[4] defined according to the classification system used by Füller and colleagues (2007) to define members of online basketball communities. Jordan Brand Price/Fake Check users can be classified based on their posting and helping frequency as lurkers, posters or frequent posters (Füller, Jawecki, Mühlbacher, 2007). Lurkers have previously been widely defined in both qualitative and quantitative terms, such as users who never posted messages or contributed to the forum in the last three to four months (Nonnecke and Preece, 2000; Ganley, Moser, & Groenewegen, 2012), to more general descriptions such as those who rarely contribute and post messages (Nonnecke, Preece, and Andrews, 2004). Using posting frequencies of users from one basketball community as an example, Fuller and colleagues (2007) categorized over half (58%) of the individuals as lurkers based on their low contribution rates. With the obviously inability to account for the prevalence of individuals who were passively viewing the forum and not posting within the captured timeframe of threads used in the this study (19 days), a lurker was defined in the current study as someone who contributed 1-5 posts (about 1%) to the sample.

Nielsen (2006) found that for most online communities, about 90% of users can be classified as lurkers, while just 1% of users account for almost all contributions. This 1% of individuals can be categorized as frequent posters. Fuller and colleagues (2007) defined frequent

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[4] Sun and colleagues (2014) noted that studies focusing on different types of communities should define criteria for inclusion in these categories differently than those used for other types of communities (Sun, Rau, Ma, 2014, p. 111).

posters as just over 3% (212 out of 6216) of total members being responsible for 80% of the

postings (Fuller et al., 2007, p. 64), showing that a small amount of users created majority of the

content in that community. Lurkers were the most common type of users found in the Jordan

Brand Price/Fake Check subforum, representing over 90% of the total unique users. These

members may be guests or registered members that passively view the discussions for their own

benefit, such as educational purposes or learning about the community. They rarely contribute to

discussions or help with legit checks.

In comparison, frequent posters are those who are regular contributors to legit checks, are

the most respected and knowledgeable community members, and are viewed as having the most

influence of opinion within the forum (Füller, Jawecki, Mühlbacher, 2007, p. 64). Frequent

posters are often the most active, knowledgeable, well-respected, and "seasoned" Jordan

sneakerheads on NikeTalk. Their opinions are often sought out by thread creators, as some may

directly request help from these known veterans. This was exemplified in a post by a user to an

administrator explaining that they were referred to NikeTalk by a friend on Facebook:

> Thank you for your time bro, my boy told me you helped him out numerous times, so
>
> you're opinion was the main one i was looking forward to...so when you disagreed
>
> ,despite my knowledge and the help from other various pages and blogs, I was a little
>
> confused , so if you finalize they're legit...IM going to relist them ..again thank you for
>
> clearing things up.

Less than 5% (n = 6) of the total unique users in this sample can be classified as frequent

posters, as they accounted for over 30% of the total posts. The product and brand knowledge,

expertise, and experiences they bring to these discussions are often generally viewed as the most

accurate feedback they can get from someone on the site. However, there were instances in

which one poster directly challenged the expertise of one frequent poster. This is not necessarily viewed as a bad thing. This type of constructive criticism and questioning of advice by community members could be used by the thread creator to decide which points from each side they most agreed with, aiding in the purchasing decision.

Thread creator and poster site usage and experience varied, from occasional and new to daily and over 10 years. These individuals also varied in terms of Jordan footwear product experience, with some users being frequent online buyers and traders while others only bought or sold occasionally. One user even claimed to have over 20 years of experience with Jordan footwear. It was difficult to identify the gender of users using solely usernames alone, as there are no standards or a general consensus of what differentiates a male vs. female username. The sneakerhead culture at large is dominated my males, but there has been a recent growth of female sneakerhead culture (Block, 2015). A female could be therefore attempting to use a perceived male's username for inclusion purposes, or a man could have a name considered a unisex name and it be misperceived as a female username. As a result, there is a potential that both males and females were included in the sample.

5.1.4: Jordan Footwear Products and Purchases

Overall, the Jordan 11 (31.63%), 1 (18.6%) and 3 (11.22%) were the most discussed models. Members bought, sold, and traded products on various e-commerce platforms, including consumer-to-consumer mediums (ex: auction and social media sites such as Ebay and Facebook) and business-to-consumer websites offering rare and enticingly priced Jordan footwear (ex: websites like vipkicks.com). This showed the variety of potential avenues for a hopeful consumer to victimized when looking for these products online. A majority of the products in question were acquired via consumer-to-consumer (C2C) dealings, such as through the trading or

reselling shoes on Facebook, EBay, or at sneaker conventions such as SneakerCon. Take for example this Fake Check request below. In it, the user provides a detailed request and notes the location where he obtained the product:

> Hi, I picked up a pair of the '88 white cement 3s at Sneakerness Amsterdam last weekend. They are worn, and I was sure about them being legit, even tho I don't own any 3s for reference. I have tried to make this picture series as comprehensive as possible. The one thing I'm unsure about is the fact there isn't even the faintest hint of a stamp inside the box. Could you guys have a look?

5.2: Coding and Key Indicators

NikeTalk members shared indicators to help verify both sellers and products. An analysis of the data revealed the product and seller level verification indicators (cues) were discussed the most in the posts. Open coding led to an identification of 53 total indicators initially (50 for products; 3 for sellers). These indicators were then selectively coded and grouped, which led to the creation of 10 indicator categories (8 for products; 2 for sellers). These indicators were then categorized by whether they were useful for Product or Seller Level Verification purposes. Selective coding led to the creation of eight Product-Level indicator categories: Design/Tooling, Logo, Materials, Sole, Packaging, Accessories, Manufacturing/Production, and Condition. Selective coding also led to the creation of two Seller-Level indicator categories: Pricing and Suspicious website. The total number of posts in which these indicators appeared in was tracked to see which indicators were most frequently used to evaluate these products.

Overall, there were low frequencies for all indicators. This could be attributed to the fact that nearly 20% of all posts utilized what equated to one-word answers to provide feedback, in which they either only stated that they felt the item was fake or legit without additional insight.

For instance, "100% legit," "Your good. 100% good," and "Soooo fake" were responses to a thread in which a person wanted requested a Fake Check on a pair of 2015 Chicago Jordan 1's, and posted seven pictures to assist those who were willing to help him assess the product. Besides stating their thought on the authenticity, they provided no additional detail on what indicators they used to make their decisions. This could be attributed to the fact that they were confident in their assessment, or agreed with the comments of a previous poster and felt no further information was needed unless specifically asked by the help-seeker to support their claim with examples.

5.2.1: Product Flaws: Tells or Quality Control Issues?

Before discussing the product level indicators that were discussed amongst those in the sample, it important to note that product flaws – such as cosmetic and aesthetic issues or those which may affect product performance – can be expected for large production runs of products in a variety of industries. This is especially prevalent in the footwear industry, where products may be handmade and produced in different factories who may not completely adhere to the intended quality control specifications on every single product in a given production run communicated to them by the brand.[5] These quality control and production issues may sometimes lead to complete recalls of that production run.[6] These issues can especially be expected if these products happen to be produced in rogue factories (which will not adhere to the brands specifications), and are then slipped into the legitimate supply chain or are sold online to unsuspecting consumers.

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[5] This lack of adherence could be due to a variety of reasons, such as suppliers using unauthorized subcontractors, rushed factory and quality control inspections, or workers not taking the needed time to do better quality work as a result of feeling pressured into meeting production quotas (Clifford and Greenhouse, 2013).

[6] A recent example of this was Nike's decision to pull the LeBron 12 from the market on the initial launch day, due to quality control concerns and cosmetic issues (Brettman, 2014). The AJ 1 KO High OG was recalled due to production issues, with mold problems speculated (NikeStore, 2015a, 2015b; Choi, 2015). Nike's and Air Jordan's have been recalled previously due to other material or cosmetic issues, as well (Casey, 2007).

Noticeable product flaws or inconsistencies lead users to scrutinize and question the authenticity of products before and after making a purchase in an online context. Flaws may be observed through pictures posted by the seller, or on the actual obtained product post-purchase. These product flaws were described by NikeTalk users as either a "tell" or quality control (QC) issue. Tells are the cues and indicators that let you know a product is more than likely a fake. They are considered a red flag and should lead to further inspection and questioning of the shoe to the seller. A QC issue is a common product flaw that may have slipped past inspection at the manufacturing facility that can lead to you questioning if a product is real or not, but it does not mean a product is a counterfeit. A NikeTalk administrator offered the following analysis of tells vs. QC issues. This was an intervention in a thread in which the members were having a debate on what indicators should be used to determine the authenticity of the pair at hand. The administrator notes that size of the production can lead to a few bad apples in the bunch, but that these bad apples are not necessarily fakes:

> Guys we have to remember these thing are GRs for GODS sake..I keep hearing you guys say something is fake bc something should be lower, or the tongues are a little short etc..THIS STUFF COULD EASILY BE QC issues...There were Millions of these made in different factories mind you..There WILL BE small differences in construction IE spacing etc..ITS INEVITABLE..You guys gotta supply something more than "my pair looks different than your pair so your pair must be fake"..You are literally comparing 2-3 pairs of shoes from a multi-million pair shoe run??? This is not accurate AT ALL and probably more often than not you are gonna be wrong in your assessments..You cant say with 100% certainty EVERY pairs back tab logo should be 3/4" from the midsole..Or every pairs tongue should be 1/4" proud of the collar..Thats redic..Ill say it again..SHOES

ARE HAND ASSEMBLED..Either one of you guys sit down and piece together 1000000

pairs of something and i GUARANTEE you will have hiccups as well..SMALL

INCONSISTENCIES DOES NOT MEAN A SHOE IS FAKE.. You MUST take the

whole package into consideration.

The administrator continued on to describe in detail what "tells" are:

DETAILED accurate tells are needed that WOULD NOT BE A QC issue..For instance

different logos, colors, packaging, tooling...These will be your decision-making points,

not "that looks a little lower than my pair" For instance let's say every legit pair came

with White cardboard inserts..Then pairs pop up with black inserts..They are fake..Thats

something solid and can not be QC..Simple as that..These shoes like all other fakes will

have tells..We Just gotta find them..I have 3 solid ones at the moment..Ill share when they

have been proven accurate.

5.2.2: Product Level Indicators

The eight product-level indicators that were discussed in the sample are presented in this

section. Table 1 (next page) presents the indicators by category, along with the amount of replies

they appeared in. They are discussed in this section in order of rank frequency.

Design/Tooling

This was the most frequently discussed indicator for products. Tells related to the design

of the shoe were the shape of the shoe being off (too wide or skinny); the overall cut of the shoe

(too high; not symmetrical, etc); and the height and cut of the tongue. Incorrect shape was

viewed as a key tell. A moderator stated "Yep, definitely fakes..Shape is off for this release,

tooling is also off (the way the shoe was constructed)." However, discussions about this aspect of

the shoe also took into account the differences in the sizes of individual's feet and the impact that

can have on stretching the shape of the shoe. If the height and cut of the tongue was inaccurate,

these forum users noted that this was a concern. The height of the patent leather cut was frequently discussed as a tell for the Jordan 11 model. For example, a user stated "both are 100% fake. 23s are off. and the patent leather cut is too high." Below, Member A states their opinion on the shoe, and the Member B adds support for their assessment regarding the cut of the patent leather:

a: 1000% fakes..high PL cut, yellowing is off, shape is off..

b: Agreed. That pl cut is a dead giveaway

Table 1: Selective Coding of Indicators

Indicator Category by Verification Type	Number of Replies (n = 443)	Frequency	Initial Code Example
Product-Level			
• Design/Tooling	80	18.05%	Shape of shoe is off
• Logo	34	7.67%	Jumpman placement
• Materials	21	4.74%	3M reflectivity
• Sole (Insole/Outsole)	17	3.83%	Incorrect yellowing
• Packaging	16	3.61%	Missing Nike sticker on box
• Accessories	11	2.48%	Retro card
• Condition/Price	10	2.25%	Deadstock vs. used
• Manufacturing/Production	7	1.50%	Production date accuracy
Seller-Level			
• Suspicious Website	6	1.35%	Company based in China
• Price	4	.90%	Price too good to be true

Other observed Design/Tooling issues regarding the collar of the shoe, stitching quality, and the shoe looking "cheap" led individuals to question or support product legitimacy. An

example of the product looking cheap would be the product looking like it was poorly constructed simply based on individual perception of aesthetic appeal.

Logo

The quality, accuracy, and position of the Jordan Jumpman and 23 (his playing number) logos were viewed as key tells for Jordan footwear products, ranking second as the most discussed indicator. Take for example this quote showing the perceived importance of the logo being a red flag: "100% fake. 23s are a dead giveaway." In the same thread, another member provided support for the previous member when they replied "Yup fakes, 23 is off." In terms of quality, bad stitching on the logo was viewed as raising skepticism on the behalf of forum users. Accuracy of the logo related to whether the logo looked like the official trademark image. The Jordan Jumpman logo is a silhouette of the legendary player in midair dunking a basketball. Only four fingers are shown on his hand, and the shoes have laces extending off of him. Inaccuracy here could be the Jordan figure's body being too wide, or the number of fingers being inaccurate. Position of the logos related the placement of the Jumpman and 23 on the footwear products. If the logos were too high or too low in comparison to known legitimate pairs, then this was viewed as a definite tell. This member used the Jumpman logo on the back of the shoe as a tell: "Always check the lip on the toe and the 23 on the back that's always a dead give away."

Materials

Materials related to the quality of the materials used in making the product. One way this was illustrated was when a member stated Key examples were the quality of the stitching of the shoe; reflection of the 3M material; and if the correct materials were actually used and of what quality (ex: use and quality of suede). 3M shoes are shoes which have a reflective material added to the finished product. When the shoe is placed under a flash from a camera or is viewed at

different angles under lighting, it will change the image of the shoe. If the shoe did not reflect as it should for a legitimate pair, this was a tell. For stitching, the shoes should be sturdy and not fall apart due to minimal wear and tear. If the shoe gave out after owning it for a short period of time, this was a red flag. Also, carbon fiber is placed on some of these products (especially the Jordan 11). "Can you get a better close up of the carbon fiber?" If the quality and color of the carbon fiber did not meet expectations, the product was further scrutinized. The same went for patent leather and suede materials. If they were not of expected quality, the shoe was viewed as fake. For example, this seller assesses a pair of Jordan 1's: "Shiny leather, swoosh is too thick, size tag font and border is off, toe box is off, box label should be above the red line."

Sole

Incorrect coloring and fast yellowing of the outsole was seen as a key tell. The outsole of Jordan footwear products naturally turn yellow over the course of time. Incorrect yellowing was one of the most frequently discussed red flags. If the shoe yellowed or discolored too soon or not at all, these were signs that a product may be a fake. One forum user stated that "There should be more visible yellowing around the pods which is a major concern."

Experienced forum users noted that counterfeiters are too aware of not only this tell, but all other tells. They work to not get caught. As more sophisticated manufacturing, packaging, and printing technologies emerge, counterfeiters are able to make fakes that are almost exact replicas and similar to genuine products. They have begun to make fake Jordan's that yellow over time. This makes it harder for the consumer to tell if they have been victimized. Here, a moderator provides education to those involved in a Fake Check thread on this potential deception:

These are indeed fakes.. MANY fakes for instance all of the ER Concords should be yellowed now...Yellow does not = legit 100% of the time..Its good to see, but there are other checks that should be made too..

Packaging

Retailer's stickers (such as Footlocker) and quality control stickers and stamps being on the packaging helped to add towards perceived legitimacy. One member asked the thread creator, "Does the box lid have a factory stamp on the inside and does the box have a retailers sticker?" to better assess their product. For another product, a moderator stated that the product he was assessing had "no stickers etc in or on the box..Like a stamp from the factory and a QC sticker" and that there "also should be a NIKE sticker on the bottom of the box." These quotes illustrate the perceived importance of the reseller obtaining their product from an authorized retailer, and being able to prove this having correctly marked packaging adds perceived legitimacy to the product.

Incorrect packaging raised skepticism on the behalf of forum users. If the footwear product came in a different box than the one Nike released the product with, users questioned its legitimacy. Quality of the packaging also raised concerns. If the box was flimsy and not sturdy like authentic Jordan boxes, then the authenticity of the product could be questioned.

Accessories

If the product or packaging did not include the correct accessories, the product was generally viewed as a fake. Contents and accessories included the proper protective paper that is placed inside of the box, the "Retro Card" that comes with Retro Jordan footwear products, and the shoe trees (or forms) that are placed inside the shoe to keep them from creasing. In response to a Fake Check, a member asked the thread creator to "Please post a clear pic of the Retro card

that came with the pair..Also the box label and cardboard inserts." For certain models, having additional laces tied to the shoe, or the laces not being pre-laced correctly for DS shoes, was viewed as a fake indicator by two individuals. The member in the quote below provides information regarding their experience with a particular Jordan 11 release, particularly with regards to the expected lacing for a DS pair of this model.

> 1st paid is legit and definitely not DS. You can see the useage on the soles and creases on the inner toes of the PL and leather heel part. Plus these releases weren't laced all the way to the top loop. Rookie mistake on the seller that wore them and tried to make them look as DS as possible.

Nike is very particular about these accessories in order to prevent counterfeiting. Experienced users who buy pairs from legitimate retailers are able to compare their accessories with the accessories of the product in question. Inconsistencies could include misplaced and inaccurate box labels, and missing or inaccurate authentication markers and track-and-trace technologies (ex: holograms, brand specific stickers).

Condition of shoe/Price

The condition of the shoe, such as whether it was new or used, has an effect on the price one should pay for a shoe. New Jordan footwear products are termed deadstock (DS). Deadstock shoes are those that are brand new, still in the box, and have not been tried on. Used shoes are those which have been subject to wear and tear. These were viewed to be the most difficult pairs to authenticate visually, due to the natural wear and tear associated with Jordan footwear products, such creases or yellowing of the sole. This was further complicated by the need for quality pictures (discussed later). For Jordan footwear products that were limited releases and

have been in high demand, some wear and tear is acceptable and the used shoe is still a commodity.

Price was viewed as an additional key indicator for verifying legitimacy of shoes based on condition. In the Price/Fake Check threads, the help-seeker sought to know if the condition (and authenticity) of the shoe was worth the sellers asking price. Below is an exchange between one help-seeker and thread moderator:

a: Sellers is looking for 175+ shipping. Is that fair?

b: Sounds decent. Pay what you would be willing to pay for em. I probably wouldn't do any more than $150 shipped.

This allowed the help-seeker to make a personal decision on what they would feel comfortable paying for a shoe in the given condition. Another stated that they paid $110 for the shoes on Ebay, but began to question their authenticity. They were told by the moderator that their suspiciousness was due to normal wear and tear of the product, and that $110 was a good asking price.

Looks ok, fair price. They have been worn quite a few times, which is why the insole logos have rubbed off.

If a shoe is DS and rare, low pricing is a fake tell. For example, these users stated the following:

Yea that price is way too low. I think they only made about 1000 pairs of these. They go for around $1300+ DS

Indeed fakes...if your looking for ds 2011 concords best sign to look for is the deep yellowing around pods on the soles. Ds concords go for 400+"

However, a seller may attempt to deceive an individual by claiming a shoe is DS and attempting to have the buyer pay that premium price. Here, a member offers his advice on a product that the thread creator was told was DS by the person who bought them from:

legit but come on... DS? did you even look at them? there's ankle creases and the 23s are cracked from wear... for God sakes there's dirt stuck in the traction pods on the shoes and they're laced to the top. do not pay DS price

These two members helped provide information on what is a better asking price for a shoe of this quality:

a: Agreed their definitely legit. But not ds I would pay maybe 230 for them

b: 270 is good if I was selling

Manufacturing/Production

Forum users often viewed manufacturing level indicators to be tells for fake products as well. The tags on the inside of the shoes were where this information is found. For example, if the UPC (barcode number scanned at retail checkouts) was not long enough or was not associated with a known retailer, then this was a sign. If the style and color codes didn't match the Nike authorized codes, this was a red flag. Inconsistencies on these tags, in terms of origin of country for the products and listing an incorrect size for that shoe, were tells. The production dates were one of the easiest ways to tell legitimacy of a product. "100% legit man. Stitching looks good and the production dates are good." It was very easy for experienced forum users and those with extensive product knowledge to match the given production dates with those of known legitimate products. These two users below help inform the help-seeker of their knowledge of the production date for the Ray Allen 13's.

a: Fake real Rays have an end production date of 5/13/11.

b: Tounge looks off and top two lace holes are off. Most if not all Rays released to the

public ended with 5/13/11 that I have seen. Just trying to help.

5.2.3: Seller Level Indicators

Suspicious Website/Seller

The general "suspiciousness" of a website/seller was the key seller-level indicator. One

way that suspiciousness was exhibited was by users questioning the native origin of the website

(seller) and viewing that as a red flag. If the site used Chinese language or was based in China,

posters often let the seekers know that there is a good chance the product was not authentic. One

suspicious website, lovekicks.ru, was based out of Russia. Specifically, the Niketalk members in

this sample were suspicious of Jordan products from at least three websites: brooklynajays.com,

kixify.com, and lovekicks.ru. A sneaker consignment shop – RIFLA –was deemed legit. One

Ebay seller – Vipexclusives – was deemed suspicious by multiple individuals, while another –

Cool Shoe Shine – was deemed legit.

> 100% legit '13 Retro OG Bred 1's. If you're purchasing from Cool Shoe Shine, they're a
>
> reputable seller from what I've seen.

If a help-giver had prior experience shopping on or reviewing a website/seller, they were

better able to give a detailed account of the reputation of their accountability. In the quote below,

the knowledge seeker was able to use the information shared from the experienced forum user to

realize that they have been victimized by Vipexclusives. The total cost of this victimization was

$80, due to the fact the consumer sought to pay retail value and got overcharged by this amount

for a fake product. Here as an exchange between two individuals where this realization took

place:

a: Thanks again for all the help...is it possible for resellers to put retail stickers on real

boxes and stick fake shoes in??FTL...EAS...ect....got these from vipexclusives on eBay.

b: Oh vipexclusives...I had a feeling they sell fakes..did a lot of Lc from VIPexclusive

and most pass as legit..but now I know they sell fakes, they always get early releases and

has a good feedback on ebay..smh

a: I called myself doing a lil research and since all the lc's done on shoes copped from

him turned out legit....I took a chance....so he's mixing real wit fakes? paid 80 ducks over

retail...they going back

While victimization here was not prevented here in the form of preventing a sale, this

knowledge empowered the consumer to seek a recuperation of lost funds from the transaction, or

to at least seek further information on the authenticity of this product. The previous quote was a

clear example of an experienced forum user extending guardianship.

The members in the forum also exhibited ways they felt a seller could gain trust, or

become less suspicious to a potential buyer. In the sneakerhead community, seller (website or

single person) level verification evidence may also be in the form of receipts verifying that the

product has come from a legitimate retailer (ex: Footlocker; Finishline); mobile phone

screenshots of successful transactions by the seller (to help validate their reputation), or what are

termed in the shoe community as seller "tagged" pictures.

Tagged pictures are those in which the seller of the shoe posts a picture of the shoes next

to a picture with their real name or seller name (such as an Ebay username) on it as a means of

taking ownership. By doing so, they are placing their reputation as a seller on the line by

guaranteeing authenticity of that shoe. Tagged pictures are often viewed as a means of gaining

trust in the public that you are not trying to scam them and sell them counterfeit shoes. For an

Ebay seller, this could have tremendous implications for their ability to continue to sell products on the platform. If a pair of shoes associated with a tagged picture is deemed to be counterfeit, they could receive negative feedback, have their account suspended, be taken to court, or be forced to repay the person for the monetary damage incurred.

Pricing

"Too good to be true" pricing on products was also used to assess a seller. One member explicitly stated the price made them suspicious when they said "I would like to believe these are real but price seems a bit too good to be true." If the price was too high for the product in question, forum users suggested that the knowledge seeker not waste their money. If the price was too low, there was a chance that the seller was trying to entice the potential consumer into buying the product. Take the example of this conversation between subforum users. The following quotes relate to a pair of shoes valued at over $1300 being offered to this consumer for only $470. The consumer was almost deceived into buying it:

a: Seller says they are ds and wants a really good price.. nt help me out

b: 100% Fake. lace bag and shape of the shoe are dead giveaways.

a: Really? Thanks bro, 470 was a steal[7]

b: I'm sure that's why. He probably paid $40

By having experience with these products in both the legitimate and secondary sneaker markets, these individuals have a wealth of experience and a general idea of what constitutes a

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[7] This could be viewed as an implication that the purchasing decision was changed due to the information received having an effect on the purchasing behavior of the individual.

reasonable price for different Jordan footwear models, and were able to offer quality information

that could be used during seller assessment. Here, the victimization was directly prevented.[8]

5.3: Evidence of Guardianship

The concept of guardianship (Cohen and Felson, 1979; Hollis et al., 2011; Hollis-Peel

and Welsh, 2014) was extended in this section to describe how the NikeTalk Jordan Price/Fake

Check subforum can serve as a protective factor, by facilitating guardianship opportunities for its

members. The concept was dually extended to assess how users of this subforum can, and

currently do, take advantage of these opportunities to self-protect and extend guardianship

against this type of victimization. This section presents latent and manifest data that provided

evidence and observations of self-protective target hardening behaviors, capable Guardianship in

Action (Reynald, 2009) by users of the forum, and place management by the NikeTalk

administrators and forum moderators. Latent data – which is determined by the interpretations of

the researcher – was used to better reflect and uncover potential underlying guardianship

processes that were taking place through C2C interactions. Latent content was used to uncover

the "hidden" or underlying guardianship potential of the Jordan Brand Price/Fake check

subforum and its users, due to the fact that guardianship is not necessarily a quantifiable and

directly observable concept in all cases (based on content of a post). On the other hand, manifest

data was useful for directly observable and quantifiable guardianship processes, such as how

many threads receiving a reply being used as a quantitative and countable way to measure

extended guardianship observed on the surface. It should also be noted that different readers of

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[8] In two instances, the data revealed examples of monetary damages online purchasers of Jordan footwear products may incur from being duped into buying counterfeits. The consumer paid $300 for a counterfeit pair of Jordans, which represents a minimum loss of $100 strictly based on average Jordan footwear retail prices of $150-$200. In another instance, one individual was felt victimized by paying $80 over retail for a pair of Jordan's that they were told was fake after requesting a legit check.

the same latent data may have different judgements, so latent content has limited reliability at best.

Self-protective target hardening behaviors (self-guardianship) related to individuals actually seeking help to better differentiate counterfeit and genuine products and sellers. Information sharing related to guardianship that was extended by those who replied to the threads to educate consumers. Place Management related to the actions that were exhibited by NikeTalk administrators and moderators in order to secure the forums members from offenders. These are discussed in depth below.

5.3.1: Actively Seeking Help: Online Self-Protection through Target Hardening

Data revealed that the NikeTalk members who use the Jordan Price/Fake Check subforum actively sought help to strengthen their ability to self-protect against buying counterfeits online and being deceived by masking and mimicking tendencies by actively seeking help through requesting Price and Fake Checks from fellow NikeTalk members. This was shown in the data each time someone created a new thread in the forum that fit one of the accepted thread classification categories. As previously discussed, virtually all threads in this sample of Jordan Brand Price/Fake Check forum are were either an individual or combine Price and Fake Check. This provides some insight into the reasons for seeking help. Consumers conduct these checks to gather information and immediate feedback that can be used to impact purchasing decisions and behaviors.

Users can choose to start a post in which they post pictures of the shoe box, packaging, its contents, the shoes, and other authenticating evidence they may have. Other users may choose to reply in threads to this topic, offering their expertise, advice, or knowledge about the shoe, retailer, or situation at hand. Most often, the users sought to have their beliefs and skepticisms of

products and sellers confirmed or disproven. Creators (thread starters) made users aware of the knowledge they sought to receive in either the thread title or initial post. This was demonstrated in the following post regarding the price of a specific shoe advertised:

I would like to believe these are real but price seems a bit too good to be true. Any help will be much appreciated. Cigars sz 11.5 and Champagne sz 11. I know the cigars look a bit scuffed and worn, anything else yall may notice please point out...thanks in advance.

Another example of an initial help request was: "It's a good buy that's why im second guessing. Size 10 comes with box. Are used. Please help! Thanks" One member simply asked "these legit or no FAM?" Some chose to be very detailed when seeking help:

Hey everybody! I need help with 2 kicks. Both are 7Y GS Air Jordan 11s. Both have been worn, Concords were only worn once. They both seem to have all of the aspects of a legit shoe but there's something fishy about both shoes and their detailing. Are these fakes or am I just imagining things? First up are the Bred 11s. They seem to wear much faster than any other Jordans I've ever owned. Then, there are the Concords. The picture doesn't really pick it up, but there is yellowing around the pods, toe, and the heel. Also, both shoes have that dot on the insole. Both were purchased in 2013 from top-rated Ebay sellers for around $250-300. Please let me know what you think!

By the consumer requesting legit checks and actively seeking out product and seller information that could be useful during their online product search and evaluation process, they are taking proactive measures to prevent victimization. This showed that thread creators were contextually aware of the prevalence of counterfeit Jordan footwear online, they were contextually aware of the potential to be deceived by sellers, and they also were not complicit with product counterfeiting. This awareness of product counterfeiting and deception, coupled

with the lack of complicity[9] is what leads the consumer to check the legitimacy of their product in this sub-forum. This implies that brand owners should continue to educate and make consumers more aware of the perils and dangers of shopping online from sites other than authorized retailers, such as the ability to be deceived and not receive a refund. By doing so, there is the chance that more contextually aware consumers will be more likely to utilize available online resources (such as Price/Fake Check forums) to assess suspicious products and sellers prior to making a consumption choice.

5.3.2: Extending Guardianship through Information Sharing

Extending Guardianship was a theme that emerged through the product and brand specific knowledge, information, and experience sharing of those who replied to initial help request. To better examine for evidence and the capability of guardianship in the subforum, posts were coded to record frequencies of codes that represent the stages of the Guardianship in Action measurement construct (Reynald, 2009): invisible, available, capable, and intervening. The Guardianship in Action (GIA) measurement construct (Reynald, 2009) was originally used to examine the potential for guardianship in residential spaces (Hollis-Peel and Welsh, 2014). The construct provided a direct "observational tool for measuring both the potential for guardianship, as well as guardianship in action at residential properties (Reynald, 2009, p. 1)." Reynald (2009) originally concluded that residential guardianship was a process involving someone who has the potential to engage in guardianship by monitoring and intervening when necessary (Reynald, 2009). The current study modified and extended Reynald's (2009) four-stage classification of guardianship to better fit the virtual and geographically dispersed nature of the internet and cyber

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[9] According to Chaudhry and Stumpf (2011), consumer complicity is "a consumer's willingness to obtain, share, or use counterfeit products (Chaudhry and Stumpf, 2011, p. 139).

domain, as opposed to the physical domain and residential spaces. This was needed, as explained by Hollis-Peel and Welsh (2014):

> "as the instrument was designed specifically for this setting (residential neighborhoods), these measures would likely not be fully applicable in non-residential areas. The questions asked are designed to examine residential guardianship. It is our opinion that a modified instrument would need to be developed to examine levels of guardianship and environmental correlates in non-residential areas. This would allow us to develop a better understanding of how guardianship operates in these different social contexts (Hollis-Peel and Welsh, 2014, p. 2014)."

The process of active guardianship in the physical world is similar to that in the cyber domain. Vakhitova and Reynald (2014) recently conducted a survey that examined guardianship in action in cyberspace and found some applicability for the construct. They concluded that contextual awareness (operationalized as being aware of anti-cyber abuse policies; in this case anti-counterfeiting) made someone twice as likely to intervene in a cyber abuse incident. This was an important predictor of an individual witnessing and being willing to intervene to protect against cybercrimes (in this case, Cyber-deception/theft/fraud). This theoretically means that someone who is more aware of the potential to be victimized due to online product counterfeiting will be more likely to intervene when needed.

The invisible stage (Stage 0) is when there are no guardians visible or available (Hollis-Peel and Welsh, 2014, p. 324). For the current study, this was shown in the data when a created thread received no replies. This occurred in 18 of the 98 (18.36%) threads in our sample. The first stage of guardianship – availability – refers to there being guardians available, but not necessarily actively monitoring (Hollis-Peel and Welsh, 2014, p. 325). This concept had to be

modified to fit the virtual environment, due to an inability for the researcher to physically observe NikeTalk members at their computers and to be able to physically observe them unobtrusively viewing and using the Jordan Price/Fake Check subforum.[10] However, this stage (Availability) was automatically assumed to have occurred (and be occurring) if NikeTalk members were observed engaging in the second stage – capability.

Capability refers to guardians being visible, available, and actively monitoring. This concept was not able to be observed unless the members were observed engaging in the third and final stage – intervening. They defined this stage as guardians being visible, available, monitoring, and intervening. This was shown in the data whenever a thread received a reply to provide product and/or seller level verification assistance. 80 of the 98 (81.63%) threads in the sample yielded a reply to the initial help request, showing that those who sought help more often than not received some feedback from those who chose to intervene. This also implied that these users were contextually aware and willing to help. Hollis-Peel and Welsh's (2014) definition of this stage shows the progressive nature of guardianship by inherently assuming that the first two stages have to be passed in order to make it to the intervention stage. By the NikeTalk members choosing to intervene and provide this unsolicited assistance, they were indirectly engaging in capable guardianship.

Hollis and Wilson (2014) note that guardians at this stage can intervene either indirectly or directly. Direct intervention, would be shown by someone "directly approaching the would-be offender in an effort to stop them (Hollis and Wilson, 2014, p. 173)." This was only found in one thread and was done by a NikeTalk moderator when a seller attempted to defend themselves and

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[10] The purpose of this research design was to allow the researcher to remain covert and unobtrusive; no NikeTalk members were recruited to allow the researcher to physically observe and record NikeTalk members during this stage. This would be something that future research could address.

their product when they came across the buyer requesting a legit check[11]. A NikeTalk moderator jumped in the conversation when the seller attempted to defend himself, listened to them explain what they felt made their product legit, and allowed the seller the opportunity to save his reputation by providing further evidence in the form of better images and information regarding the shoe. Knowing that there is a chance that they could have been banned from the conversation and have their reputation ruined, it was crucial that the seller verified the legitimacy of their product. The moderator directly intervened and solved the problem through mediation and eventually verifying the (perceived) authenticity of the product (This was an example of place management, which will be revisited in the next section).

Hollis and Wilson (2014) defined indirect guardianship as "calling on someone else to intervene on the guardian's behalf (Hollis and Wilson, 2014, p. 173)." Applying this thinking and definition to the current study, it seems to be the case that the NikeTalk member who chooses to seek help through requesting a Price and/or Fake Check is actually engaging in indirect guardianship over themselves, due to them calling on the help of others to intervene on the guardian's behalf. As Hollis and Wilson (2014) noted, most indirect guardianship involves someone calling on the police to be that guardian. In the case of someone engaging in indirect guardianship through seeking help from other members, the members who actively intervene by replying to these help requests are in a sense providing assistance, extending guardianship, and doing a service that law enforcement may not be able to do.

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[11] The fact that this seller was able to prove their legitimacy was an added benefit of the forums. The NikeTalk moderator even encouraged sellers to conduct legit checks themselves to protect their reputation. This was also an example of place management being shown. This was interesting in the sense that this could be viewed as a convergence between a potential offender and victim, which showed the importance of having moderators and NikeTalk administrators act as place managers over the forums and members. Place management was best shown when moderators and administrators chose to intervene in the threads and provide education or mediation.

Further, given the explanation of the difficult conceptual distinction between guardianship and target hardening that was provided by Hollis and colleagues (2011)[12], it may actually be the case that NikeTalk members who reply to the threads and provide information regarding product and seller level verification education to help seekers are perhaps extending guardianship by *watching* over individuals in the subforums (in this case, by monitoring the Price/Fake Check subforum) and are intervening through *empowering that persons target hardening capabilities*. Increasing someone's ability to differentiate counterfeit and genuine products makes them a harder and less suitable target against online product counterfeiting victimization and deception. This information in this subforum would likely not even be being shared without the guardianship process taking place. For example, someone who is not available (Stage 1) and capable of engaging in guardianship (Stage 2) in the subforum would not be able to intervene (Stage 3) by sharing target hardening information (product and seller level verification indicators) to a help-seeker (suitable target).

By Jordan Price/Fake Check sub-forum users being available (online and on NikeTalk), monitoring and supervising (active in the Jordan Price/Fake sub-forum when the thread is created), and willingly intervening indirectly (voluntarily replying to Legit Check requests), these individual acted as guardians over the help-seekers. They have the potential to prevent victimization if the thread creator felt that the insight provided in that reply confirmed their

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[12] This distinction was best attempted to be explained by Hollis-Peel and Welsh (2014): "Guardianship is exercised by individuals who deter the would-be offender by watching over the potential target of criminal activity. Target hardening involves attempts to decrease the suitability of the target by making changes to the targets themselves. Here, there is an effort to make the target less attractive to the potential offender, whether there is adequate guardianship present adequate guardianship present or not (Hollis and Welsh, 2014, p. 322)."

suspicions and deterred them from purchasing that product[13]. However, this research did not intend to make these types of causal assumptions, and this should be a focus of future research.

5.3.3: Place Management

Interpreting latent data revealed that Independent Virtual Brand Community site administrators can potentially be viewed as place managers (Eck, 1994). Place managers are responsible for monitoring and controlling behavior at physical or virtual locations that are potential convergence spots for motivated offenders and suitable targets (Eck, 1994). These individuals can extend guardianship and handle offenders, due to the overseeing nature of their management role (Kennedy, 2015). This oversight could be viewed as an extension of natural surveillance (Newman and Clarke, 2003).

NikeTalk administrators can act as place managers by banning known trolls and those who are perceived to be sellers and promoters of counterfeit products. However, while this is a possibility, it was not directly observed in the data as no one was banned in our sample threads. However, by having strict zero tolerance policies against the discussion and selling of counterfeit products by site users, these place managers are reducing the likelihood and opportunity for a potential offender to converge with a suitable target. These administrators help work to keep potential victims away from potential offenders by making these Price/Fake Check forums a safe haven for consumers to be informed on the legitimacy of products and key indicators that can be used during the consumer decision journey. These site administrators are extending guardianship by making site users aware of the potential for counterfeits, and by keeping them away from potential victimization. The continuous monitoring of threads and their ever-present nature can

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[13] In a few instances the help-seeker had their belief that the shoe was fake confirmed using a legit check, and decided against buying the shoe (self-protective target hardening): For example, one help-seeker stated, "Thanks a lot, I'm a play it safe and pass on em then."

be viewed as 24-hour formal and natural surveillance by administrators and moderators in this community and subforum (Prenzler, 2007).

Place management was also shown through the Niketalk administrators or moderators intervening in the discussion threads when someone directly requested their help, when they felt that there needed to be clarification on sneaker terminology and ways to distinguish the counterfeits from legitimate products. There were 33 posts that came from moderators. There are also security notices and other helpful links pinned to the top of the subforum for quick reference and access. These include a list and on-going discussion thread (since 2006) of legitimate websites, help for getting legit checks, warnings for trolls and illicit actors that they will be banned (security notice), and the list of sneaker terminology.[14] This is one of the warning left on the homepage by administrators:

> TROLLS/FREE POSTERS: IF I AM NOTIFIED, or any other staff, YOU WILL BE
> BANNED.

This is a message left on the homepage for those helping with legit checks:

> IF HELPING WITH LEGIT CHECKS: POST THE REASON WHY THE SHOE IS
> FAKE. POSTING "FAKE" DOESNT REALLY HELP MUCH

NikeTalk administrators could be acting as indirect guardians if they are keeping an active and updated list of identified suspicious websites and sellers publicly accessible on their website. They could alert law enforcement and brand owners of this list, which would potentially allow both brands and law enforcement to investigate and pursue legal ramifications for infringers, seize domain names, and confiscate counterfeit products.

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[14] Two specific legit check guides were posted at the top to help consumers distinguish between authentic and counterfeit colorways of Jordan Retro 1 and Jordan Retro 11 models. As the analysis showed, these were the two most legit checked models by consumers. The administrators posted these guides as quick checks for individuals who do not wish to engage in discussions but still are seeking help.

5.4: Additional Findings and Observations

5.4.1: Mutual Respect and Gratitude

Subforum users often exhibited a form of mutual respect for each other, regardless of site and product use and experience. It is this respect that allows the conversations to flourish efficiently and effectively. These users have different backgrounds and experiences with different sellers and products in different markets, and other members are able to refute any claims of legitimacy or fakeness they don't agree. Constructive criticism of fellow members and their opinions on legitimacy is welcomed and occurs often. Members and moderators may offer an additional opinion when they see no common ground being met. The opinions and discussions of others are monitored by site administrators to keep this mutual respect flowing and keep incidences of problematic behavior to a minimum.

Expressing gratitude was common in these threads. There are multiple ways in which a user could express gratitude. One way was thanking all of those who intended to reply in advance by stating "thanks in advance" or TIA in the initial post. Users could also "rep" fellow members that posted legit check reviews if they found them to be useful and a great contribution to the overall knowledge of anyone seeking to learn about that specific shoe. By repping a fellow community member, their credibility is raised. This reciprocity and mutually beneficial feeback enhances the relationships between members and could be a welcoming sign for others to join in the conversation (Tamoschus, 2014). Implications of expressing gratitude are discussed later.

To summarize, the findings show that the NikeTalk IVBC members used a combination of eight indicators to authenticate products: Design/Tooling, Logo, Materials, Sole, Packaging, Accessories, Manufacturing/Production, and Condition. The members used two indicators to verify sellers/websites: Suspiciousness of the seller and Pricing. The data also indicates that these

members actively seek help from their fellow community members to authenticate products,

taking advantage of the benefits of CMC's. This helps them protect themselves from

victimization. They often receive voluntary help from their fellow members in the form of

authenticating information (the indicators discussed) as well, which can be viewed as capable

guardianship being extended. Further, NikeTalk administrators and forum moderators fulfill

place managements duties and provide a virtual safe haven and learning center for assessing

products in an online environment. The next section provides a discussion of these findings,

along with limitations and implications.

CHAPTER 6: DISCUSSION AND CONCLUSION

6.1: Discussion of Findings

The digital age has brought many changes to the general shopping experience, consumer purchasing behavior, and both the product evaluation and authentication processes (Fejes and Wilson, 2013, p. 321). As online shopping and e-commerce continually grows and offers many advantages to consumers (easier to compare prices; can shop from mobile devices, etc.), criminals are increasingly seeing the internet as an attractive medium to deceive genuine-item seeking consumers into purchasing counterfeit athletic footwear by using masking and mimicking tactics (Mavlanova and Fich, 2010). The purpose of this thesis was to explore and better understand how consumers can (and currently do) protect themselves and others from buying counterfeit athletic footwear when shopping online, by them actively seeking and willingly sharing product and seller level verification information to aid in the consumer product authentication process (Fejes and Wilson, 2013). Further, this research sought to examine how Independent Virtual Brand Communities can facilitate this special type of guardianship in online spaces by serving as a safe and open platform for learning and sharing this authenticating information. A qualitative content analysis (Berg, 2001) was performed on a sample of 100 threads from the Jordan Price/Fake Check subforum hosted on the NikeTalk virtual community to address two key research questions, which will be discussed further in the chapter.

The data provides some preliminary support for the findings of Fuller and colleagues (2007) regarding posting frequency by users in brand communities, in that a small number of the sample was deemed as being highly knowledgeable (or experts). Less than 5% of the total number of unique users in our sample accounted for over 30% of the total posts, showing that a large number of the contributors in our threads posted at a low rate. These findings provide some

support for previous research that lurkers greatly outnumber frequent posters in online communities (Fuller et al., 2007; Nonnecke, Preece, and Andrews 2004). This was indicative of the activity level in the Jordan Brand Price/Fake Check subforum. Due to the small number of threads (n = 100), however, it is important to note that these categorizations may not accurately describe these individual's posting frequency in the Jordan Brand Price/Fake Check subforum. A larger sample of threads could potentially reveal that these individuals may have posted more or less frequently in other threads.

In the NikeTalk community, members' openly share and seek out product and seller level authenticating information both pre and post purchase to protect against victimization. To reiterate, online shopping is a risky routine activity, and increases ones risk for fraud victimization (such as being deceived into buying a counterfeit product (Pratt et al., 2010; van Wilsem, 2013). This risk is further increased when you consider the inability of consumers to physically evaluate these products for authenticity prior to making a purchase online (Holt et al., 2015). When a consumer is faced with inadequate information needed to distinguish counterfeit and genuine products, the risk of purchasing that product increases (Gilly et al. 1998). This is a common situation that consumers of Jordan brand footwear are faced when they come across product listings in e-commerce marketplaces. To reduce this risk, consumers often use Independent Virtual Brand Communities as conduits to seek and glean product and seller level verification information from fellow consumers (C2C communication) (Adjei et al., 2010; Chatterjee, 2001; Trevinal and Stenger, 2014), and this was shown in the Jordan Brand Price/Fake Check subforum.

There were over five threads created per day on average in this sample, implying frequent activity. There are many different reasons that lead an individual to seek help using this

subforum and create threads. Seven different types of threads were identified based on a coding of the title and frequency of posts: Fake Checks, Fake/Price Checks, Deleted, Definition Checks, Shoe Reviews, Seller Checks, and Price Checks. 92.88% of the threads were Fake Checks, which implied that this subforum is frequently used to inquire about the authenticity of Jordan footwear products.

This subforum also appeared to have a high number of different individuals contributing to the threads, as 133 unique users were identified from the 98 threads and associated posts. There was a general sense of mutual respect between these users of this subforum. At times there were jokes being told, and most users seemed to feel a connection to the community. This was implied by their high rates of voluntary participation and contribution to the subforum, which showed a willingness to help their NikeTalk "family." To show thanks for receiving help, individuals "rep" the person who helped them by clicking their like button to increase their reputation.

Overall, there appeared to be low response rates to the threads in this subforum. Only 30% of the threads created yielded six or more replies. For those posts with five replies and under, most of the replies were found to either be saying that the consumer simply agreed or disagreed with the legitimacy of the products and seller. For example, a fellow sneakerhead may say that a product is "100% fake bro," or that the shoe is "definitely legit" without further elaboration. One potential explanation for this is that those who are passively lurking the subforum may be able to get the answer they are seeking without even making a post for help. They may choose to not contribute if they see someone has provided the answer to the question as well.

NikeTalk users appear to vary greatly in terms of age, site and product experience. The Jordan 1, 3, and 11 models were the most frequently discussed, implying that these are the most frequently purchased or most highly sought after models by this segment of Jordan footwear consumers. These individuals stated that they obtain their products from a variety of on and offline sources.

Prior research has shown that buyers of counterfeits use the internet as an informational tool to distinguish between counterfeit and genuine items (Radon, 2012). Consumers view e-WOM (such as C2C communication) as important to their learning about the quality of a product (Chevalier and Mayzlin, 2006) and that it can impact consumer purchasing intention (Jalilvand and Samiei, 2012). These prior studies could explain the motivation for help-seeking on behalf of these consumers, as the current research found that genuine-item consumers use the internet in a similar manner. The willingness to seek help could be impacted by the perceived shopping risk (individual, social, financial, or functional) and perceived counterfeit risk perception (Klarmann, Wiedmann, Hennigs, 2013), which was outside the scope of this study.

RQ1) Do athletic footwear Independent Virtual Brand Community members and administrators act as, or have the potential to be, capable guardians against product counterfeiting victimization over the community and its members?

This research question sought to assess the guardianship potential of Independent Virtual Brand Communities, their members, and administrators. Using latent content from the posts, the data revealed that consumers in the Jordan Brand Price/Fake Check subforum actively sought out both product and seller level authenticating information from fellow NikeTalk members before making a purchase in order to reduce their risk for victimization from online product counterfeiting and deception.

This supports the growing trends of consumers using the internet and online brand communities as conduits for pre-purchase information gathering and "customer-to-customer sharing of product information and experiences (Adjei, Noble, and Noble, 2013)." Grazioli and Jarvenpaan (2003) noted that consumers may be able to protect themselves from victimization by "noticing inconsistencies that lead to detection before a loss is sustained" and that further research "needed to identify effective ways to help individuals and businesses to avoid being deceived by malicious individuals setting them up as targets online (Grazioli and Jarvenpaan, 2003)."

Users of the subforum also actively sought out this authenticating information post-purchase to evaluate their purchasing decision when the product they receive seemed suspicious to them. This could be attributed to the fact that deception detection usually occurs after a loss has already occurred (Grazioli and Jarvenpaan, 2003). The threads sampled only revealed a few instances where a consumer found out that they had been victimized by buying a counterfeit (or over-priced based on condition) Jordan product, but a larger sample could reveal more insight into this aspect.

This active help-seeking behavior to reduce risk and make more informed purchasing decisions was conceptualized as online self-protection through target hardening (Reyns and Henson, 2015, p. 18), due to these behaviors falling more in line with Hollis-Peel and Welsh's (2014) recent definition of target hardening, as opposed to guardianship. They defined target hardening as "attempts to decrease the suitability of the target by making changes to the targets themselves," independent of guardianship being present or not (Hollis and Welsh, 2014, p. 322). Being able to better distinguish genuine from counterfeit products makes a consumer a less

suitable target by decreasing their susceptibility to deception tactics online. Consumer education through IVBC's such as NikeTalk can help assist with these efforts.

This active information seeking also suggested that users trust the NikeTalk platform and view it as a secure place to check the authenticity of Jordan footwear by consulting and seeking information from others. Further, findings suggest that they trust and value the opinions of these members. Negative seller feedback was found to be viewed as a red flag in previous research (Narcum and Coleman, 2015), and this analysis provided some support for this notion due to the perceived experiential credibility of the NikeTalk members (Flanagin and Metzer, 2013, p. 1627).

When a member who was present on the site chose to willingly reply to a Price/Fake Check thread, they were extending guardianship over others in the subforum (see Newman and Clarke, 2003). Over 80% of the threads in our sample received a reply, showing a high rate of voluntary help being given. This willingness to intervene online could be attributed to the contextual awareness of these individuals, but future research would be needed to draw that conclusion (Vakhitova and Reynald, 2014). A sense of shared responsibility could also be the reason these community members willingly share helpful information (Muńiz and O'Guinn, 2001). They could feel like it is their duty to help protect their "NikeTalk fam," as one member referred to the other members in a thread.

In line with the help-seeking occurring pre and post purchase, guardianship was seen to be occurring during these stages, and was not observed occurring during the actual crime (as would be possible for product counterfeiting that is occurring in an offline setting). This finding was in line with recent research on guardianship and cybercrime which showed that most guardianship interventions occur before or after a crime occurs (see Reyns et al., 2015). Reyns

and colleagues (2015) noted that prevention advice can be given to potential targets before the cybercrime victimization occurs, or after to lower the likelihood that a person becomes a repeat victim (Reyns et al., 2015). In the case of the NikeTalk members sharing information at these points, they could either be helping prevent the person from making a counterfeit purchase, or helping the person realize that they had been victimized and empower them to seek a recuperation of their losses from the offender.

Further coding based on the four-stage classification of guardianship from the Guardianship in Action measurement construct by Reynald (2009) revealed that NikeTalk members were conceptually able to be regarded as capable guardians in an online context. This conclusion is based on the fact that these members were conceptually visible, available, monitoring, and intervening by providing product and seller level authenticating information and educating these at risk individuals on how to best distinguish genuine and counterfeit Jordan's. These members also were reporting fraudulent websites and sellers, which helped protect the help-seekers and increase their knowledge and awareness of deception tactics.

Place management (Eck, 1994) was exhibited in the subforum whenever an administrator or moderator chose to intervene in a discussion thread to clear up confusion between individuals. As Reyns (2010) noted, online place managers are important to preventing cybercrimes. They have the ability to control what happens on their sites and forums, having the ability to ban individuals and make rules (Reyns, 2010). The design of NikeTalk itself inherently facilitates guardianship by hosting a specific forum for consumers to inquire about the authenticity of their Jordan footwear products, which are frequent targets of counterfeiters. This place management is important considering the criminogenic nature of the internet.

Administrators also placed security notices and warnings on the subforum's homepage to make the rules and acceptable conduct of the forum known. These place managers did not allow counterfeit sellers or supporters to engage in the discussion threads, which helped make it more secure for those seeking to receive help. Further, the place managers helped educate and empower consumers to differentiate counterfeit and genuine products further by providing information of known fraudulent and authorized retailers on the page, which has been deemed as very important in prior research (Phau and Teah, 2009; Gentry et al., 2006). They also made the perceived expert levels visible by displaying the reputation rating (dependent on user posts and "reps" by other members) of the individual NikeTalk members by their names. Adjei and colleagues (2013) note that this practice helps reduce a consumer's pre-purchase uncertainty (or risk).

RQ2) What key indicators do Jordan Brand footwear consumers using C2C communications in an athletic footwear Independent Virtual Brand Community use most frequently to differentiate between counterfeit and genuine Jordan Brand footwear products and sellers/websites (offering these products)?

The second research question sought to understand what key product and seller level indicators consumers of Jordan footwear products use most frequently and potentially perceive as the most effective when engaging in the virtual product authentication process on their journey to making a purchasing decision. In conducting their research on the use of cues during the consumer product authentication process, Fejes and Wilson (2013) noted that consumers concurrently utilize both extrinsic and intrinsic cues when authenticating products. In this analysis, the seller-level cues can be viewed as extrinsic cues, whereas the product-level cues can be viewed as intrinsic cues (Olson, 1972).

Fejes and Wilson (2013) note that intrinsic cues are often utilized more by consumers during the product authentication process, and are even deemed as more effective than extrinsic cues (Fejes and Wilson, 2013). The findings of the current study lend some support to this, in that there were eight intrinsic cues found, relative to only two extrinsic cues. The finding that more intrinsic than extrinsic cues were used could be due to the help-givers having a high level of Jordan footwear product knowledge. Rao (1988) found that the use of intrinsic cues increases with the level of product knowledge.

Extrinsic Cues

Prior research has identified extrinsic cues (indicators) consumer use during the product authentication process to distinguish counterfeit from genuine products (Fejes and Wilson, 2013). These studies have found the price (Chakraborty et al., 1996; Cordell et al., 1996; Gentry et al., 2001; Prendergast et al., 2002; Huang et al., 2004; Gentry et al., 2006; Chaudhry and Zimmerman, 2009; De Cat, 2010; and Stumpf et al. 2011), and the nature, type, and location of the retail outlet (Cordell et al., 1996; Gentry et al., 2001; Prendergast et al., 2002; Gentry et al., 2006; Chaudhry and Zimmerman, 2009) to be key extrinsic cues used by consumers. The findings of the current study provide some support that these are used by consumers during the product authentication process. For example, the findings showed that a perceived 'too good to be true price' on a pair of Jordan footwear led a forum user to become more suspicious of the product under assessment.

The suspiciousness of the website/seller being a key indicator that led a user to be more skeptical of the authenticity of the product at hand is also in line with the findings on the importance of website quality in influencing the purchasing decision (Kim and Lee, 2006). One reason that sellers could be deemed suspicious was the location of the website, such as if it was

hosted in China (a known counterfeit hub by aware consumers). The country of origin was found

to be a red flag for sellers (particularly China), which is consistent with previous research that

the country of origin is a red flag for counterfeiters (Narcum and Coleman, 2015). An eBay seller

could be viewed as suspicious if they happened to only use stock images of a product, and not of

the actual product in question itself. This was observed in a thread where an experienced forum

user asked a help-seeker to use actual, tagged pictures of the actual pair that they would be

buying, and that eBay sellers using stock images should be viewed as suspect. Not only did this

help inform the user on a way to quickly recognize potential seller deception, it also helped

educate this user (and lurkers who viewed the thread) on how to receive better feedback when

requesting a legit check on a product (only using actual product images).

These qualitative findings provide some intriguing insight into the way that price-quality

inference (Cordell et al., 1996; Albarq, 2015) is manipulated by counterfeiters to deceive

consumers. While Berman (2008) highlighted low pricing as a red flag for counterfeit products,

our study provided some insight that Jordan footwear counterfeiters and fraudulent sellers may

actually use both high and low prices to deceive consumers, due to the fact these consumers are

often willing to pay a premium price to obtain rare or sold-out Jordan shoes. Consider the impact

of the price-quality inference on a consumer's attitude toward counterfeit products, given that a

consumer's attitude towards counterfeits will influence their purchasing decision (to purchase or

avoid purchase). Albarq (2015) notes that "the two main differences between a counterfeit and

an original product, as perceived by a consumer, are lower prices and the lack of quality

guarantees (Albarq, 2015, p. 821)." In the case of Jordan footwear products, counterfeiters have

the ability to manipulate the price-quality variable that plays a part in the decision to purchase a

product.

Staake and Fleisch (2008) noted that given the rise in the quality of counterfeit products, counterfeiters are able to sell their deceptive products at the retail price of the genuine item and still make a large profit (based on cheap production costs). There are some consumers willing to pay large amounts of cash to obtain rare and highly sought after Jordan footwear products (for example, the recently released Air Jordan 2 Retro 'Just Don', which retailed at $650 and sold out in minutes on Nike.com). In this case, the counterfeiter can make a high quality fake and price it marginally higher the retail price of the genuine item to entice the consumer into buying it, using the price-quality inference against the unsuspecting consumer.

Fejes and Wilson (2013) note that quality does not equate to product authenticity (Fejes and Wilson, 2013, p. 332). It is harder for the consumer to use the price-quality inference as a cue for product authenticity in this case. On the other hand, older and used Jordan footwear products are still of value due to their rarity (in some instances; for example, an original pair of Air Jordan 6's from 1991). In this situation, the counterfeiter can make a product that appears to be in good condition and price the product lower to entice the consumer into buying it. This again impacts the price-quality reference and deceives consumers into buying a counterfeit.

One other interesting finding to consider that was contrary to prior research was that price was not found to be the most frequently used indicator in our sample, as was the case in prior studies by recent research (Gentry et al., 2001, 2006; Fejes and Wilson, 2013). The use of frequencies in qualitative research is, however, intended to only better explain the data, and not point to significance or strength. As a result, it is best to concede that price may very well still be the most commonly employed cue, but that this may simply not be the case for Jordan footwear consumers.

This effect may vary by product type, brand, and whether the consumer has the available funds to purchase a higher priced product or a desire for uniqueness. For example, if they have a higher income, they may be more likely and willing to spend more to obtain a highly desired product that is scarce or rare (due to its potential to be unavailable when they look to purchase it in the future, see Childs and Jin, 2015; Byun and Sternquist, 2012; Eisend, 2008), and thus may place less importance on the price when evaluating the authenticity of the product. This could lead them to being more susceptible to price manipulation by counterfeiters. Future research would need to examine this before making such a claim, although prior research has indicated that consumers as authenticators differ in terms of income (Fejes and Wilson, 2013; Wee, Ta, & Cheok, 1995).

Fejes and Wilson (2013) noted that consumers with higher incomes often have the financial means to purchase genuine products from authorized retailers with a decreased risk of being victimized by deception. Consumers with lower incomes may have limited options as to where they buy their desired products and therefore may be at an increased risk. While this may be true in a general sense, genuine-item consumers with higher incomes may still be at an equal risk of victimization when buying Jordan footwear products online as those with lower incomes seeking the same product. If a lower income person is a dedicated buyer of Jordan footwear, they may be willing to shell out a high amount of their income to purchase a Jordan footwear product, which means that they have equal buying power as the person with a higher income. This suggests that consumers should be careful when attempting to use secondary sneaker market prices for athletic footwear as cues for product authenticity, as they can be manipulated by counterfeiters. Consumers should use the other intrinsic product-level indicators discussed in the

next section to make a more informed assessment of the overall authenticity of that product (Fejes and Wilson, 2013, p. 332).

Intrinsic Cues

Intrinsic cues were also used by NikeTalk members to distinguish counterfeit and genuine Air Jordan footwear. The use of design/tooling (Wee et al., 1995; Wisbey, 2010; Prendergast et al., 2002), logo (Chaudhry and Zimmerman 2009; Wisbey, 2010; Stumpf et al. 2011; Gentry et al., 2001), materials (Chaudhry and Zimmerman 2009; Gentry et al. 2006; Gentry et al. 2001; Stumpf et al., 2011), sole (Wisbey, 2010), packaging (Chaudhry and Zimmerman, 2009; Gentry et al., 2001; Prendergast et al., 2002; and Stumpf et al., 2011), condition/price (Quality) (Hamelin et al., 2013; Cordell et al., 2006; Gentry et al., 2001, 2006; Fejes and Wilson, 2013; Prendergast et al., 2002), and manufacturing/production (Gentry et al., 2001; Wisbey, 2010) cues by this group of consumers were consistent with cues found in previous research to be used during the consumer product authentication process. These findings provided insights into the key role and effects of price, design (Hamelin et al., 2013) and overall product quality during the search and authentication processes (Fejes and Wilson, 2013; Gentry et al., 2001) for consumers of Jordan footwear products in a deceptive market. This showed that design and price of the product are key indicators used by both counterfeit-seeking consumers of non-deceptive counterfeits (Hamelin et al., 2013) and also by those consumers seeking to obtain a genuine product in a deceptive market.

Design/tooling appeared to be the most frequently employed cue for online verification of Jordan footwear products. This could be because for a pre-purchase product evaluation in an online environment, all a potential consumer can do to assess a product is view the pictures posted by the seller and compare them to a benchmark (Fejes and Wilson, 2013). The tooling

points more towards the actual shape of the shoe based on the tools used to construct it (too round or wide, or flimsy), while the design does the same by accounting for the visual look of the shoe (for example, perceived height of the shoe). This is likely because a shoe not matching the shape of a compared picture of an authentic product hints that it may be more than likely fake.

This ability to differentiate using solely a picture could also be impacted by a counterfeiter using a stock picture of the genuine product from an authorized retailer to misrepresent the product (a type of copyright infringement), or they could even actually post pictures of a genuine Jordan footwear product in their hand when listing the product for sale in order to make it seem like this is the product the seller would be receiving and increase purchase confidence, but end up sending the consumer a counterfeit version instead. Overall, this implies that the while the Design/Tooling of the shoe should be one of the biggest red flags for these products, consumers should be wary of the potential to be deceived by the use of deceptive product images. Future research could explore ways to help consumers specifically identify the use of deceptive product images online and guard against this.

It should be noted that consumers utilized a condition-price inference to assess the authenticity of the product, as well as to assess what price should be paid for the product if it is authentic based on the condition of the shoe (deadstock vs. used). Prior research has revealed that the perceived quality of the product (as an intrinsic cue; Fejes and Wilson, 2013; Gentry et al. 2001; 2006) as well as the price (Fejes and Wilson, 2013; Gentry et al., 2006; Prendergast et al., 2002) are used by consumers to authenticate products. This relates to the previously mentioned price-quality reference (Cordell et al., 1996). The condition of the shoe, deadstock or used, in conjunction with the price offered by the seller seems to be an intrinsic cue that points to the overall quality and authenticity of the shoes for genuine-item seeking Jordan footwear

consumers. However, a shoe being used or deadstock does not mean that it is fake, nor does it

mean a shoe is genuine (Fejes and Wilson, 2013).

In the case of Jordan footwear products, used shoes can actually help knowledgeable

consumers differentiate between genuine and counterfeit Jordan's. As these consumers noted, the

color of the sole of the shoe will be different depending on the wear and tear of the shoe, as well

as the age of the shoe. A pair of genuine Jordan's from 1999 that have received even only a

minimal amount of wear should by now still a slightly yellowed sole. If a seller is claiming to

have a used pair of Jordan's from 1999 that have a brand new looking sole, an aware genuine-

item seeking consumer should become suspicious and engage in the product authentication

process deeper. If a seller claims to have a deadstock pair of shoes from 2015 that already has a

yellowed sole, the consumer can generally assume that there is deception taking place and should

continue to engage in the authentication process.

In the same light, this thinking can be used by consumers to help recognize pricing

manipulation attempts by sellers. Both new and used Jordan's have a market, and prices will

vary depending on the popularity and symbolic meaning of the shoe to both the larger

sneakerhead community and the seller. Those who offered pricing advice in this subforum were

aware of generally accepted market prices for certain Jordan's, and could recognize if a seller

was attempting to get over on an unknowledgeable buyer. This finding can be summed up by

saying that a condition-price-quality inference was used by genuine-item consumers of Jordan

footwear products to assess product authenticity and acceptable pricing.

Although there are inherent limitations to the findings of this study due to the use of a

small sample, a potential implication of certain indicators being discussed more than others is

that certain indicators could simply be easier to use when attempting to verify a product online

using only visual cues. This could potentially explain why Manufacturing/Production was the least discussed indicator in the threads, and while Design/Tooling was discussed most frequently. Manufacturing/Production cues are usually inside the shoe, so this would require the help-seeker to make sure that they post pictures of things like product tags or stamps so that individuals could verify things such as the production date. Also, this would require extensive product knowledge to know the correct dates.

In comparison, the Design/Tooling of a shoe is more easily recognizable simply by observing a picture of the actual product online, as was previously discussed. Instead of having to be aware of production level cues, the helper can easily look at the shoe and attempt to determine if it is genuine based on prior product experience. In light of this insight, future research should explore which certain indicators work better for online authentication vs. for physical verification, and why. Doing so could lead to situation-specific guides being developed to educate consumers on which verification cues they should use depending on their purchasing location (online or physical).

6.1.1: Additional Insights

These consumers also implied that they did not support knowingly buying and selling counterfeit products, which was evident in their questioning of the products and seeking of outside opinions to reduce their likelihood of purchasing a counterfeit. This low level of complicity (unwillingness to buy counterfeits; see Stumpf et al., 2011) and unfavorable attitude towards counterfeiting led to them seeking to acquire information and reduce their risk of being victimized (Albarq, 2015). Prior research by Matos, Ituassu, and Rossi (2007) found that consumers whose family and friends approved of their decision to buy counterfeits had more favorable attitudes towards counterfeiting. Based on prior research, it can be assumed that this

unfavorable attitude would also lead an individual who received information stating that a Jordan footwear product at question is counterfeit to be less likely and willing to want to purchase that product (Wee et al., 1995; Harun, Bledram, Suki and Hussein, 2012).

Buying a counterfeit product is not currently illegal in the United States, but it is largely viewed as an unethical consumption choice. NikeTalk ethics promote a culture of seeking knowledge and not buying or being caught wearing fake shoes. This is symbolic of the attitude and ethics of the larger sneakerhead community (especially Retro Jordan footwear buyers), which frowns upon counterfeit footwear (Giebelhausen and Lawson, 2009, p. 234). Phau and Teah (2009) note how a person's attitude towards counterfeiting impacts their ethical decision making, and ethics have been found to influence negative purchasing behaviors towards counterfeit luxury fashion (Hamelin et al., 2013; Wang, Dai, Addei-Duah and Wang, 2014). Those who request legit checks may potentially feel that wearing fake products could lead to them being viewed in a negative light by their peer reference group, and thus seek help to avoid these feelings, or could simply be fulfilling their material needs of buying a genuine item (Penz and Stottinger, 2005; Furnham and Valgeirsson, 2007; Phau, 2010). Potential embarrassment, such as being made fun of if they are found to be wearing fake Air Jordan's by their friends, could also be a social risk that leads these individuals to verify the authenticity of their products (Tang et al., 2014). Regardless of the motivation for the legit check, it is clear that these individuals were not supportive of, or engaging with, counterfeiting.

The overall results of this analysis suggest that visiting NikeTalk and requesting legit checks both pre and post purchase can serve as a protective factor against victimization online. Future research on other IVBC's would be needed to assess generalizability. Even with the high rates of posts that only contained "fake" (4.9%) or "legit" (13.7%) without any additional

feedback, the information provided in the Jordan Brand Price/Fake Check subforum can be useful to help-seekers and aid in the consumer product authentication process. A study by Racherla and Friske (2012) on the perceived usefulness of online consumer reviews found that word count did not have a significant impact on overall perceptions of usefulness (Racherla and Friske (2012). Chua and Banerjee (2016) noted that "measures such as word length, sentence length, and review length are perhaps not among the most crucial predictors of review helpfulness (Chua and Banerjee, 2016, p. 552)." This implies that even one-word or shorter answers could still be having their intended authenticating and helpful effects on that help-seeker, although future research would need to actually test this. It still is suggested here that place managers on IVBC's that host legit checking forums should find ways to encourage those who reply to provide detailed feedback and backup their claims of product authenticity as much as possible. This will improve the quality and depth of information given to consumers that can assist them in knowing whether or not they agree with that person's information and its benefit (or lack thereof) to their evaluation process.

It should again be noted that testing for the extent of use or impact of the information received by help seekers in these forums on purchase intentions and decision, nor how helpful they perceived the help and indicators discussed to be was not a goal of this study, as this would require extensive and rigorous research to accomplish. Adjei and colleagues (2010) found online brand communities to be effective for influencing sales, independent of who owns the community (brand vs. consumer) (Adjei et al., 2010). It is reasonable to think that a number of consumers receive help and are still unable to decide if the item is genuine or counterfeit, for various reasons. For example, the valence (positive vs. negative vs. mixed) of the comments could be impacting these consumers, depending on personal characteristics (Adjei, Noble, and

Noble, 2013). Some may feel that too many conflicting assessments makes them even more confused. Different cues will also be viewed as more important than others depending on the various characteristics associated with the individual, and therefore will be used differently by each person (Fejes and Wilson, 2013, p. 328-329).

Future research should also consider what happens next when these consumers become victims of "blur counterfeiting" (Bian, 2006), which occurs when an individual is still unable to place the product in question in the genuine or counterfeit category even after seeking and receiving help from fellow NikeTalk members. In a state of blur counterfeiting, Fejes and Wilson (2013) note "the consumer will either search for more clues, refrain from purchase, or proceed in spite of the failure to authenticate (Fejes and Wilson, 2013, p. 331; see pp. 333-334 for a discussion on this dilemma)." Consumers refraining from purchasing due to an inability to obtain information to differentiate genuine products and counterfeits could have a negative impact on the consumer's relationship with the brand, which could lead them to not purchasing the brands based on reputation (which diminished the company's bottom line).

They could also continue to purchase the unauthenticated product. If they end up buying a counterfeit, they have added to the demand of counterfeiting. Brand managers and marketers should look more into this effect. Also, given that the end goal of the authentication process is for the consumer to be able to determine the authenticity of the product (Fejes and Wilson, 2013), the factors that lead them to not being confident to do so even after receiving help from fellow consumers should be given some consideration. This could provide further insight into the perceived helpfulness of certain indicators over others by seeing what was perceived to have helped and what didn't, and in turn can help with consumer education efforts.

6.2: Theoretical Contributions

6.2.1: Contributions to Criminological Literature

The current study utilized the Situational Crime Prevention framework (Newman and Clarke, 2003) to understand how online communities and their members prevent product counterfeiting in online spaces using CMC's by facilitating and taking advantage of these guardianship and target hardening opportunities. This extended recent work done using Situational Crime Prevention techniques to prevent cybercrimes (see Reyns, 2010). This was a crime and situation specific approach to reducing the likelihood that a person is victimized due to online product counterfeiting and deception through the use of obtaining information from community sites. van Wilsem (2013) stated that "online consumers can realize situational crime prevention by adopting various strategies" and that they can "gain information from community sites that record fraud tactics in specific cases (van Wilsem, 2013, p. 175)."The NikeTalk Jordan Price Fake/Check subforum is a practical example of this.

This study also applied the guardianship element of Routine Activity Theory to the prevention of online product counterfeiting victimization. In doing so, the study extends the recent work on the application of Routine Activity Theory and guardianship to the study of victimization due to cybercrimes (Holt and Bossler, 2013; Reyns and Henson, 2015; Reyns et al, 2015) and the prevention of product counterfeiting (Hollis and Wilson, 2014; Hollis et al., 2015) by focusing on how consumers engage in guardianship activities online to prevent themselves and others from being victims. Further, this study helped provide some support Hollis-Peel and Welsh's (2014) conceptual distinction between guardianship and target hardening activities.

Recent research has operationalized online target hardening (or online self-protection/guardianship) through measures such as individuals using antivirus software, regularly

deleting emails from unknown senders, and regularly changing passwords (Holt & Bossler, 2013; Reyns and Henson, 2013, p. 12), whether they add strangers as friends on social networking sites, and whether they keep their social networking profiles private (Reyns et al., 2015, p. 11). However, no previous studies have conceptualized consumer's active seeking of product and seller level authenticating information using CMC communications as online target hardening. This exploratory study helped fill this gap. This is important considering the importance of C2C information sharing on the consumer product authentication process (and pre and post purchasing behaviors and evaluations) as more consumers turn to online shopping to buy footwear. Findings showed evidence of both guardianship and target hardening taking place in the subforum, including self-protective target hardening by help-seekers, guardianship being extended by posters, and place management by NikeTalk administrators and moderators.

This shows that the current research did find some support for the applicability of a modified and conceptually broadened view of the Guardianship in Action construct to online spaces, as opposed to strictly residential physical spaces (Reynald, 2009). Those who replied to requests for legit check were active and monitored the subforum, intervening by providing feedback and helping to clear up any confusion. NikeTalk members who contributed to the Jordan Brand Price/Fake Check subforum were able to be capable guardians (at least conceptually). Future research could extend the generalizability and provide further support for this finding.

One previous research finding that was interesting is that van Wilsem (2013) found that active forum participants were at a higher risk for online fraud victimization due to their routines online activities, such as online shopping. This was attributed to potential higher exposure to offenders who are actively gleaning these forums to see what consumers are less product (or

brand) knowledgeable and may be less likely distinguish genuine and counterfeits. The findings

of the current study seem to contradict this in a sense. Ironically, the inability to distinguish

genuine and counterfeit products is what actually leads the consumers and users in the Jordan

Brand Price/Fake Check subforum to seek and share information. They are using these forums as

a protective factor to reduce their risk for fraud victimization. Could it be that this protective

perception of the forum is only specific to individuals using forums to seek legit checks, and not

those shopping and sharing personal information in them? The type of information that the

individual offenders are sharing in various forums could be leading them to this higher risk, as

well as their individual characteristics, such as having low self-control (van Wilsem, 2013).

Also, the place management activities of the administrators and moderators were working to

protect the consumers from offenders and being victimized. Based on routine activity theory, this

increasing of guardianship should correspond to a lower risk of fraud victimization. This implies

the need for future research to resolve this theoretical issue.

The results from this exploratory qualitative study could also be used to guide future

quantitative research on this topic. For example, qualitative questionnaires or survey questions

could be created using the findings of the most frequently discussed indicators for verifying

counterfeit products online. Using qualitative research results to guide surveys can ensure that

the right keywords are used to get the intended responses from that sample. Sneakerheads often

have their own lingo, so understanding this can ensure that they are not confused as to what the

survey question is asking. These types of surveys would be useful to better understand this

certain things about this population of individuals, such as if they agree that certain indicators

work best online and if they feel that the information shared in the forum has helped protect

them. Using qualitative study results to guide quantitative research can help provide a more complete picture of this phenomenon.

6.2.2: Contributions for Consumer Behavior and Marketing Research

By using a consumer-search focus (Gentry et al., 2006), this study provides insights into consumer behavior in an e-commerce environment for a product that is very popular with consumers, and in turn, very popular with counterfeiters – Nike Jordan shoes. This research contributed to the field of consumer behavior and marketing fields in terms of the information search, product evaluation (pre and post purchase) and decision making processes for genuine-item Jordan footwear consumers on the path to purchase. This research provided further insight into the educational role that online communities play for these consumers, as well as how the NikeTalk community impacts the way a consumers perceives and evaluates product (Shau et al., 2009; Kozinets, 2002). The findings showed that these consumers sought information from fellow consumers on extrinsic and intrinsic cues during the evaluation processes both before and after making a purchase from members of an Independent Virtual Brand Community.

6.3: Implications

The findings of this study have potential implications for a variety of stakeholders in the the fight against product counterfeiting online: consumers, law enforcement, brand protection professionals, online community administrators, and policymakers. Implications regarding the need for technological advancements to account for human judgements errors when attempting to authenticate and verify legitimate products, sellers, and fraudulent websites is discussed.

6.3.1: Implications for Consumers

The framework and methodology used in this study can be used to examine the ability of consumers to recognize product counterfeiting of all types of footwear, and potentially clothing

as well. This is because these products are goods that are usually examined physically before being bought, but lose that potential to be tangibly examined when being purchased on the internet. Consumers having experience and knowledge of a brand and their footwear or clothing may be able to provide useful insight to fellow consumers online in these forums. Attempting to gather as much information pre-purchase from different sources will only help to assist the consumer in making a well-informed purchasing decision. This information can also help them when evaluating a product post-purchase. While not always possible, consumers of Jordan footwear should always attempt to buy the footwear from the brand websites or authorized retailers (such as Footlocker). This is a self-protective target hardening measure (Hollis et al., 2014). In the event that they can't, they should seek all available resources to help them best assess the product on the internet, due to an inability to physically inspect it.

If they seek to purchase on the secondary e-commerce market, they should be aware of the potential for deception and to come across counterfeit products and rogue sites. Also, consumers should be careful to not let price entice them into buying a product. If an offer is too good to be true at face value, it usually is. For example, if someone is offering to sell a pair of Air Jordan's that have only been on the market a week at less than retail price, this should raise a red flag and lead to help seeking. Being aware of the indicators that can help verify products will help.

One potential way for consumers to garner more replies and get better information when seeking help could be to post video Price/Fake Checks of the shoes to give better images. Instead of posting the pictures when they request a legit check, they can post a link to a YouTube video that contains up close images of the shoe in different lighting. This would give forum contributors a better chance to assess the product.

There are also implications for consumers of other products attempting to use IVBC's to verify other products and sellers/websites for these products. For example, the findings that the suspiciousness of the website and price were key indicators used to verify sellers/websites of Jordan Brand footwear could be generalized to verify sellers/websites of other products. A consumer seeking to buy a genuine watch could be educated to beware of suspicious websites offering too good to be true pricing. This could lead to them doing a further investigation of that website to determine if it is a trusted retailer of those watches. As previously discussed, the indicators found in the analysis may be more useful for online authentication opposed to physical authentication. Following this thinking, the findings that the Design/Tooling and Logo were the most frequently discussed intrinsic indicators for Jordan Brand footwear could imply that these two indicators would be best, or more frequently, used for online authentication of other products, when there is an inability for the consumer to physically examine the product before purchase (if they don't know what indicators to look for when evaluating the product post purchase).

6.3.2: Implications for Law Enforcement/Customs

The outsole, logo, design, tooling, and look of materials were key indicators found in previous research on indicators that can be used by law enforcement investigators to differentiate counterfeit and genuine Jordan footwear products (Wisbey, 2010). This is interesting in that it shows that online consumers and law enforcement agents utilize similar cues during the product authentication process for Jordan footwear products, either online or with the product in hand. Wisbey (2010) stated that "examiners may turn to the internet for websites that assist in pointing out other clues regarding counterfeit Nikes (Wisbey, 2010)." Law enforcement officials could mine IVBC's (such as NikeTalk) to garner more information on counterfeit cues that could then

be used to help authenticate products (Wisbey, 2010). With the growing impact of the internet on deceptive product counterfeiting, it would be useful for law enforcement to use open source information (like forum data) to better combat the problem and protect citizens.

6.3.3: Implications for Brand Protection, Marketers, and Managers

O'Hern and Kahle (2013) state that "even the largest firms (such as McDonald's, Nike, United Airlines) must recognize that they are no longer fully in control of their brands and that C2C communications now play a seminal role in determining how consumers perceive a brand (O'Hern and Kahle, 2013, p. 26)." Brand owners and brand protection departments for various industries may be able to look at these independent virtual brand communities and glean insights from their consumers (Basu and Muylle, 2003). They could also do a better job of disseminating detailed and legitimate product level information that can be used law enforcement investigators of counterfeit Nike and Jordan products (Wisbey, 2010; Fejes and Wilson, 2013) and by those consumers who are not able to obtain a product from the brand authorized online retailer for various reasons and are unknowledgeable on what makes a specific product genuine. Brands should keep their websites updated with as much product related information possible (without feeling like they are giving away any proprietary information that could be used against them by competitors or counterfeiters), including high quality pictures from all angles (Radon, 2012). Consumers can use these authentic images as a point of reference when authenticating products online (Fejes and Wilson, 2013). They may compare the pictures from the authorized retailer's website to those of a suspicious website to better assess if they feel it can be trusted and deem the product genuine or counterfeit (Radon, 2012).

Athletic footwear brands could also do a better job of keeping consumers informed and updated on authorized retail channels besides the brand owned e-commerce site (Stumpf et al.,

2011). One way they could do this is by keeping a list of authorized retailers on their own e-commerce site, or having a tool available on their website where consumers can copy and paste a URL to check for authenticity. This could be coupled with a link for consumers to report any unauthorized retailers. They should also make sure they are working to inform and protect those consumers who may not be able to purchase from an authorized retailer due to product scarcity. One possible way to help secondary sneaker market consumers could be brand working with EBay and other online auction places to promote known trusted and reputable sellers on the secondary sneaker market. Given the fact that these are some of these most brand loyal consumers, it would be beneficial for Nike to make sure they are keeping these consumers away from counterfeits in order to retain their loyalty and business.

Brand managers can also reduce consumers' from unknowingly fueling the demand with counterfeit products if they know what product level verification information consumers use during the search process. Stump and colleagues (2011) noted the importance of understanding consumers perceptions of counterfeiting and ability to distinguish fakes from genuine products in order to better educate consumers on what actually will make distinguishes genuine and fake products (Stumpf et al., 2011). They felt that by knowing what product information consumers are currently using to authenticate their branded product, brand managers could reduce consumer's unknowing complicity through more empirically grounded education and anti-counterfeiting efforts.

If a genuine-item seeking consumer is better able to recognize the quality and subtle differences between counterfeit and genuine items online, they will be more likely to choose the authentic product (Stumpf et al., 2011). Information from these forums can assist brand owners by giving them insight into which factors discourage consumers from buying counterfeit

footwear products (Edwards and Carpenter, 2014). Not only could doing this assist with public education and anti-counterfeiting efforts (Stumpf et al., 2011), it could ultimately help protect consumer loyalty, brand image, and prestige if they feel the brand is taking actions to protect them.

The information gleaned by brand employees from viewing legit checks could also help Nike crack down on Ebay sellers and fake websites who are selling counterfeit Jordan shoes, which could in turn lead to cease and desist letters being sent out (Day and Bryant, 2014, p.110) and domain names being seized by law enforcement. Due to the increasing use of Black Hat search engine optimization by counterfeiters to lead consumers to fraudulent websites (Wang, Der, Karamiy, Saul, McCoyy, Savage, and Voelker, 2014), this could be a cost-effective utilization of open-source intelligence that could be beneficial to brand protection efforts. They can also the use information to raise awareness of deceptive counterfeits (Staake et al., 2009). Berman (2008) noted the importance for brands to pay close attention to the products with the highest risk for counterfeiting, such as those products that have been known to be heavily counterfeited in the past, and the key products of the brand (Berman, 2008, p. 194).

While the findings are only exploratory, they suggest that the Jordan 1, 3 and 11 silhouettes are the products that consumers demand the most, based on the frequencies for legit checks. This could mean that these are the products most frequently targeted by counterfeiters as well and that Nike should be sure to more closely monitor customer returns and complaints for these products, which can be found through their communications in forums such as the one used in this study. Online community members can even potentially aid brands in the making of higher quality, safer, and harder to counterfeit footwear products through these discussions of product issues and legitimacy (Berman, 2008; Füller, Jawecki, Mühlbacher, 2007).

With NikeTalk not being owned by Nike, the brand could look to partner with NikeTalk administrators as a Trusted Third Party (Basu and Muylle, 2003) site for consumers to go and be educated on how to verify and validate their products while shopping online. Not only would this increase the reputation and general consumer awareness of NikeTalk, but it could also help Nike with their engagement efforts for a key segment of their consumers. To show appreciation for the vigilant actions taken by key contributors of the NikeTalk Jordan Brand Price/Fake Check subforum, Nike could promote highly respected members on their brand-owned social media sites, such as posting a picture of the individual on Instagram or Facebook along with a nice post encouraging this activity by others. That could help build that individual's reputation in other sneakerhead communities that they may be a part of, and in turn shows consumers that Nike takes the time out to thank their loyal consumers for helping protect their brand.

6.3.4: Implications for IVBC Administrators

There a few potential implications for administrators and place managers of NikeTalk and other IVBC's for other that host forums where users can request legit checks for other types of products. These administrators should work to promote more users to contribute feedback to legit check requests. One way to encourage members to become more active contributors to these forums and help out their fellow members more is rewarding them for their participation and frequent posting (Nielsen, 2006). This could motivate an individual to provide more thorough and detailed product reviews, which would obviously be beneficial to users of the forum.

Money would be a great benefit, but may not be needed for brand community members. Their sense of responsibility to the community and feeling connected to those in the forum is what leads them to voluntarily provide feedback. Instead, administrators could promote high

quality contributors – such as featuring a "Member of the Month" on the site homepage – to express their thankfulness for this person's contributions. Seeing someone gaining this recognition could lead a lurker to posting more in hopes of gaining notoriety in the larger sneakerhead community, for example.

This is a benefit of the "repping" system already in place on NikeTalk. Each member with a profile receives a reputation score depending on their number of quality posts and times they were "repped" by other members clicking their green like button. This is prominently displayed on a NikeTalk member's profile with ribbons (similar to a star rating system). Hovering your cursor over the area where the ribbons are brings up a pop up message explaining what the accumulated number of ribbons represents. For example, a member having 5 ribbons means that a user is "headed for greatness," while having 9 ribbons means that the individual is a "renowned expert in the community." This helps help-seekers by alerting them to who may be providing them the highest quality or more useful information in a given thread.

Over-rewarding could have negative effects and should be prevented. These negative effects could include things such as highly repped members developing an inflated ego based on this recognition, or less reputable members feeling that certain users are being overrated and in turn beginning to express their dissatisfaction by posting negative comments aimed at those users (or even discontinuing use). Some individuals could also attempt to manipulate their rating systems by increasing the numbers of posts with less quality. Site administrators should be very careful to avoid this while rewarding and promoting key contributors (Nielsen, 2006).

IVBC administrators should also encourage users seeking legit checks to post better quality pictures in order to garner more responses and help. In terms of picture quality, taking multiple pictures outside from different angles and with good lighting was a good way to get the

detailed legit checks from fellow community members. This allows those who would like to

offer product level feedback the best chance to visually inspect the aspects of the shoe and decide

if flaws are "tells" or QC issues. A moderator noted this:

> honestly you're gonna need way better pix for an accurate LC..PICTURES not
>
> screenshots, collages etc. Soles could have easily just been cleaned, probably not but who
>
> knows. Good pix = accurate LC, every time.

6.3.5: Implications for Policymakers

These findings can aid policymakers regarding the proposed value of penalizing

consumers purchasing counterfeit products as a way to deter those who knowingly seek to

purchase these products fueling the counterfeit market (Orscheln, 2015; Riso, 2014; Fejes and

Wilson, 2013). For example, the prices of the average sale of men's sport footwear over $100

has grown 75% across all channels over the last five years (Powell, 2014), meaning that there

will be a market of consumers actually seeking to get a better deal on those products which

criminals will seek to exploit. Assessing whether an everyday consumer knowingly purchased or

was deceived into buying a counterfeit when bargain shopping is very tricky, bringing ethical

concerns in to play and questions on how to measure naivety relative to knowing complicity

when purchasing these products. It is therefore important to understand the consumer product

authentication process before attempting to blame consumers for unknowingly purchasing

counterfeit products, as has been recently suggested (Fejes and Wilson, 2013).

This will require more research on cues used by consumers for other products and brands

before deciding to penalize all consumers of counterfeit goods. Fejes and Wilson (2013) noted

that "information on consumers cue seeking and selection behavior may lead to the development

of more efficient strategies for raising the awareness of consumers regarding counterfeit

merchandise and educating them about fraudulent good detection," and that consumer education

on product and seller level legitimacy indicators could reduce the incidence of victimization

(Fejes and Wilson, 2013, p. 335). As a result, policy efforts should include the use of these and

other key indicators in educating the public to prevent counterfeit purchases, law enforcement in

their efforts to provide the intention of the purchaser in court, and customs officers who job is to

inspect shipments (Fejes and Wilson, 2013).

6.3.6: Importance of Technology to Product Authentication Online

While consumer-to-consumer information sharing and education through the use of

CMC's (social media, forums, etc.) can be a great informing and learning resource for consumers

who are unable to purchase a desired genuine product via an authorized retailer and are seeking

immediate feedback to aid in their evaluation of the legitimacy of secondary sneaker market

products and sellers they come across online, prior research suggests that consumers generally

have a hard time visually distinguishing counterfeit and genuine parts (Bloch et al., 1993; Field,

Bergiel, Bergiel, Balsmeier, 2008). In a study on the ability consumers to distinguish genuine

and counterfeit pairs of watches and sunglasses, Field and colleagues (2008) found that 12% of

consumers placed a counterfeit watch in the genuine category, and this effect was even greater

for sunglasses, with over 42% of the consumers wrongfully categorizing counterfeits as genuine

items (Field et al., 2008, p. 285). This is understandable, given the potential that the cues used by

consumers to evaluate the authenticity of a product can be manipulated by counterfeiters (Tang

et al., 2014). In addition, having prior product knowledge does not guarantee a person won't be

confused by deceptive products (Tang et al., 2014). Even manufacturers have been found to have

a hard time distinguishing their own products (Wilcox and Boys, 2014). In light of these

potential issues, it is suggested that technological enhancements aimed at providing consumers

immediate authentication abilities will provide the greatest chance for a consumer to truly validate a product and ensure they are not buying a counterfeit (Evert-Burks, 2015).

Recent research has focused on automatic identification and detection of deceptive counterfeit good listings on online marketplaces to increase the efficiency of the information search step and authentication processes, such as using artificial intelligence techniques (Wimmer and Yoon, 2015). Arnold and colleagues (2016) have proposed the use of a semi-automatic workflow to identify and inspect suspicious product listings online (Arnold, Wartner, and Rahm, 2016). RFID technology (such as digital certificate cards with an imbedded RFID) and series numbers can be implemented on footwear products to allow users to scan a code or tag and verify the products with the convenience of their smartphones (Asanghanwa, 2007; Li, 2013). This can be especially useful for consumers during the post-purchase authentication stage to help a consumer realize if they have been victimized or not.

Technological innovations will be further useful due to emerging technology that counterfeiters will be able to use to create higher-quality and highly indistinguishable fakes, such as 3-D Printers (Cuzella, 2015). This type of technology will offer counterfeiters more sophistication and will make the need for automatic detection even more glaring in years to come. Technology can help reduce the human-judgment errors that could result from attempting to distinguish counterfeit and genuine products online using visual evaluation cues only (due to mimicking and masking techniques or a lack of product knowledge).

6.4: Limitations

The limitations of these findings must be discussed first before proceeding with a discussion. The small sample size (n= 100 threads) used for this exploratory study presents an issue in terms of generalizability, as there is the chance that an analysis of a larger sample of

threads could potentially provide a more complete outlook and better insight into the nature of information sharing and guardianship in these forums. This study focused more on understanding this segment of consumers and garnering insights, while understanding that generalizability would be limited at best due to the use of a convenience sample that may not be necessarily representative of all NikeTalk community users, nor of the average Jordan footwear consumer who may not use NikeTalk. Future research should be done quantitatively as well as qualitatively on a larger sample to determine the efficacy of these forums as protective factors against buying counterfeits in an online environment. Another limitation is that this study is exploratory in nature, and that the design of this study in regards to product counterfeiting research has not been previously used.

This research examined one independent virtual brand community's sub-forum focused on only on one brand, one type of product, and one industry. Generalizability of these findings is limited to products such as footwear and clothing, where visual cues may be more useful in assessing product legitimacy during online shopping. There may be an inability of consumers of other industries and products to determine if a product is counterfeit based on visual cues alone. For example, identifying counterfeit automotive parts and pharmaceuticals may require chemical testing and material science to determine authenticity. Consumers of these branded products may therefore have a hard time verifying products through conducting legit checks and requesting help from fellow consumers in Independent Virtual Brand Communities. Their fellow consumers will likely lack the needed technology and expertise to test product legitimacy. Additional research is needed to address this.

6.5: Conclusions and Future Research

Prior research has shown both an increase in product counterfeiting online and online shopping (Cesareo and Stöttinger, 2015; Elings and Keith, 2015). With e-commerce continuing to grow in scale as the preferred shopping avenue for consumers in the athletic footwear industry due to its convenience, along with the growing level of sophistication of counterfeit athletic footwear products, consumers need to be armed with as many resources and tools to make a knowledgeable and legitimate purchase online. This exploratory study analyzed 443 discussion subforum posts in an IVBC for Nike, Inc., to identify key indicators that Jordan brand footwear consumers (a large segment of the athletic footwear consumer population) use to assess product and seller legitimacy and quality during their product search in the criminogenic e-commerce marketplace. In addition, this study sought to examine the potential for guardianship of this segment of consumers in Independent Virtual Brand Communities due to these brand-dedicated consumers asking like-minded individuals to provide insight on that persons concerns, and receiving feedback through knowledge and experiences shared in response. This research sought to prevent counterfeiting victimization using a consumer focused approach in order to reduce the overall demand for counterfeit products and aid in prevention of victimization.

The athletic footwear market will continue to thrive due to increased product demand, aggressive marketing campaigns by brands, brand loyalty, and the globalization and growing popularity of certain sports making these products more prevalent and desired worldwide (for example, basketball in China and soccer worldwide). As long as this product market is growing, counterfeiters will seek to profit from and exploit unsuspecting consumers through the deceptive marketing and distribution of counterfeit athletic footwear using the growing the e-commerce marketplace, more sophisticated technologies, and the global reach and anonymity provided by

the internet. Empowering consumers to take pride in their role as stakeholders in this fight and extend guardianship over themselves and others online by seeking and sharing knowledge in IVBC's can help reduce the incidence of counterfeit athletic footwear sales online to unknowing consumers, due to the influencing role of C2C communication in online brand communities on purchasing behavior (Adjei, Noble, and Noble, 2010). The findings of this research suggest that it would be useful to identify IVBC's for other footwear brands and markets, to examine their current state of information sharing and see what indicators could be potentially be gleaned from the discussions on counterfeit products.

Overall, this study sought to help in the larger fight against the demand for counterfeit goods. Prior research has shown that consumers work to reduce uncertainty and risks prior to purchasing a product (Klarmann, Wiedmann, Hennigs, 2013). Wilcox stated that "consumers who demand genuine goods will purchase counterfeit products only when deceived into believing that counterfeit products are authentic," and that "it can be exceptionally difficult for consumers to differentiate counterfeit and authentic products because counterfeiters have near-perfected their ability to replicate the authentic product and may set a price comparable to that of the legitimate product (Wilcox and Boys, 2014, p. 280-281)." This shows how consumers of genuine items can be unknowingly tricked into buying a counterfeit product and fueling this demand. The insights provided from this study can be used to better understand how this group of consumers seeks to avoid being deceived into buying these products, and can help with targeted efforts to educate these types of consumers on the harms of counterfeits and ways to authenticate product offerings that they come across online – ultimately reducing the demand for counterfeits.

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