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ART THEFT, ART VANDALISM, AND GUARDIANSHIP IN U.S. ART
INSTITUTIONS

By

Katharine L. Salomon
B.A, Transylvania University, 1990
M.S., University of Louisville, 2008

A Dissertation
Submitted to the Faculty of the
School of Interdisciplinary and Graduate Studies
of the University of Louisville
in Partial Fulfillment of the Requirements
for the Degree of

Doctor of Philosophy in Interdisciplinary Studies

School of Interdisciplinary and Graduate Studies
University of Louisville
Louisville, KY

August 2018

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A Dissertation Approved on

June 29, 2018

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Eleanor Roosevelt wisely said, *“You gain strength, courage, and confidence by every experience in which you really stop to look fear in the face. You’re able to say to yourself, ‘I’ve lived through this horror, I can take the next thing that comes along.’”*

This quote aptly captures the essence of my doctoral studies journey. More important than absorbing the finer points of multivariate statistics, critically thinking about theoretical constructs, or even adopting a scholarly prose, I learned the importance of resilience. This skill supersedes any subject taught within a course curriculum or degree proffered by academic success.

There are many people to acknowledge and thank who have been a part of this tumultuous path to the completion of my dissertation. First and foremost, I would like to thank John Begley and Peter Morrin for sticking by my side the past ten years and for their never-ending wisdom and comfort. I learned more about the art world and museology from them than I could from any book. I am also extremely grateful to my Chair, Dr. Ryan Schroeder, for taking on this unique project with enthusiasm, donating precious time reading my long-winded chapters/emails, and having the utmost patience for a high-strung doctoral student. Additionally, this dissertation would not be complete without the brilliance of Dr. David Roelfs. He jumped right in at the twelfth hour numerous times with academic passion, a smile, and kind words. The remaining member of my “dissertation team” is Dr. Paul DeMarco. This entire process never would have

ever transpired if he had not taken a chance on a non-traditional student with off-beat project ideas. His flexibility allowed for many calamities to be either avoided or remedied.

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In closing, without the above-mentioned kind souls, it never would have been possible for me to successfully complete this stage of my life and embrace the next one with resilience, courage, and hope.

ABSTRACT

ART THEFT, ART VANDALISM, AND GUARDIANSHIP IN U.S. ART INSTITUTIONS

Katharine L. Salomon

August 7, 2018

Art crime scholars and art world professionals constantly grapple with determining the most effective methods by which to reduce and prevent victimization by art thieves and art vandals. Despite the numerous accounts of this form of criminality, there is a dearth of empirical studies focused on the security and care of art collections. Using Routine Activities Theory to guide the research, the present study explores the relationship between social and physical guardianship practices and the prevalence of art theft and art vandalism using questionnaire data collected from 111 American art museums and art galleries. The results indicate an overwhelming lack of statistically significant association between the majority of the guardianship measures and art theft and art vandalism victimization, a pattern consistent with the possibility that social and physical guardianship practices are not implemented until after an act of vandalism has already occurred.

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CHAPTER I
INTRODUCTION

Statement of the Problem

On November 20, 2015, three armed, masked men entered Italy's Castelvecchio Museum in Verona, shortly after it had closed. The bandits tied up and gagged both a cashier and the museum's remaining security guard. The thieves quickly helped themselves to seventeen rare paintings worth approximately 15 million euros and escaped in the security guard's vehicle using the keys stolen from him. The Italian authorities speculated that the theft had been ordered by an unsavory private collector. On March 16, 2016, thirteen suspects were arrested in connection with the heist. Interestingly, investigators discovered the entire caper was a possible inside job because one of the museum's security guards' sisters was in a relationship with one of the suspects. The guard was also arrested in conjunction with the crime.

(http://www.artfixdaily.com/news_feed/2016/03/16/4996-arrests-made-in-16-million-art-heist-from-verona-museum, electronically retrieved April 21, 2016). Luckily on May 6, 2016, Ukrainian border guards discovered the seventeen valuable Old Master paintings wrapped in black plastic bags which were buried under a pile of leaves on a small island near the Ukrainian/Moldovan border

(http://www.bostonherald.com/news/international/2016/05/ukraine_tracks_down_old_ma

ster paintings stolen from verona, electronically retrieved May 12, 2016). Art thefts are only one form of crime that wreak havoc to cultural institutions' collections, staff, and their visitors' ability to appreciate irreplaceable relics of humanity.

Art vandalism, also known as iconoclasm, is a more general term for the intentional destruction of art (Cordes & Turcan, 1993; Williams, 2009). Destructive acts targeted at works of art can be just as debilitating to a museum or gallery as the theft of art. On October 5, 2007, four masked men armed with axes and crowbars loudly entered Andres Serrano's exhibit of sexually explicit photographs, "The History of Sex", which was on display at an art gallery in Lund, Sweden. The men ran through the gallery smashing and hacking the works to the sound of death-metal music while verbally expressing their disgust with the imagery of the photographs. Seven 50 by 60 inch works worth a total of \$200,000 were damaged. The vandals proudly advertised their video of the attack on YouTube and the vandals threatened, via the internet, to return in order to attack the show again. Needless to say, security at the gallery was intensified to deflect another criminal perpetration

(<http://www.nytimes.com/2007/10/09/arts/design/09serr.html>, electronically retrieved October 30, 2009).

For hundreds of years, museums and art galleries have been society's guardians of humanity's greatest treasures for present and future generations. In addition to storing, researching, and displaying objects, these institutions have the responsibility to safeguard these valuable, works of art; a role otherwise known as guardianship. Guardianship is a major responsibility, though institutions do not always succeed in its implementation and execution. According to Madero-Hernandez and Fisher (2013), guardianship broadly

“refers to the ability of persons or objects to successfully prevent crime” (p. 517).

Protection of collections and persons in museums and galleries has evolved from a simple extra duty to a regulated, standard industry practice. The *Code of Ethics* put forward by the American Alliance of Museums (AAM), for instance, states that any museum is obligated to ensure the collections “in its custody are lawfully held, protected, secure, unencumbered, cared for and preserved” (<http://www.aam-us.org/resources/ethics-standards-and-best-practices/code-of-ethics>). Likewise, the International Council of Museums’ (ICOM) *Code of Ethics* also requires that museums “should ensure appropriate security to protect collections against theft or damage in displays, exhibitions, working or storage areas and while in transit.”

(<http://www.icomoesterreich.at/shop/data/container/ICOM%20Code>

[%20of%20Ethics.pdf](http://www.icomoesterreich.at/shop/data/container/ICOM%20Code%20of%20Ethics.pdf)). Yet, despite the fact so many resources and so much expertise have been devoted to collections guardianship, theft and vandalism remains a seemingly unstoppable problem. The strict guidelines and the increasingly sophisticated security systems and practices most museums and galleries have implemented still do not protect art museums and galleries in the United States from victimization by art thieves and art vandals, which is the focus of this dissertation. Specifically, this dissertation seeks to explore the relationship between cultural institutional guardianship practices and the prevalence of instances of art theft and art vandalism in American art museums and art galleries, as well as analyze which guardianship measures can reduce the odds of art theft and art vandalism victimization.

As a category of criminality, art crime can assume various forms. According to Durney and Proulx (2011), art crime refers to “criminally punishable acts that involve

works of art and includes a spectrum of phenomena as diverse as art thefts and confiscations, faked and forged art, vandalism and illicit excavation and export of antiquities and other archaeological materials” (p. 115). Though often under-publicized, art crimes annually result in significant losses of both financial assets as well as irreplaceable cultural patrimony worldwide.¹ According to Newsweek and other popular news publications, the international art crime industry generates six to eight billion dollars in total material losses each year, and exponentially more in intangible losses to communities, nations, and cultures (<http://www.newsweek.com/outgunned-search-stolen-art-258531>, electronically retrieved June 14, 2014). Despite the fact the global economic consequences of art crimes are significant, quantitative investigations of the topic are surprisingly limited both in the U.S. and abroad.

Numerous case studies and historical accounts comprise the body of literature on art theft (Bazley, 2010; Burnham, 1975; Chappell & Hufnagel, 2014; Charney, 2009; Charney, Denton, & Kleeberg, 2012; Charney, 2016; Clarke & Szydlo, 2017; Conklin, 1994; Conley, 1995; Dolnick, 2005; Durney, 2010, 2013; Grove & Thomas, 2014; Jackson, 2016a; Kila & Balcells, 2015; MacKenzie, 2005; Nairne, 2011; Nicita & Rizzolli, 2009; Pasas & Proulx, 2011; Purkey, 2010; Slattery, 2012; Tompkins, 2016; Webb, 2008; Wittman & Shiffman, 2010), art vandalism (Bazley, 2010; Boldrick, Brubaker, & Clay, 2013; Brisman, 2011; Conklin, 1994; Dornberg, 1982; Fine & Shatin, 1985; Freedberg, 1985, 1989; Fuller, 1987; Gamboni, 2007; Grove & Thomas, 2014; Held, 1963; Jackson, 2016a; Kila & Balcells, 2015; Koldrud & Prusac; 2014; Phillips, 1925; Phillips, 1973; Scott 2010b; Teunissen & Hinz, 1974; Tompkins, 2016; Williams,

¹ The FBI’s website advises that losses due to art crime total in the “billions of dollars annually.” See http://www.fbi.gov/about-us/investigate/vc_majorthefts/arttheft.

2009), and art museum/art gallery security (Bazley, 2010; Benny, 2013; Burke & Liston, 1993; Charney, 2009; Clarke & Szydlo, 2017; Conklin, 1994; Grove & Thomas, 2014; Keck, 1966; Layne, 2014; Mason, 1978; Noblecourt, 1964; Tompkins, 2016). However, scant qualitative research has been devoted to art theft (Aarons, 2001; Adams, 1974; Agama, 2016; Barelli, 1986; Benson, 2013; Ho, 1992; Kerr, 2015; Wylly, 2014), art vandalism (McNamara, 2013; Scott, 2009), and security practices within cultural institutions (Benson, 2013; Kerr, 2015, McNamara, 2013, Scott, 2009) exists. An even greater deficit of studies encompasses the repository of quantitative scholarly contributions of art theft (Benson, 2013; Burnham, 1978; Burmon, 2017; Durney, 2011; Ho; 1992), art vandalism (Bessette, 2016; Scott, 2009, 2010a), and art museum/art gallery security (Benson, 2013; Burmon, 2017; Cordes & Turcan; 1993; Dobovšek, Charney, & Škrbec, 2010; Normaker, Norlander, & Archer, 2000; Scott, 2009, 2010a; Wilemse and Etman, 1995). Furthermore, Burmon (2017) is the only scholar thus far to utilize theoretically informed quantitative methodology within her study of patterns of art theft in the U.S. and the recovery of stolen art. Burmon (2017) notes that a considerable number of her measures, “involve substantial reliance on the theoretical framework of situational crime prevention and routine activities theory” (p. 79). For example, Burmon (2017) applies two of RAT’s theoretical constructs to her variables measuring target suitability and guardianship.

However, Burmon’s (2017) study only incorporates univariate analysis and bivariate correlations among her variables within her scholarly investigation. Thus far, no scholar has tested Routine Activities Theory or any other theory as within a multivariate analysis as it relates to any form of art crime.

In terms of combining the study of either art theft or art vandalism with security practices related to each particular form of victimization, only six academicians are recognized within the art crime literature. Kerr (2015) examined the securitization and policing of art theft in London, England, Scott (2009, 2010a) investigated art vandalism and museum security in the United Kingdom, Ho (1992) incorporated security measures within her exploratory study on art theft in New York City, Benson (2013) examined security measures within her study on cultural heritage crime in Gauteng, South Africa, McNamara (2013) researched museum security protocols and practices as they relate to vandalism as a portion of her thesis on art vandalism, and as mentioned above, Bowman (2017) utilized variables measuring security in her study. To date, Wilemse and Etman's (1995) Dutch study is the only work which analyzes both art theft and art vandalism in conjunction with museum security. This research is limited in the sense it did not quantitatively investigate any theoretical construct explaining art crime. Therefore, this dissertation seeks to not only examine the relationship between art theft, art vandalism, and cultural institutional security procedures, but also to explore theoretically derived quantitative models relating to guardianship practices, art theft, and art vandalism.

Art Theft and Art Vandalism

The American public heartily embraced the entertaining topic of art theft when Pierce Brosnan burst onto the silver screen in the 1999 remake of *The Thomas Crown Affair* (the original featuring Steve McQueen and Faye Dunaway, released in 1968). The suave, debonair gentleman embodied by the lead character of Thomas Crown is hardly a realistic portrayal of the typical art thief, nor does the screenplay deliver a narrative

typical of the world of art crime. According to former Art Loss Register's in-house counsel, Chris Marinello, most art thieves are actually "common thugs who have no real knowledge of art other than they knew something was valuable" (quoted in Aminedoleh, 2011, p.3).

For instance, The Federal Bureau of Investigation (FBI) arrested three thieves in New York City with Italian Mafia ties who knew so little about the five stolen artworks, that when the federal agents eventually caught them fencing the piece(s), they were revealed to have actually been clever forgeries (<http://nypost.com/2000/09/30/fake-art-is-an-offer-you-cant-refuse/>, electronically retrieved April 5, 2015), (Thomas, 2002). Former FBI Special Agent Robert K. Whitman describes in his memoir, *Priceless: How I Went Undercover to Rescue the World's Stolen Treasures*, that the art thieves he encountered did not share any particular characteristics other than they were all motivated to steal art by their greed for money. Conklin (1994) posits eight additional motives behind art theft: "for personal possession, on commission for collectors, for sale to dishonest dealers, for consignment to auction houses, on speculation, for investment, for ransom for personal gain, and for political purposes" (p. 130). Each of these motives will be discussed in greater detail in chapter two.

Art vandals, on the other hand, are not driven to perpetration for material rewards but by different impetuses. The media, museum officials, and the public tend to promulgate the notion that art vandals are mentally unstable or insane due to the crime's seemingly senseless, irrational acts (Bazley, 2010; Bessette, 2016; Conklin, 1994; Fine and Shatin, 1985; Scott, 2009, 2010b). For example, in 1987, ex-soldier Robert Cambridge walked into the National Gallery in London, England with a sawed-off

shotgun and shot Leonardo DaVinci's drawing, *The Virgin and Child with St. Anne and St. John the Baptist* (1499-1500). Cambridge's bullet shattered the protective glass and made a six-inch hole in the work. Eventually the \$35 million work was restored and placed back on exhibit. Cambridge "told the police his intent had been to show his disgust with "political, social and economic conditions in Britain.""

(<http://www.nytimes.com/1988/11/08/arts/restoring-a-leonardo-drawing-that-was-hit-by-a-shotgun-blast.html>, electronically retrieved April 24, 2016). However, despite Cambridge's explicit, concrete explanation for his destructive acts, the authorities did not accept his motive as rational and he was committed to a psychiatric hospital (Conklin, 1994).

Further explanations for acts of destruction of art include envy (Cordes & Turcan, 1993; Fuller, 1987), protest against sexual imagery (Bazley, 2010), and destruction for destruction's sake (Scott, 2009). Scott (2010b) holds mental disturbance and destruction for destruction's sake are unacceptable explanations for an art vandals' behavior. Rather, there are four underlying motivations for art vandalism: "political agitation, ego-centric publicity-seeking, religious convictions, and the belief that an exhibit does not constitute "art"" (Scott, 2010b, p. 22). Scott (2010b) also astutely surmises, "By affording the question of motive greater consideration, a better understanding of the phenomenon and its context would be achieved, and this would truly empower the museum sector" (p. 36). In sum, if museums would consider the underlying reasons that art thieves and art vandals perpetuate their crimes, then security practices and procedures could be designed more effectively to reduce instances of victimization.

Museum Security

In order for art theft and vandalism to be prevented, there must be adequate security measures in place in museums and galleries. The American Alliance of Museums (AAM) provides on its website a detailed “Suggested Practices for Museum Collections Space Security” document for museums accredited by the AAM to utilize. These suggested practices “are necessary to protect from loss or damage of the museums’ collections and loaned collections that are in the museums’ collections”.

(<https://www.aam-us.org/docs/professional-resources/suggested-practices-for-museum-collections-space-security.pdf?Status=Master&sfvrsn=2>). The Smithsonian Institute boasts one of the best security departments in the world. It possesses an innovative security service and its security guards are “well trained, armed and have law enforcement authority” (Benny, 2013, p. 7). The Metropolitan museum of Art (The Met) also has an impressive security department. John Barelli, the chief of security at the Met, relates his department’s strengths in *Museum, Behind the Scenes at the Metropolitan Museum of Art*. He proudly reports 600 employees in his security department who are led with strict discipline. The Met utilizes a sophisticated communications center, a plainclothes detail, and armed officers at the front door. Barelli proclaims “when people come into this Museum, they see my security staff, and they know we mean business; they know if they do anything here, we are going to react, and they’re going to be taken care of”. (Danzinger, 2009, p.7).

However, at times, our cultural institutions cannot or will not provide appropriate levels of security and their alleged negligence has resulted in unnecessary scrutiny by a court of law. In October of 2013, art thief Radu Dogaru declared he was suing the

Kunsthal Rotterdam museum for making it too easy for him and his band of thieves to steal seven famous paintings worth over \$24 million on October 16, 2012 in three minutes. Dogaru contended the museum's sloppy security was the real crime in the heist, given there were no alarms on the paintings and the emergency back door was unlocked. According to the New York Times Magazine (2013), the valuable works were displayed close to an exit on the first floor of the museum and the wires holding the objects to the wall were weak. The museum did not employ night guards and the CCTV was not programmed to cover the area of the museum where the thieves broke in. An alarm eventually activated, but not until after the men had entered the institution. A curator, not affiliated with the museum, humorously noted, "It struck me as shoplifting, rather than robbing a museum""(Caesar, 2013, 29). Paradoxically, after the theft, Kunsthal museum's chairman of the board claimed that "adequate security measures had been taken" (<http://www.nytimes.com/2012/10/17/world/europe/Picasso-and-Monets-Are-Stolen-From-Dutch-Museum.html>, electronically retrieved August 14, 2014). However, it appears Dogaru never followed through with his litigious allegations and in February of 2014 he was sentenced to serve six years and eight months in jail (<http://www.dailymail.co.uk/news/article-2513970/Romanian-29-Picasso-Monet-Gauguin-art-theft-Dutch-museum.html>, electronically retrieved May 23, 2016).

Additionally, in 1996, the St. Louis Museum of Art sued the Whitney Museum of American Art (the Whitney) and its security service over a painting that was damaged while on loan to the Whitney On August 7, 1993, one of the Whitney's temporary security guards, Reginald Walker, drew a heart inscribed with "Reggie + Crystal 1/26/91" and wrote "I love you Tushee, Love, Buns" on a Roy Lichtenstein painting that was

valued at \$1.5 to \$2 million.

(<http://search.proquest.com/docview/430632180?accountid=14665>, electronically retrieved July 14, 2015).

Lastly, on March 12, 2007, a Russian judge reprimanded the State Hermitage Museum in Moscow, Russia for its security lapses and ordered the museum to increase security after one of its curators was able to slowly remove approximately 221 objects worth a total of \$5 million from the museum over a six-year period. Apparently, the curator's husband sold the stolen works to pawn shops in order to pay for his wife's diabetes insulin. He was sentenced to serve five years in prison

(http://www.nytimes.com/2007/03/16/arts/16herm.html?_r=0, electronically retrieved on July 24, 2014)

These cases pose the question: Are some art museums and art galleries more prone to art crime than other art museums and art galleries? Moreover, how accurately do museum and gallery personnel assess their overall security measures? What levels of guardianship are reasonable to expect from our esteemed cultural repositories? Stevan Layne astutely points out in *Art and Crime* that museums spend millions of dollars building their collections and similar amounts building their structures to house these collections. Yet, they only devote a small portion of their budget to protecting their works and their security departments (Layne, 2009). In conclusion, the budgetary constraints of security departments affect decisions as to which guardianship practices and policies will most effectively decrease a museum and gallery's chances of art theft and art vandalism victimization. It would be helpful to anchor the need for security within a theoretical framework to increase understanding for which guardianship practices to implement.

Theoretical Framework – Guardianship

Just over twenty years ago, Conklin (1994) proposed Cohen & Felson's (1979) *Routine Activities Theory* as a theoretical framework for the study of art crime including art theft and vandalism. Cohen & Felson's (1979) underlying assumption is that in order for crime to occur, three perpetually recurring factors must converge in time and space (a) motivated offenders, (b) a suitable target, and (c) the absence of a capable guardian or guardians. Conklin (1994) similarly asserts in order for an art crime to be committed, there must be a motivated offender (an art thief), a suitable target (the art work), and an absence of a capable guardian (lack of adequate security).

Factors Which Motivate Offenders

Cohen and Felson's (1979) defined a motivated offender as a person who has both the criminal propensity and ability to commit a predatory act. Conklin (1994) applied the scholar's definition of a motivated offender when referencing art criminals as motivated offenders.

Accordingly, in addition to the motivations listed in the previous section, the nature of the dynamics of the art world present potential thieves with the ease of successful crime commission due to the fact art thieves and art vandals elude arrest, a lack of reporting from victims, and low prosecution rates if apprehended. (Bazley, 2010; Conklin, 1994; Scott 2009, 2010a, 2010b). Art thieves often elude arrest or discovery. According to Charley Hill, former detective inspector with Scotland Yard's Art and Antiquities Unit, law enforcement agencies typically do not devote many resources

toward recovering stolen art as more serious crimes, such as terrorism, murder, and rape take precedence over finding a painting (Webb, 2008, p. 26). In fact, it has been estimated only ten percent of all art-theft cases worldwide result in the successful recovery of works of art (Charney, 2009; Conklin, 1994), and Bonnie Magness-Gardiner, the program manager for the FBI's art crime team and the administrator of the FBI's National Stolen Art File program, claims the more accurate figure narrows to just 6% (B. Magness-Gardiner, personal communication, August 22, 2014).

Conversely, many art vandals want to generate publicity for their criminal actions. Cordes and Turcan (1993) report art vandals who commit major acts of vandalism such as slashing, stabbing, or attacking a work of art with violence yearn to be exposed. For example, on February 28, 1974, prior to spray painting "KILL LIES ALL" on Pablo Picasso's famous painting, *Guernica* (1937), Tony Shafrazi called the press prior to entering the Museum of Modern Art where the painting was currently on exhibit. After Shafrazi finished his act of destruction, a security guard grabbed Shafrazi and Shafrazi shouted, "Call the curator. I am an artist"

(<http://www.artnet.com/magazineus/features/zeitz/tony-shafrazi9-10-09.asp>, electronically retrieved April 25, 2016;

<http://www.people.com/people/archive/article/0,,20087449,00.html>, electronically retrieved April 26, 2016). Shafrazi was only sentenced to five years' probation and later became a successful art dealer (Gamboni, 2007). According to research, however, minor acts of vandalism such as scratching, scribbling, or even placing chewing gum on a work of art are more common and these offenders want to avoid detection (Cordes & Turcan; Gamboni, 2007; Scott (2009, 2010a).

Since law enforcement agencies typically do not investigate art crime cases with as much rigor as they do murder, rape, or terrorism cases there is an industry wide reluctance of owners and institutions victimized by art theft and art vandalism to report the predatory violations. Many victims do not want their reputations tarnished to the extent donors think twice about contributing financial support to an institution perceived to be a poor guardian or incapable of adequate guardianship (Burnham, 1978; Conklin, 1994; Durney, 2013; Ho, 1992; Scott, 2009, 2010a; Webb, 2008). Lastly, the low prosecution rates contribute to the attractiveness of the commission of art theft and art vandalism. Other than on the federal level, there are no art crime specific statutes. Therefore, art criminals are prosecuted under state statutes for burglary, larceny, and criminal mischief which may carry lower penalties than art crime or these types of cases are handled in civil courts which may require victims to engage in lengthy and expensive litigation (Bazley, 2010; Conklin, 1994).

Suitable Targets At Risk For Victimization

A suitable/attractive target, has been defined by Felson and Cohen (1980) as an object or a person which contains one or all of these four features: value (material or symbolic allure), inertia (dimensional size, weight and any features that prevent it from being removed), physical visibility (prominence or prestige) and accessibility (location, easy to access, and easy to escape). In terms of art theft victimization, expensive, smaller, less prominent, and easily accessible objects due to their location are usually higher risk and pose the potential for greater losses. Valuable small paintings, glass works, photographs, or sculptures which are easily accessible from a small gallery on the first

floor of a building might be relatively effortless to slip under a coat or dropped into a bag or briefcase unnoticed. In addition, thieves often cut a work from its frame, roll it up, or place it in some type of discreet container, with which they can walk away undetected. For example, on December 4, 2004, two men entered Adam Williams Fine Art Ltd., an art gallery on the Upper East Side of Manhattan in New York City. The solo employee allowed the men entrance after thinking they were either expected telephone company repair persons or prospective customers. The men turned out to be neither. One of the men distracted the employee while the other man went to the back of the two-room gallery and was able to purloin a 18” by 14” untitled 19th century French painting by Theodore Chasseriau by hiding it under his coat. The value of the painting was not disclosed. However, police said, “it’s an expensive piece of art, but it’s not Picasso’s bowl of flowers” (http://www.nytimes.com/2004/12/04/arts/design/a-doorbell-rings-and-a-painting-is-gone.html?_r=0, electronically retrieved April 26, 2016).

A suitable target for art vandals contains properties desirable to each vandal’s particular motivation. For instance, devout Catholic Dennis Heiner smeared white paint over the entire surface of Chris Ofili’s, *The Holy Virgin Mary* (1996) on October 2, 1999 at the Brooklyn Museum of Art in order to restore the religious dignity of the Virgin. *The Holy Virgin Mary* was a large painting of a black Madonna which is resting on balls of elephant dung. The cut-out collages on the painting are images of vulvas taken from pornographic magazines. The artist’s intent may have been to unite Nigerian ideas of the woman as the source of fertility with traditional Catholic iconography of the Virgin Mary. The painting was considered sacrilegious by the religious leaders in New York City (<http://www.nytimes.com/2015/05/29/arts/design/chris-ofilis-the-holy-virgin-mary->

[to-be-sold.html? r=0](#), electronically retrieved April 25, 2016). Additionally, a target's prominence may attract an art vandal, especially those who wish to make a political statement through acts of vandalism (Scott 2010b). On March 10, 1914, Mary Richardson slashed Diego Velazquez's painting, *The Rokeby Venus* (1647), seven times with a meat cleaver to protest the imprisonment of the British suffrage's leader, Emmeline Pankhurst. The painting had been recently acquired by The National Gallery in London, England and was considered a national treasure (Adams, 1993). Lastly, a suitable target for an art vandal may be a proxy figure for a person with whom the vandal is angry with, wants to punish, or exert revenge (Cordes & Turcan, 1993; Scott 2010b). For instance, on April 9, 2003, in the main square of Baghdad, hundreds of Iraqis attacked the statue of Saddam Hussein with sledge hammers and attempted to pull the statue to the ground with rope to demonstrate their hatred for the ousted Iraqi leader (http://news.bbc.co.uk/onthisday/hi/dates/stories/april/9/newsid_3502000/3502633.stm, electronically retrieved April 25, 2016).

Lack Of Capable Guardianship In Art Museums And Art Galleries

The final component of Routine Activities Theory is lack of capable guardianship. According to Cohen and Felson (1980), guardianship "refers to the supervision of persons or objects that can prevent crime from occurring" (p. 392). Conklin (1994) defines guardianship as, "the degree to which owners protect their work" (p.123). Understanding the context and relevance of "the degrees" of the guardianship necessary to protect works of art forms a fundamental role. Absent, flawed, or substandard protections can easily render art objects vulnerable to theft or vandalism. Museums,

galleries, and vaults that store works of art usually feature variable levels of security (i.e. guardianship for different kinds of objects). It would be logical to assume thieves and vandals are more attracted to institutions with weak or poor guardianship practices and each form of criminal perpetration utilizes different modus operandi in which museums and galleries may not be equipped to defend against. Within the criminological literature, guardianship has been divided into two classifications: physical guardianship and social guardianship. Physical guardianship includes those security elements that would commonly be referred to as “target hardening”, such as alarms, locks, special outside lighting (Madero-Hernandez & Fisher, 2013; Miethe, Hughes, & McDowall, 1991; Meier & Miethe, 1993; Miethe & McDowall, 1993; Rountree, Land & Miethe, 1994), and CCTV (Addington, 2008; Burrow & Apel, 2008; Breetzke & Cohn, 2013; Johnson, 1999). Social guardianship refers to the human element of crime prevention such as having a neighbor watch your house while you are away (Fisher, Sloan & Lu, 1998; Fisher & Wilkes, 2003; Tseloni, Wittebrood, Farrell, & Pease, 2004), household composition (Fisher, Cullen, Turner, 2002; Outlaw, Ruback & Britt, 2002; Miethe, Hughes, McDowall, 1991, Miethe & McDowall, 1993; Rountree, Land, & Miethe, 1994), and home occupancy (Garofalo & Clark, 1992; Wilcox, Madensen & Tillyer, 2007). As the research on guardianship evolved, the concept of the place manager became an integral aspect of the social guardianship construct. Place managers are actors who discourage crime and reduce the potential for criminal activity by their mere presence and daily activities at specific places. These managers are not guarding a potential target; rather, these actors are controlling activities at specified locations (Eck, 1994, 1995; Felson, 1995; Mazerolle, Kadleck, & Roehl, 1998). Within the art museum and art

gallery context, a place manager might include museum/gallery security personnel, as well as non-security staff such as employees, volunteers, and even visitors. Indeed, everyday citizens are often credited with successfully protecting museums' and galleries' at-risk treasures. As Vicki Oliveri astutely proclaims, in the context of the gallery, the goodwill of the common citizenry is "just as vital to the life of a cultural institution as a good security system" (Oliveri, 2014, p. 97).

The Present Study

The motivation for the current study stemmed from the 1995 Dutch article by Willemse and Etman, in which they investigated the mitigating impact of museum security on thefts and vandalism in museums in The Netherlands. Numerous art thefts had plagued Europe during the 1990's, resulting in the Dutch Government sponsoring Willemse and Etman's research. The researchers mailed questionnaires to gather information on museum security and incidences on art theft and art vandalism to more than 200 museums throughout Europe and compiled the results in the aforementioned article. Surprisingly, the researchers' final recommendations included utilizing replicas from the more valuable works in the collection.

Taking a somewhat similar tack, this dissertation seeks to expand upon Willemse and Etman's research by examining current museum security practices and explore the relationship between these practices and the contemporary frequencies of theft and vandalism within American art museums and art galleries. The research contained addresses, among other aspects, the extent to which opportunity and guardianship within museum and gallery security practices are related to museum and gallery theft and

vandalism. This study has two goals. First, this research analyzes the frequency with which these two acts of art crime within American art museums and art galleries occur and how their parameters correlate to the various forms of guardianship surveyed. Secondly, this study tests the applicability of the guardianship component of Routine Activities Theory within the context of art theft and art vandalism. Specifically, separate social and physical guardianship models will be created in order to quantitatively investigate which theoretical measures most effectively predict the probability of art theft and art vandalism perpetration. However, as the first research of this type in the United States and the first study to attempt to apply a quantitative theoretical model to the above forms of art crime, the current project remains largely exploratory in nature. Furthermore, this academic investigation lays the foundation for future study and the ultimate goal is to contribute to a field of research that can increase the protection provided to artwork within our national art museums and galleries.

CHAPTER II

ART WORLD BUSINESS STRUCTURES

This chapter outlines the corporate structures operating in today's art world and how these structures impact the impact and reporting of art crime.

Structures of Art Museums and Galleries as Non-Profit Institutions

Art museums and art galleries are popular leisure destinations for many Americans. According to the National Endowment for the Arts' 2012 Survey of Public Participation in the Arts, 47 million Americans visited an art museum or gallery in 2012 (<http://arts.gov/news/2013/national-endowment-arts-presents-highlights-2012-survey-public-participation-arts>, electronically retrieved August 17, 2014). Moreover, according to the AAM, there are approximately 850 million visits each year to American museums, which is "more than the attendance for all major league sporting events and theme parks combined and museums preserve and protect more than a billion objects" (<http://www.aam-us.org/about-museums/museum-facts>, electronically retrieved August 17, 2014) and the Metropolitan Museum of Art in New York City alone hosted 6.2 million visitors during the fiscal year that ended June 30, 2014 (<http://www.artfixdaily.com/artwire/release/2651-metropolitan-museum-announces-62-million-annual-attendance>, electronically retrieved August 17, 2014).

The International Council of Museums (ICOM) defines a museum as “a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment” (<http://archives.icom.museum/statutes.html#2>, electronically retrieved August 13, 2014). There are many categories of museums including: military, art, science, children’s and history museums. This dissertation’s focus will be on art museums and art galleries, respectively.

When museums first emerged in Western societies, they existed as exclusive collections presented only to an elite audience, mainly artists, aristocrats, and wealthy gentry. Museums were often palaces that had held private collections of treasures and art objects for centuries for private contemplation and pleasure. They were often referred to as simply “cabinets of curiosities” (McClellan, 2008). Since the late eighteenth century, museums have evolved into esteemed public institutions and keepers of vast collections of artifacts representative of numerous cultures worldwide. They remain one of the most highly regarded sources of public knowledge and trust, attested to by the willingness of the public to place its confidence in museums’ responsibility to educate our communities in cultural and art history, contemporary expression and design (Cuno, 2004). Museums are upheld as trustworthy sources of objective information (<http://www.aam-us.org/about-museums/museum-facts>, electronically retrieved August 19, 2014).

Museums are also places of escape where members of the public can go to find peace and a meditative experience. When the Metropolitan Museum of Art (The Met) in New York City opened two days after the 9/11 attacks, 8,000 people walked through its doors to be

soothed after the horror that had ripped Manhattan apart. Dr. James Cuno, President and CEO of the J. Paul Getty Trust expresses it best: “art museums offer ‘places of refuge and spiritual and cultural nourishment’ where people may be ‘led from beauty to justice by a lateral distribution of caring.’” (McClellan, 2008, p. 3)

Closely aligned, the difference in the title “gallery” or “museum” is largely semantic. According to Ho (1992), there are two classifications of art galleries that exist in American culture: private galleries operated by art dealers for profit, and non-profit organizations that operate community gallery spaces. John Begley, former University of Louisville Hite Art Institute gallery director and professor of curatorial studies, also specifies that non-profit galleries serve the public through carrying out an educational or community service mission and are certified by the United States Internal Revenue Service (IRS) as eligible to receive tax- exempt donations. Begley further notes that these galleries are often very similar to museums in almost every aspect, except that they tend to not maintain permanent collections, though, even this difference is not a hard and fast rule. There are also museums, galleries, and other forms of public art centers that are government owned, publicly-funded and operated, both publicly and privately funded at all levels of government from -national, to state, to county, and to municipalities. Both the Los Angeles County Museum of Art (LACMA) and the St. Louis Art Museum are examples of hybrid institutions with both public and private funding, which is now the most common model). In contrast, institutions like the Sterling and Francine Clark Institute of Art in Williamstown, Massachusetts, or the Crystal Bridges Museum of American Art in Bentonville, Arkansas, are private non-profit museums. Additionally, museums affiliated with universities often fall into the hybrid category, particularly if

they are operated by public universities (J. Begley, personal communication, August 28, 2014). Case in point, the Hammer Museum is a publicly-funded division of the University of California, Los Angeles, while the Yale University Art Gallery is a public art museum funded by the private endowment of Yale University.

Non-profit art galleries include art-center galleries, university galleries, artist co-ops, and exhibition spaces at libraries, hospitals, or government buildings (Ho, 1992, p. 23). Non-profit galleries are usually governed by an elected board of trustees and enjoy a tax exempt status as a 501C-3 organization. Such non-profit art galleries can support small paid staffs but are often dependent on volunteers who also fulfil staff functions. Trustees of non-profit galleries are unpaid. Non-profit co-op galleries depend on the membership of artists who comprise their ownership and operation, and who must take turns running the gallery on a day to day basis. Non-profit galleries are typically restricted by limited budgets, and due to these restrictions sometimes do not acquire the insurance adequate to cover works of art appraised of any value, and often they cannot afford to maintain the security precautions needed to protect the objects they exhibit (J. Begley, personal communication, August 28, 2014). According to Peter Morrin, the former director of the Speed Art Museum, boards of non-profit galleries also may not have expertise in issues of security, and, as such, may fail to provide adequate support as well as oversight to paid staff. These issues discussed above then leave non-profit galleries especially susceptible to security infringement (P. Morrin, personal communication, December 18, 2014).

It should be noted that while non-profit institutions produced earned revenue through a variety of means, such as admissions, lecture and event fees, and gift shop

sales, they generally do not engage in sales of artwork. But there are exceptions even to this practice, as some non-profit galleries are intentionally organized to support artists and see providing artists with income through such sales as support and part of their mission. Museums may also de-accession works of art to fund new purchases.

For Profit Institutions

Commercial art galleries are for-profit businesses with inventories that represent both individual artists and private collectors. They buy, sell and trade in art works with a vested interest in generating revenue and return on investments for either their owner(s) or the corporate entity that oversees the gallery's operations. Private gallery owners, or art dealers, typically charge commissions of 25% to 75% of the price of an artist's work in any given sales transaction. Additionally, an item they have purchased and owned will be marked it up to any price the market will bear. Select galleries that represent prominent contemporary artists might also provide an annual stipend to artists for the exclusive right to show and sell their work to the high net worth buyers they retain as clients. The directors/owners of these galleries not only exhibit and sell the work of the artists they represent, they can possess exceptional connoisseurly knowledge of a given artist's studio practice and repertoire, and aim to "educate clients, curators, and the public about an artist's practice" (Bunting, Allison, & Richie-Handler, 2014, p. 81). However, while this educational function is perhaps similar to non-profit mission statements that guide museum operations, profits on revenue from art sales are distributed among the gallery's owners. Consequently, for profit galleries are a commercial enterprise first and foremost.

Hybridity of Art World Institutions

As the art world has evolved, museums' and galleries' operating models and purpose have become intertwined. According to Conklin (1994), some galleries consider themselves similar to museums because they don't charge a fee to the public and many of their patrons are simply looking at the works as they would do in a museum. Conversely, others argue that art galleries cannot resemble museums because they are retail spaces. Their primary purpose is profit driven. Additionally, they argue that galleries do not educate the public nor do they elevate the public's cultural consciousness. (p. 268). In the New York Times (NYT) article, "The Art World Blurred," the authors report that private galleries are changing and starting to provide more museum-style exhibitions emphasizing didactic texts and descriptive labels (http://www.nytimes.com/2012/10/28/arts/artsspecial/boundaries-blur-at-art-showcases.html?pagewanted=all&_r=0, electronically retrieved August 17, 2014). This change has been prompted by a decrease in museum funding for large exhibitions, which has created opportunities for high end galleries to pursue the missed opportunity. For example, the private dealer, Acquavella Galleries in New York, mounted the exhibition, *Wayne Thiebaud: A Retrospective*, a historically-based monographic exhibition more common in the public museum context. Not only are private galleries holding their own exhibitions, they are borrowing works from and loaning works to museums. According to John Wilmerding, Professor Emeritus of American Art at Princeton University, "organizing an exhibition in a gallery has its advantages. The galleries have the resources and are willing to put up the money. You can do a handsome catalog in two months, not a year and a half, which is what it takes at most museums."

http://www.nytimes.com/2012/10/28/arts/artsspecial/boundaries-blur-at-art-showcases.html?pagewanted=all&_r=0, electronically retrieved August 17, 2014). The overlapping of the for- and not-for-profit models can also be witnessed in the healthy retail shop trade within museums, and at after-hours events where visitors are offered food and wine. Prominent gallerists have also transitioned into top roles at major museums, such as Jeffrey Deitch, who gave up his position as a New York gallery owner to become to director of the Museum of Contemporary Art, Los Angeles, for three years. Conversely, museum curators are being integrated into commercial galleries, as when former Museum of Modern Art curator, John Elderfield, became an employee of the Gagosian Gallery. Some particularly well-known, established blue-chip galleries, such as Blum & Poe or Los Angeles' Louver Gallery, recently hired a team of professional archivists, a profession typically only seen in institutions of higher learning, historical societies, or large municipal art museums like The Met, or the Museum of Fine Arts, Boston. Most professional galleries also employ a number of professionals who one could previously only find in museums, such as a registrar, exhibition coordinator, security guards, and frequently student interns seeking experience in the art industry (McCullen, 2008; Bunting, L., Allison, V, & Richie-Handler, B.L., 2014). Increasingly, under pressure of falling philanthropic support, most museums, such as the Kentucky Museum of Art and Craft in Louisville, Kentucky, also draw revenue from other sources like ticket sales, artwork sales, and gift shops. (J. Begley, personal communication, August 28, 2014).

All of these “blurred roles” between museums and galleries creates an environment ripe for criminal opportunity. For example, the loan of artwork from

museums to commercial galleries creates new challenges such as custodial issues. If a work is on loan from a museum to a gallery (or vice versa), how can the museum be sure that the gallery will have adequate security measures in place to protect the work? How can the gallery be certain the security presented in a site visit will remain in place throughout the exhibition? How much responsibility does the “borrower” carry in making certain the borrowed work is not a fake or forgery? How can the “lender” be certain someone will not vandalize or steal one of the works that is on loan?

Art World Ethical Issues and Crime

American art museums and art galleries constantly encounter ethical quandaries that arise from the current the art industry. While these issues often do not rise to the definition of legal crime within this broad context, ethical transgressions are pertinent. Many public American museums are institutional members of the AAM, as well as the international Association of Art Museum Directors (AAMD), both professional regulatory bodies with by-laws and standards of practice to which all institutional members are compelled to adhere by virtue of membership. The AAM’s *Code of Ethics* holds, for example, that a museum’s duty to the public is not only to act legally, but also ethically, responding, and representing the public interest” (Amineddolch, 2013, p. 247). However, AAM standards and best practices for museums are voluntary and are not legally enforceable rules. Yet, despite the rigorous standards these two professional organizations have established even public art museums occasionally have been known to fall short of these prescribed ethical practices.

One of the central tenets of the AAM's *Code of Ethics* is that while a public art museum may deaccession and sell any unrestricted objects in its permanent collections in order to support new acquisitions, they are forbidden to do so in support of operating costs. Whenever it is revealed that a member institution has done the latter, it will be "sanctioned" by the AAM and presumably shunned by the museum community. An AAM sanction directly affects any existing loan agreements between the offending institution and any other institutions from which it has borrowed works of art, or where it has lent objects from its permanent collection. In 2014, the board of trustees of the Delaware Art Museum, in Wilmington, Delaware, voted in favor of deaccessioning one of their most treasured objects, the Pre-Raphaelite William Holman Hunt's *Isabella and the Pot of Basil* (1868), and putting it up for auction at Christie's, where it sold for \$4.25 million (half of what the Museum expected to earn from the sale). The Delaware Art Museum then committed the profits it received from the transaction to support operating costs necessary to keep the museum from insolvency. In a statement released by the AAMD dated June 18, 2014, the AAMD advised that there were other options such as reaching out to their donors for additional funding (<https://aamd.org/for-the-media/press-release/association-of-art-museum-directors-sanctions-delaware-art-museum>, electronically retrieved August, 19, 2104). In the end, the museum was sanctioned by the AAMD and, although not a member of the AAMD, was consequently denied the opportunity to borrow from other member museums. However, the AAMD's sanctions do not constitute a true legal obligation between the organization and its members, so that should a member museum wish to conduct loans or exchanges with an AAMD-sanctioned museum they may do so at their own risk. Former AAMD president, Susan

Taylor advises “AAMD sanctions are guidelines, so member museum directors have the flexibility to make their own decisions”

(<http://www.usatoday.com/story/news/nation/2014/06/19/delaware-art-museum-accreditation/10888703/>, electronically retrieved August 20, 2014).

In the U.S., the most prominent business association of commercial galleries in membership and prestige is the Art Dealers Association of America (ADAA). The annual ADAA exhibition at the Park Avenue Armory is thus a premier showcase for high-end galleries and their inventories, such as the aforementioned Acquavella Galleries, as well as others worldwide who conduct business in the U.S. The ADAA states that, “each member is expected to conduct business professionally, fairly, with integrity and with the courtesy and respect due to artists, clients, colleagues, and other Members, and the general public” (<http://www.artdealers.org/about/code-of-ethics-and-professional-practices>, electronically retrieved December 30, 2014). The language of some of these ethical requirements details the circumstance and consequences of a situation in which an ADAA member may encounter stolen art or artifacts, even if the liable organization is initially unaware that any works involved in its transactions have been obtained by illicit means. The ADAA expects its members to report irregularities to law enforcement agencies and to cooperate fully and candidly should any investigation ensue. The ADAA maintains that all members are mandated to provide potential clients with an accurate condition report and description of the work(s) offered for sale, all known provenance, and must provide to interested buyers a detailed invoice of any works intended to be purchased prior to the sales transaction. Violation of any of these prescribed ethical regulations could result in the institution being censured, having its membership

suspended, being expelled from the ADAA, or “such other penalty as the ADAA, acting through its Board of Directors, may deem to be appropriate.”

(<http://www.artdealers.org/about/code-of-ethics-and-professional-practices>, electronically retrieved December 30, 2014).

Intriguingly, however, as with the non-profit-focused AAM and AAMD, the ADAA’s warning still falls short of fully defining what constitutes these kinds of transactional scenarios or any overly specific language clearly detailing the penalties associated with expulsion from the ADAA other than the presumed loss of credibility in the arts community (<http://www.artdealers.org>, electronically retrieved December 30, 2014). Such ethical advice, therefore, presents member organizations with no genuine, enforced industry regulation or measurably effective deterrence for unethical behaviors. Houpt (2006) stated that “...trade associations are relatively weak, rely entirely on their members for subscriptions, and have little capacity to enforce rules. Many dealers flatly deny that there is a problem. Some resent the cost.” (p. 8). It is for this reason that the transactions that take place between art institutions, collectors, and dealers often seem opaque, secretive, and virtually unregulated to those outside business. Unfortunately, the clandestine climate of the art trade sets the stage for an industry replete with opportunities for successful art crime endeavors.

Private dealers often value highly the confidences and discretion maintained between buying and selling parties, especially given the significantly high value of the commodities in which they conduct business. As a result of this commonly acceptable discretion, buyers do not have to be provided with a clear provenance. For example, in 1967, the New York art dealer, Betty Mont, attempted to dissuade a client from delving

any deeper into an inquiry surrounding the questionable previous ownership of a painting she and her husband had recently purchased from Frederick Mont, Inc., on Upper East Side of New York City: Mrs. Mont relayed, “As we told you we bought the painting through an agent, and you will understand that this man does not wish to give away his sources-this, you will admit- is his good right, because he hopes to get other items from them. “(B. Mont, personal communication, May 8, 1967). There is no further information on this particular matter. However, according to Thomas Hoving (1997), former director of the Metropolitan Museum of Art, Frederick Mont had been involved with another sale of a work of art with disputable provenance. In 1974, Mont sold a painting of 16th century St. Catherine by Matthias Grunewald to the Cleveland Museum of Art for one million dollars. This panel was later discovered through forensic analysis to be a fake and Mont reluctantly returned the money to the museum.

More recently, In 2013, Glafira Rosales, a Long Island art dealer plead guilty to fraud for selling forged artworks to the Knoedler Gallery, one of the oldest commercial art galleries in New York City. Rosales and her boyfriend, Jose Carlos Bergantiños Diaz, his brother, Jesus Angel Bergantiños Diaz, and Pei-Shen Qian, the artist who forged the work all conspired to defraud the gallery. Ann Freedman, the former president of Knoedler, and Julian Weissman have since repeatedly stated that, despite the lack of documentation, they were both convinced the work was genuine, based on their connoisseurship. Weismann further remarks that the art industry’s mask of secrecy was a large contributor to the situation, explaining that “secrecy is something that occurs left and right in this business.” (http://www.nytimes.com/2014/05/03/arts/design/selling-a-fake-painting-takes-more-than-a-good-artist.html?_r=0, electronically retrieved August

21, 2014). In sum, the highly competitive nature of the art market is an environment in which ethical practices are perceived as potential obstacles to conducting a legally run profitable business. Such is the quandary evidenced in the deliberate ambiguity in any rules and regulations that pertain to the appearance of conscientious practices in both non-profit galleries that acquire works of art for public exhibition and education and the commercial entities that facilitate a marketplace for these objects.

Ancient works of art are particularly likely to draw attention to potentially unethical business practices. In the years before ethical archaeological practices, ancient artifacts have been routinely looted or stolen from historic sites, especially those located in politically unstable states or former colonies of Western super powers. Included in this category are items looted from archaeological dig sites, ancient structures, or graves.

Historically, it took archeologists' advocacy, well-publicized scandals, and government-initiated advisory panels composed of government and art world professionals that issued policy recommendations to implement basic regulatory measures, to pressure both the US and the UK to comply with international agreements regarding the acquisitions of looted antiquities (Efrat, 2016). However, this issue persists within the art world. Some prominent public art museums have attracted scrutiny by overlooking, intentionally or not, the various warnings that emerge in the acquisition and accessioning process for ancient antiquities.

For example, objects later discovered to be looted or obtained initially by unscrupulous methods can be the finest pieces in a given museum's current permanent collection. In these situations, museums can be resistant, even under governmental or industry pressure, to return such objects to their rightful owners or countries of origin in

order to maintain the status and prestige of their collections *vis-à-vis* other comparable museum collections. Jonathan Webb (2008) remarks that “museums are the institutional equivalent of the compulsive private collector; their hunger for acquisition is unbending and insatiable” (p. 127). In 2008, the Metropolitan Museum of Art somewhat begrudgingly returned an object known as the *Euphronios krater*, discovered to be a looted object, to Italy after a 30-year legal battle with the Italian government. (Brodie & Proulx, 2013; Bazley, 2010; Conklin, 1994). Similarly, in 2005 Marion True, a former curator of Greek and Roman Art at the J. Paul Getty Museum (The Getty) in Los Angeles, California, was indicted along with American antiquities dealer, Robert E. Hecht, by the Italian government on charges of receiving stolen antiquities, trafficking, and conspiracy to traffic. The charges were eventually dismissed due to the expiration of the statute of limitation. The Getty found it had no choice but to return the objects in question to Italy, as a show of good faith (Bazley, 2010; Brodie & Proulx, 2013).

Art crimes such as those at the Knoedler Gallery and the Met fuel a multi-billion dollar black market, which, according to the FBI and other sources, contributes to \$6 -\$8 billion annually in commercial profit (http://www.fbi.gov/about-us/investigate/vc_majorthefts/arttheft, and <http://www.newsweek.com/outgunned-search-stolen-art-258531>, electronically retrieved June 14, 2014).

In conclusion, as stated in the introduction, art crime, in general, has been defined as “criminally punishable acts that involve works of art and includes a spectrum of phenomena as diverse as art thefts and confiscations, faked and forged art, vandalism and illicit excavation and export of antiquities and other archaeological materials” (Durney and Proulx, 2011, p.115). The variety of the above reviewed ethical issues and crimes

reflect the complexity and multiplicity of possibilities for criminal acts to be perpetrated. This in turn requires a thorough examination of several elements of this multifaceted issue in order to formulate strategies to combat the problem.

This dissertation cannot engage all these possibilities for criminal activity within the art world; however, it should be noted that the overall configuration of the contemporary art market contributes to an atmosphere that encourages illegal activity and allows factors such as the non-reporting of crimes, secrecy, and the lack of documentation to render difficult how gaining an understanding and sound formulas for combating the two forms of art crime which are the focus of this dissertation: art theft and art vandalism, in both public art museums and private and public art galleries.

CHAPTER III

ART THEFT AND ART VANDALISM

“Edgar Degas once said of painting a picture, that “It calls for as much cunning as the commission of a crime”” (Tompkins, 2016, p. 210)

In this chapter, we review current and previous literature on the two forms of art crime which are the focus of this dissertation-art theft and art vandalism. The literature argues for the special status of art theft and art vandalism due to its impact upon art history and cultural well-being of society. Additionally, we focus on the motivations of the aforementioned types of criminality and combative mechanisms in place to curb the incidences of art theft and art vandalism, as well as the environmental factors that influence art crime today.

PART ONE – ART THEFT

A Review of Art Theft

“On December 4, 2014, thieves broke into a shuttered tavern adjacent to a prominent art gallery (Puerta de Alcalá) in Madrid, punched a hole through the wall that led to the gallery, managed to deactivate the gallery's alarm system, and then proceeded to abscond with some 50 works of art” (<https://news.artnet.com/market/50-paintings->

[stolen-from-madrid-gallery-195850](#), last accessed December 30, 2014). The stolen works have not been recovered. However, stolen art has a very low recovery rate, and experts estimate only two to ten percent of stolen art is ever found.” (Conklin, 1994; Charney et al., 2011; B. Magness-Gardiner, personal communication, 2014).

According to Encyclopedia Britannica art theft is “criminal activity involving the theft of art or cultural property, including paintings, sculptures, ceramics, and other objets d’art” (<https://www.britannica.com/topic/art-theft>, electronically retrieved May 30, 2018). Further, theft is defined as “ the physical removal of an object that is capable of being stolen without the consent of the owner and with the intention of depriving the owner of it permanently” (<https://www.britannica.com/topic/theft>, electronically retrieved May 30, 2018). Art theft and its normative counterpart differ in several respects.

While art theft and general theft are classified as property crimes, theft of artworks do not fit the normative characteristics of ordinary theft cases. Given that the aforementioned form of criminal perpetration also target art objects, which are venerated works held in the public trust, any victimization to these works elevates the seriousness and symbolic power of the crime (Freedberg, 1985; Gamboni, 2007). Additionally, the social norms to protect and preserve these artifacts of culture are violated and the consequences exceed the financial losses to society. According to Robert Wittman, a former FBI special agent with the art crime unit, “art crime is different from a car theft or a bank robbery, it wasn't perpetrated by your average thief, and it wasn't sold to your run-of-the-mill fence or pawnbroker. It has got a different group of people involved in it. You have to have some knowledge of what has been taken in order to determine where it

might end up." (<http://www.npr.org/templates/story/story.php?storyId=98281679>, electronically retrieved May 29, 2016).

Furthermore, due to the need for some knowledge of art, law enforcement may not investigate a theft of art as rigorously as they investigate a car theft or a home invasion due to the stolen object not being perceived as worthy of intense examination (Benson, 2013; Kerr, 2013; Clarke & Szydlo, 2017). Secondly, the victims of art theft primarily only want their artwork recovered rather than apprehend the thief, which is in conflict with law enforcement's goal of closing a case by arrest.

Lastly, in many instances, art theft is an interstate and international crime. Art that is stolen from one state or country can be quickly and surreptitiously moved to another one.

Art Theft Legislation and Criminal Statutes

In the rare instance that an art thief is identified, and apprehended, criminal offenses will apply and the defendant can face prison terms. On neither the state nor the local levels are there any specific statutes, however, related to prosecutions of art theft. This legal conundrum is a frustration echoed by many scholars and art world professionals practitioners alike (Benson, 2013; Charney, 2014; Clarke & Szydlo; Conklin, 1994; Dobavasek & Slak; Kerr, 2013; Pastore, 2009; Williams, 2008), as well as the minimal criminal penalties associated with art theft prosecutions (Benson, 2013; Clarke & Szydlo; Conklin, 1994; Kerr, 2013; Pastore, 2009; Williams, 2008). One resulting problem has been noted by Charney, "Statistics are hard to come by because police forces seldom distinguish between stolen art and other stolen goods. "A

Rembrandt is classified with a CD” (<http://ec2-79-125-124-178.eu-west-1.compute.amazonaws.com/articles/Recovery-rate-for-stolen-art-as-low-as-/31145>, electronically retrieved May 31, 2018).

This is due to the crime generally falling under the Uniform Crime Reports (UCR) offenses of Robbery, Burglary, and Larceny-Theft Statutes. (Conklin, 1994; Bazley, 2010).

The UCR defines Robbery specifically as “the taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim in fear”

(<http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/violent-crime/robberymain>, electronically retrieved 4/12/2015). Indeed, there have been some incidences of art theft that have included the threat and use of force, and weapons. In one notable example, five armed and masked robbers stormed into the crowded galleries at the Museum of Fine Arts in Nice, France, on the first Sunday of August in 2007, when admission is free. They ordered the six security guards to lie down and proceeded to steal four masterpieces off of the walls within ten minutes

(<http://www.washingtonpost.com/wp-dyn/content/article/2007/08/06/AR2007080600596.html>, electronically retrieved September 12, 2014). The UCR defines Burglary (breaking and entering), the next level of theft downgraded from Robbery as “the unlawful entry of a structure to commit a felony or a theft. Attempted forcible entry is included.” (<http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/property-crime/burglarymain>, electronically retrieved 4/12/2015). Most often, art thieves break into museums or galleries after closing. A

typical example took place in December 2005, when two thieves broke into a California gallery after 11:00 pm through the back door with a crowbar. They absconded with a Picasso linocut (*Femme regardant par la Fenêtre*) and a Marc Chagall lithograph (*The Tribe of Dan*) (Haupt, 2006, p. 148).

Larceny-Theft (except motor vehicle theft) is defined by the UCR as the “unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another” (<http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/property-crime/larcenytheftmain>, electronically retrieved April 12, 2015). This even more common variety of theft includes bicycle theft, car parts and accessories, shoplifting, pick-pocketing, or the stealing of any property or article without force, violence, or deception.” The most frequent mode of art theft that fits into this category is through the sleight-of-hand maneuvers of a thief disguised as a typical museum visitor who quickly purloins an object and escapes undetected, usually by simply walking out the front door. In June of 2012, a small painting by Salvador Dali entitled, *Cartel de Don Juan Temiro*, was stolen from Venus Over Manhattan, an upper east side gallery in New York, by a brazen thief who merely lifted the painting off of the wall during business hours while a security guard was on duty. Curiously, the thief mailed the \$150,000 painting via FedEx back to the gallery one week after he stole it (<http://www.ucrdatatool.gov/offenses.cfm>, electronically retrieved September 8, 2014).

At the level of federal offense, several statutes apply to art theft. These are listed and detailed in **Appendix A**.

The Statistical Picture

Despite ardent efforts by law enforcement, legal advisors, and legislators, art theft remains an unresolved worldwide problem. Very few empirical studies exist which quantitatively capture an entire picture of this issue. Due the high incidence of unsolved crimes, law enforcement agencies lack the statistics that could yield enough data to conduct these studies. INTERPOL, the European Union's international police bureau, formally states that it does not:

possess any figures which would enable [them] to claim that trafficking in cultural property is the third or fourth most common form of trafficking, although this is frequently mentioned at international conferences and in the media. In fact, it is very difficult to gain an exact idea of how many items of cultural property are stolen throughout the world and it is unlikely that there will ever be any accurate statistics. National statistics are often based on the circumstances of the theft (petty theft, theft by breaking and entering or armed robbery), rather than the type of object stolen. An enhanced information exchange could assist INTERPOL in determining the importance as well as the trends and patterns of this type of crime.

(<http://www.interpol.int/Crime-areas/Works-of-art/Frequently-asked-questions>, electronically retrieved September 14, 2014).

However, the agency does concede that despite the lack of reliable, internationally harmonized statistics on cultural property thefts, their website does provide a minimal amount of related data.

There is a small amount of data available on some of the sub-categories of art theft, such as location. The majority of thefts investigated by INTERPOL were carried out in private residences. Museums and places of worship are also among the common targets. According to data provided online by the Art Loss Register, the percentage of art

thefts by location worldwide in 2008 breaks down as private residences (52%), art museums (12%), commercial galleries (9%), unknown locations (8%), churches (5%), corporate sites (4%), other locations (4%), public spaces (3%), in transit (2%), warehouses (1%), and cemeteries (0.1%)

(<http://www.artmarketmonitor.com/2009/04/23/art-loss-register-data-dump/>,

electronically retrieved September 14, 2014).

In 1986, John Barelli, chief security officer at the Metropolitan Museum of Art, published the results of an analysis of art and antiquities thefts that had been investigated by New Scotland Yard's Arts and Antiquities Squad. According to these statistics, in 1984 the majority of thefts were likewise in private residences (92%), followed by churches (1.6%) and museums (1.4%). Barelli acknowledges that criminals found it easier to steal from private residences because they are not as well protected as museums and the objects in museums are harder to sell and are well documented (p. 211). Ho (1992) empirically examined 229 art theft reports filed with the New York City Police Department's Art and Antique Investigation Unit, between January 1985 and December 1988. The location data from this study differs from the one Barelli portrayed, and shows the highest percentages of reported thefts took place in commercial galleries (45%), followed by private residences (20%), business offices (12.2%), cars parked on the street (8.3%), storage/warehouse (4.4%), churches and schools (3.5%) and hotel/clubs (3.1%) (p.56). Ho also surveyed 45 art dealers in New York City and found that most art thefts took place in gallery showrooms (68%), storerooms (25.5%), warehouses (3.9%), or while one work or group of works were on loan to another institution (2.0%) (p. 107). Looking at museum security in the Netherlands, Wilemse and Etman (1995) found that

34% of reported theft also took place in exhibition spaces, while just 4% took place from a storage space (p. 55). Aarons (2001) collected data related to the prevalence, frequency and characteristics of art theft in Australia. According to her findings, of the 57 reported incidences of art theft in that country, 27 were works stolen from commercial galleries, 17 from private residences, 5 from public museums, and 3 from storage spaces or works in transit to storage facilities (p. 23).

Burmon's (2017) sample of 114 police reports made to the FBI revealed that 25.4% of art theft perpetration occurred in a gallery, 34.2% occurred from a private owner (specific location not noted), 9.6% occurred in a business, 8.8% occurred in both a religious institution and a university/school, 7.0% occurred in an "other" location, and interestingly on 6.0% occurred in a museum. When these figures are compared with other statistics regarding location of art thefts, the museums generally are not victimized as the smallest percentage of a study's sample. In Figure 1, the distribution of location of art theft perpetration according to the FBI's National Stolen Art database is presented. While the exact sample size was not revealed, the top three locations of victimization in 2014 were residences (n=370 objects), galleries (n=218 objects), and museums (n=180 objects) (B. Magness-Gardiner, personal communication, August 22, 2014).

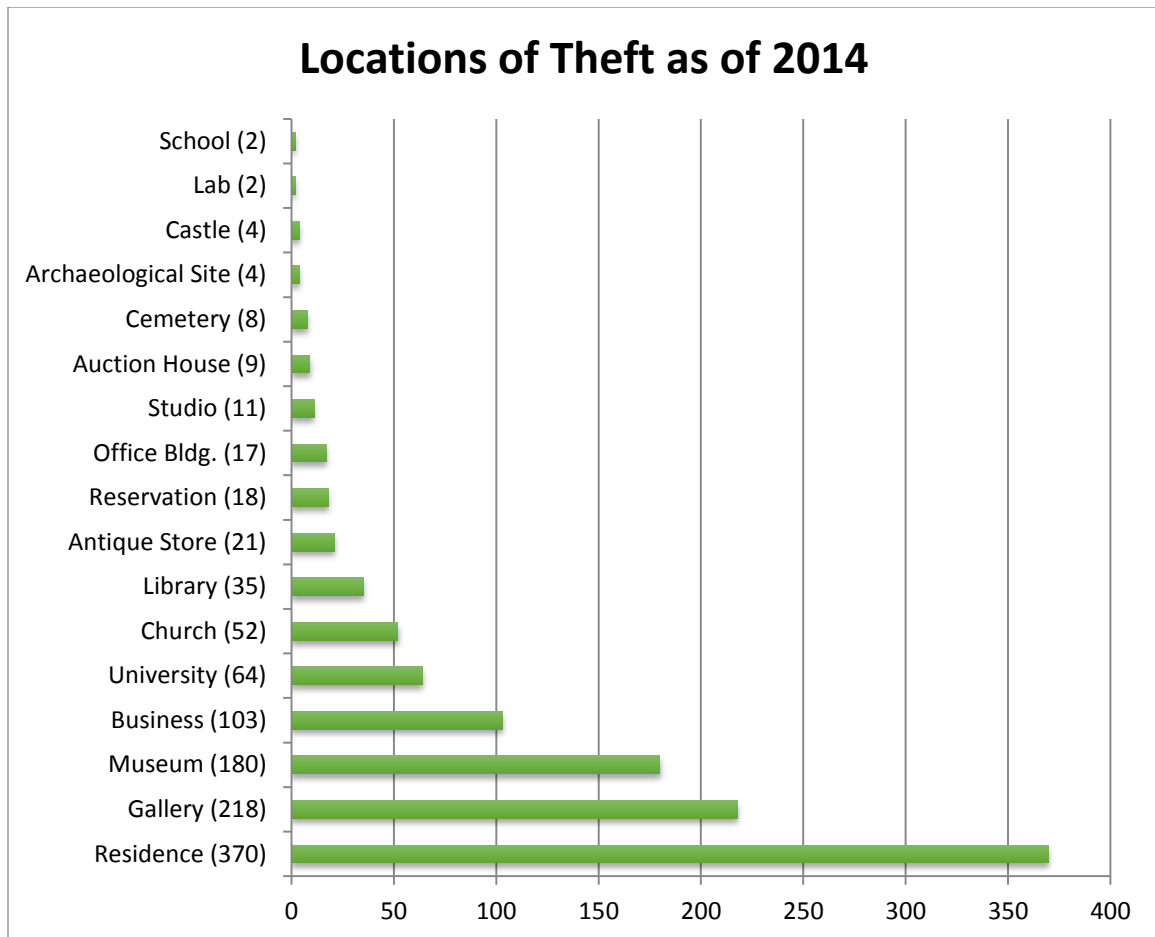


Figure [3.1]. Source: *National Stolen Art File*, Federal Bureau of Investigation (B. Magness-Gardiner, personal communication, August 22, 2014).

A second area of interest to those researching international art crimes is the type of objects most commonly stolen, which INTERPOL indicates vary by country, but typically cover “paintings, sculptures and statues, and religious items.” But really no type of object is spared by enterprising art thieves, and this category ought also to include antiquities, antiquarian books, antique furniture, numismatics, and arms and armor (<http://www.interpol.int/Crime-areas/Works-of-art/Frequently-asked-questions>, electronically retrieved September 28, 2014).

According to data provided online by the Art Loss Register, the highest numbers of stolen objects are paintings, drawings, and works on paper (89,019), followed

by sculpture (25,016), and silver (21,865). Other categories include timepieces (12,390), ceramics (10,668), jewelry (10,641), *objets d'art* (8,197), furniture (7,997), textiles (4,653), arms & armor (3,101), vehicles (2,334), books & manuscripts (1,919), coins (1,801), enamels (1,482), glass (1,279), instruments (984), lighting appliances (868), medals (383), memorabilia, toys & medals (257), miscellaneous (189), and stamps & seals (95). When Burnham (1978) conducted a survey of museums and art dealers, she found that museums reported decorative art as most frequently stolen, followed by paintings, and small sculptures. Some thefts of small objects occurred during a museum's open hours, in broad daylight. Likewise, Burnham found that small objects were also the most commonly purloined item in commercial galleries as well.

In his analysis of Scotland Yard's Arts and Antiquities Squad records from 1978-1982, Barelli (1986) found that small paintings, porcelains, silver objects, oriental rugs, clocks, small sculpture and furniture were the most common items stolen in the United Kingdom, because they are relatively easy to sell (p. 211). Ho's study of theft from commercial galleries in New York City (1994) identified paintings (25.3%) as the most common target, followed by sculpture (35.2%), prints (9.9%), folk art (8.8%), then drawings (6.6%), followed by antiquities (3.3%), and finally silkscreens (1.1%) (p. 132). The respondents also reported that small objects (under 18 inches) were most often taken because they are easy to conceal and carry. (p. 131). Ho found that the frequency of objects stolen from New York commercial galleries by organized burglary trended toward these smaller objects, but that burglars usually absconded with more substantial quantities of inventory, such as larger objects, which might be valued also by their materials and quantity (p. 157). The following proportions of objects stolen is captured

here: prints (29.1%), sculpture (23.6%), craft (14.6%), print and antiquity (12.7% each), and drawings and other (7.3% each). Aarons (2001) found that in 57 instances of reported art theft during the 1990s in Australia, paintings were stolen 47 times, sculpture 5 instances, drawings and prints 2 instances, and just one photograph was reported stolen. Australian respondents maintained that paintings were most desirable because “the physical nature of many paintings renders them easy to steal and easy to remove from display” (p. 24).

Burmon’s (2017) findings on types of objects stolen provide further data on what objects are desirable to art thieves. Specifically, 38.6% of the sample suffered the theft of a painting, 28.1% sample sustained the theft of a sculpture, 10.5% sample sustained the theft of a historical artifact, 8.8% sample suffered the theft of multiple objects, 7.9% sample sustained the theft of “other” objects, and 6.1% sample suffered the theft of a drawing. According to the FBI, multiple types of objects have been recorded stolen. Specifically, the data garnered from the NSAF database in 2014 revealed that 2,920 paintings, 1,262 sculptures, 829 prints, 322 drawings, 320 books/manuscripts, 160 photos, 145 pieces of jewelry, 89 plant pots, 49 cloaks, 48 musical instruments, 39 maps, and 18 textiles were reported stolen (B. Magness-Gardiner, personal communication, August 22, 2014).

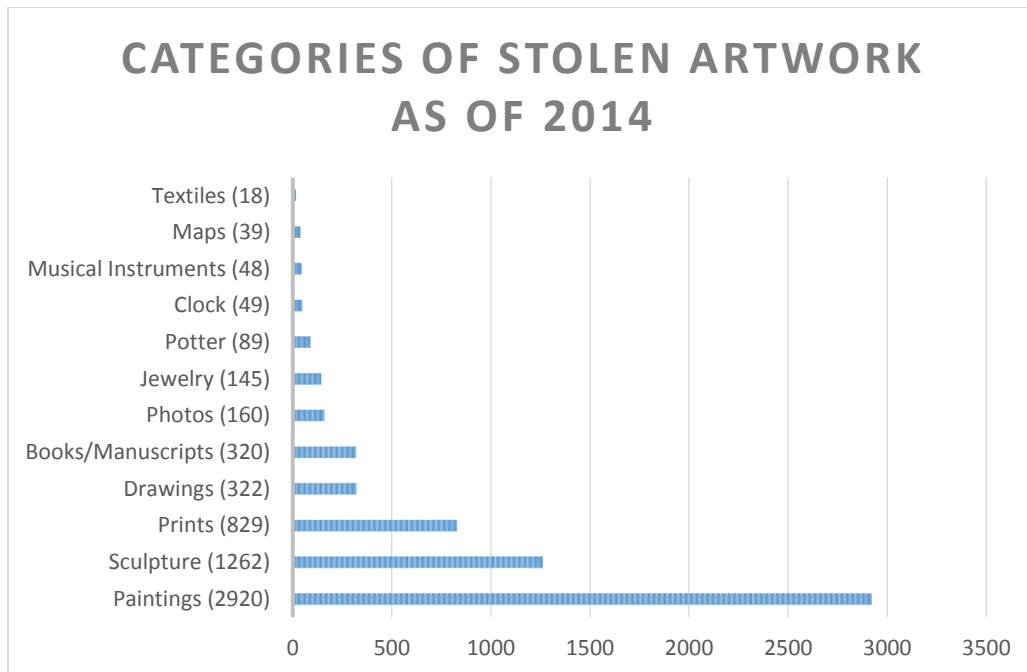


Figure [3.2]: Source: *National Stolen Art File*, Federal Bureau of Investigation (B. Magness-Gardiner, personal communication, August 22, 2014).

The frequency that works by specific artists are stolen over others presents a third area of interest. According to data provided online by the Art Loss Register the artists whose works are most frequently stolen, include Pablo Picasso (699), Salvador Dali (396), Joan Miro (390), Marc Chagall (361), Albrecht Durer (212), Pierre-Auguste Renoir (192), Andy Warhol (183), Rembrandt van Rijn (181), Peter Paul Rubens (147), and Henri Matisse (138) (<http://www.artmarketmonitor.com/2009/04/23/art-loss-register-data-dump/>, electronically retrieved September 14, 2014).

Other types of criminal offenses committed during art thefts comprise a fourth set of data. In Europe, breaking and entering is the most common method used by thieves. Ho's (1992) analysis of 229 art theft reports to the New York City Police Department's Art and Antique Investigation Unit from January 1985 to December 1988 shows that types of offenses that accompanied museum theft could be grouped into four main categories: larceny (58.1%), burglary (38.9%), robbery (1.7%), and fraud (1.3%) (p. 54).

The range of offenses committed in the burglary of commercial galleries are shoplifting (4%), burglary (20%), employee theft (2.9%), and “mysterious disappearance” (2.9%) (p. 59). According to the FBI’s *National Stolen Art file*, in 2009, the majority of the criminal activity within the NSAF was burglary, followed by larceny. The three remaining types of criminal activity are armed robbery, robbery and a small percentage of the criminal activity is consignment fraud (B. Magness-Gardiner, personal communication, August 22, 2014). In terms of gender distribution, according to Dr. Magness-Gardiner in her presentation at the 2009 annual meeting of the American Society of Criminology, only 10% of art thieves are female and approximately 90% of art theft was committed by males.

As mentioned earlier, recovery rates for stolen art are comparatively quite low compared with other forms of stolen property, typically around 10% according to Naylor (2008), and these interceptions usually happen as one attempts a sale of a stolen work of art (Spadanuta, 2011, p. 51). To bring the statistics into the more recent past, according to Mark Durney (2010) only 1.9% of stolen works of art were successfully retrieved by authorities between 2000 and 2009. A significant outcome of this study was the “correlation between the amount of information provided to stolen art databases and the likelihood that a registered object will be recovered” (p. 7). Durney statistically isolated the variables of the premise-type recorded versus the omission of premise-type records. What he found was that recovery rates spanned 2.75% and 1.24% of the number of investigated art thefts, and recovery likelihood improved if the stolen objects in question appeared in databases devoted to catching art thieves. The premise-types in this study ranged from “archeological sites, archeological monument, bank, cemetery, church,

company, gallery, in transit, museum, other, private, public, unknown, and warehouse” (p. 6). When Durney added the variable of geographic-location versus its lack of geographic-location information in other investigations ranged from 3.16% to 1.18%. Durney concluded that the more information that institutions can supply to stolen art databases, the likelihood of object return improves (p. 8).

A History of Art Theft

The FBI’s National Stolen Art File website defines a work of art as a thing or things that can be identified as fine arts, decorative arts, antiquities, Asian art, Islamic art, Native American art, ethnographic objects, archaeological material, textiles, books and manuscripts, clocks and watches, coins, stamps, musical instruments, or scientific instruments, and which are “uniquely identifiable and have historical or artistic significance” (http://www.fbi.gov/about-us/investigate/vc_majorthefts/arttheft/national-stolen-art-file, electronically retrieved August 16, 2014). The theft of works of art is likely as old as human history itself. In the last century, the first widely publicized crime was the 1911 theft of Leonardo da Vinci’s *Mona Lisa* from the Musée du Louvre in Paris by a museum employee, an Italian national, Vincenzo Peruggia, who simply remained in the museum after closing in a broom closet, pulled the picture off its wall display, and walked out with the painting under his coat. Authorities eventually apprehended Peruggia when he attempted to sell the painting to the directors of the Uffizi Gallery in Florence, Italy. (Ho, 1992; Conklin, 1994).

Simon Houpt (2006) attributes the volatility of the art market and the increased incidence of theft to the exorbitant valuations constantly made reality by high net-worth

bidders in leading auction house sales. England's Metropolitan Police's website notes that criminal activity surrounding the art community is a highly lucrative criminal enterprise, estimated to be worth in excess of £3 billion each year (<http://content.met.police.uk/Site/artandantiques>, electronically retrieved September 3, 2014). How can art crime be so profitable and difficult to control? Some answers lie in the nature of the art market itself.

The Art Industry

Many aspects of the modern art industry contribute to desirability of art as a target for cunning or not so cunning thieves. As Robert Volpe, a former New York City Police Department art detective, puts it:

the least guilty of all parties are the thieves. These mules couldn't do it without the cooperation of gallery owners, flea-market purveyors, auction houses, museums, security companies, collectors and finally law enforcement agencies. Everyone else either knowingly or through neglect gives the thief a leg up (Del Piano 1993, p. 18).

A shroud of secrecy permeates the art world, and as long as the art market continues to conduct business so secretively, thieves will use its opacity to their advantage. Despite the guidelines set forth by the ADAA, dealers are not required by law to hold any sort of license to conduct business, nor are they obligated by law to report transactions or disclose details of their clients. Million dollar deals regularly take place in a relatively clandestine manner versus other forms of commerce, and despite the large sums transacted, other than the customary attention to provenance (essential to the valuation of art objects) no titles of ownership transfer between parties other than a bill of sale.

The two main forms of sales transaction for works of art are private party sales and public auction. The former scenario tends to be closed, discreet, and, as three authors have described the culture in which these transactions take place, “negotiated arrangements” brokered between parties can be “as ephemeral as a conversation over cocktails.” (Bichler, Bush & Malm, 2014, p. 363). Public auction sales disclose more information to the public and the major auction houses are publicly traded companies with shareholders to keep informed. Yet secrecy still punctuates sales in the auction world. Interested parties bid on art as an anonymous buyer, an identified buyer, or on behalf of a buyer, and sales guarantees, and bidders can remain anonymous (Bichler, Bush & Malm, 2014; James, 2000). Loopholes define the business, as Charney et al. (2012) maintain with the frank question of “what other multimillion dollar market so rarely leaves a paper trail of transactions, regularly hides commodities to avoid luxury tax, and relies so heavily on the unscientific assurance of connoisseurs to determine authenticity and value, with fortunes in the balance?” (<http://www.fbi.gov/stats-services/publications/law-enforcement-bulletin/march-2012/protecting-cultural-heritage-from-art-theft>, electronically retrieved July 19, 2014; 2012; Webb, 2008).

In addition, as stated earlier, crimes of art theft are more likely to go unreported by museums and art galleries. Burnham (1978) revealed in her study of American museums and commercial art dealers/art galleries that inventories of works were conducted with surprising infrequency. Given the large number of objects in most large public museum collections, thefts from storage facilities, especially those located off-site from the main museum campuses, can go undiscovered for long periods of time. Limited museum and gallery staffs overloaded with responsibility or out-of-date negligible

insurance values of stolen objects also contribute to the tendency to only report significant crimes. Even when these objects are discovered missing, their loss through theft may be difficult to pinpoint. Fear of future victimization was a reason cited by 34 of the museums Burnham surveyed, and 7 museums explained their losses were not covered by insurance and thus were unreported. In these instances, the museum simply absorbed the cost of the loss. Burnham's interviews with commercial art dealers confirmed that the practice of "absorbing" minor theft losses remains firmly entrenched in the art market for the purpose of avoiding appearing publicly as unprotected victims remains firmly entrenched in the art market. Commercial dealers necessarily worry about the alienation of their patrons in the wake of such disclosure and their insurance premiums can increase dramatically. Additionally, if a collector consigns a work to a private gallery for sale, a theft would raise the fear of the loss of the collector's property and thus impact future business opportunities.

Ho (1992) surveyed 45 art dealers in New York City, and the respondents from this study admitted they did not officially report victimization in more than 30% of the events in which thefts occurred (p. 63). 60% of the respondent victims claimed not to recall why thefts went unreported, and 28.6% remained assured that any items stolen held valuation below insurance deductibles. Respondents supplied a number of other reasons given for not reporting art crimes. The most common of these was the assumption that any investigation would likely be very low-priority to the New York City Police Department, which would not expediently solve cases, if at all. Another concern commonly presented were worries that any official report of a theft of objects valued less than insurance deductibles could convince insurance brokers to increase fees, raise

premiums, or even cancel existing coverage. An insurance problem may place undue financial pressure on small outfits already maintaining a delicate balance of costs associated with maintaining prestigious inventory versus sustaining steady cash flow from sales to regular clients. Comparably, the threat of bad publicity makes commercial galleries makes fearful of losing consignments they rely upon to stay in business. Staffing issues were a third issue for galleries that did not report thefts, several of whom stated anxieties over the psychological trauma of confronting an employee believed guilty of the crime, not to mention the costs that could emerge in any litigation related to the human resource liabilities that would stem from art crimes committed by internal employees (p. 63-66). Both public art museums and commercial art galleries prefer to limit information regarding the overall monetary value of their collections, especially if higher-valued unaffected objects remain in affected collections. Larger institutions like museums are sensitive about exposing any vulnerability in their security practices, which might also have a negative impact on grant-based funding, large gifts, or the institution's perceived authority in the arts community as leaders in conservation, preservation, and art-historical knowledge production. Lending institutions might thus think twice about facilitating loans of works of any value from the lending museum's permanent collection. Curatorial departments focused in ancient antiquities in particular do not wish to attract any unnecessary scrutiny from the foreign nations where objects in the permanent collection may have been originally obtained. Culpable dealers who have knowingly traded in contraband artifacts understandably would not want such scrutiny focused at their organizations (Conklin, 1994; Durney, 2013).

In their 1995 study of museum security in the Netherlands, Wilemse and Etman observed that less than 20% of respondents reported instances of victimization. Although the researchers who conducted these studies found that despite vocalized promises to notify and engage authorities of such a crime, Ho found that, “in practice this is certainly not the case” (p. 56). The researchers further learned that when the theft was from the institution’s storage spaces, only 3% of the incidences were reported to the police. The researchers surmised that this could be attributed to the fact that employees were involved and the institutions preferred to handle the incidents internally. Another factor that contributed to the tendency not to report art crimes is the concern that “philistine” law enforcement officers would inherently lack the knowledge necessary to fully appreciate, understand, and recognize the importance of any specific stolen object(s), and, hence be highly unlikely to successfully solve the case.

Despite the fact that stolen works of art have aspects important to the nations and societies of their origin beyond just their monetary value, historically-speaking, law enforcement has not always regarded the recovery of art as a top priority. According to Johnathan Webb (2008), “police officers in general have little patience with the secrecy and what some see as the pretentiousness of the art world” (p. 26). Former Scotland Yard Art and Antiquities unit detective chief investigator, Charley Hill, adds that “many police officers find it hard to take art theft seriously. Why one piece of paint-daubed canvas is worth millions while another is more or less worthless strikes many of them (and many laypeople for that matter) as a mystery hardly worth thinking about. Police departments in large cities in particular usually prioritize allocation of resources toward solving crimes of terrorism, drug trafficking, gang violence, and organized crime, not to mention

everyday occurrences such as armed robbery, sexual assault, and homicide. In this context, the disappearance of a painting, sculpture or old desk can seem trifling” (Webb, 2008, p. 26). This *blasé* attitude of police officers, whether real or imagined, has contributed to the art theft phenomenon. Victims of theft can be reluctant to report crimes because they are wary that police will not take them seriously. Art thieves themselves know that their crimes will not attract the same investigative scrutiny as the other violent crimes listed other crimes.

Art as a Desirable and Accessible Target for Thieves

Artwork itself possesses qualitative properties that make it a perfect target for thieves, which also contributes to the difficulty of solving art theft cases. One is the nature of art itself. Most art objects can be easily concealed, stored, and can be quite portable. Stolen paintings can be cut from their frames and rolled up into a suitcase with a false bottom and small sculptures or vases can be broken into pieces and then re-assembled at a later date. Stolen works of art rarely remain in the geographical area in which they were taken. More often than not, they are transported out of the country within a few days of the theft. Moving works of art, even if stolen, can be quite easily transferred across sovereign borders. It is easy to move art across state and international borders because it can be disguised as something else such as covering an antiquity with another material, so it will resemble a modern reproduction. Usually, customs officials are not educated about cultural heritage objects and/or trained in recognizing stolen artworks (Fidler, 2003; Bernick, 1998). Because many police agencies will not work with other agencies outside their jurisdictions it is difficult to remain on the trail of the stolen

goods and the laws vary between cities, states and countries. Secondly, stolen art may not reappear on the market for many years; art thieves may be waiting for the statute of limitations to run out. Third, stolen art rarely remains with its original thief, passed as soon as possible to either another thief or an art dealer, who then sells it to either to a legitimate or to an illegitimate customer. Because art is one of a kind there is no way to track a chain of title by a serial number or license plate. Consequently, if the art is discovered, more than likely it will not be in the hands of the original perpetrator of the crime (Webb, 2008).

Lastly, the public value of a work of art remains the chief incentive to thieves. First, the art dealers and artists can set the price of work and then this price can be changed at any point. The prices of art are reflective of how much buyers are willing to pay and are not based on any other factors. The prices fluctuate without any other seemingly logical explanation. Moreover, thieves are attracted to art because its value generally appreciates over time so it is difficult to estimate how much a stolen item is actually worth. Due to the high prices that artwork commands, thieves foolishly assume they will be able to easily sell it. (Webb, 2008;

<http://www.usnews.com/news/articles/2009/05/29/crime-and-picasso-the-shadowy-underworld-of-art>, electronically retrieved 7/19/14; James, 2000, p. 4).

Ulrich Boser (2010), former director of security at the Isabella Stewart Gardner Museum reports that stolen art is very difficult to unload, and typically sells for approximately 10% of its true value. He also adds that once art is stolen the thieves can be left with the responsibility of having to care for delicate works that need special care, such as making sure that artworks are not exposed to damaging atmospheric conditions

such as excessive heat or humidity. Occasionally, in the interest of distancing themselves from contraband art objects, some thieves can unload their loot to an unsuspecting customer. That mentioned, art thieves may just as likely not recognize well-known objects easily recognized on the black and legitimate art markets.

In December of 2007, art thieves broke into the Museum of Art in São Paulo, Brazil, forcing open the museum's doors with a crowbar and a car jack, and stealing Picasso's *Portrait of Suzanne Boch*, and a painting by the Brazilian artist Candido Portinari. Authorities found the pieces later leaning against a house on the outskirts of the city, which suggests that the thieves did not know what to do with the art once they acquired it (http://www.nytimes.com/2008/06/14/arts/14arts-ANOTHERARTTH_BRF.html?_r=0, electronically retrieved September 20, 2014; Naylor, 2008; Ramsey, 2004). Some art looks "expensive" and thus can attract thieves eager for large financial rewards. Some cast bronze sculptures attract thieves interested in moving a stolen work of art quickly. The price of copper, for instance, has increased in the past six years, causing sculptures derived from that mineral to become a relatively hot commodity. The city of Brea, California, for instance lost its fourth large bronze sculpture, the 250-pound, *The Spirit of Life* (artist unknown), to theft in May of 2008 after already losing the previous three through similar crimes. The *Wall Street Journal* claims that artists worldwide have gradually abandoned the use of bronze in cast sculpture, because of the copper found in bronze, which elevates the risk of theft for cast bronze objects (<http://online.wsj.com/rcticles/SB120959221333557457>, electronically retrieved July 19, 2014). Other examples of sculptures stolen and melted for scrap metal are Barbara Hepworth's *Two Form (Divided Circle)* (1969), stolen from Dulwich Park, London

England in 2011 and Henry Moore's *Reclining Figure* (1929), stolen from the estate of the Henry Moore Foundation in Much Hadham, Hertfordshire, in December 2005 (<http://online.wsj.com/articles/SB12095922133355745>, electronically retrieved July 19, 2014).

Unlike banks, many smaller commercial art galleries and public art museums lack the security infrastructure needed to adequately deter theft, a weakness thieves often exploit. Such was the unfortunate circumstance of the E.G. Bürhrle Collection in Zurich Switzerland, when four masterpieces, Cezanne's *Boy in the Red Waistcoat* (1888), Monet's *Poppies near Vétheuil* (1879), Van Gogh's *Blossoming Chestnut Branches* (1890) and Degas' *Count Lepic and his Daughters* (1871) valued at \$163 million, were stolen during museum hours by a group of armed, masked men on February 10, 2008. (Harnischfeger & Kulish, 2008.; Conklin, 1994) (a more thorough discussion of security will be continued later in this chapter).

If stakes are often high for smaller, underfunded public institutions, or smaller commercial galleries, art crimes themselves often carry comparably lower risks for perpetrators. If art thieves do find themselves overtaken and apprehended by authorities, if prosecuted and convicted, penalties are nominal and prison sentences short, due especially to the lack of specified parameters for the punishment of art crime in the penal codes. According to Robert Whitman, a former undercover agent in the FBI's art crime division, "even when the most important perps do go to jail . . . it's only to be for a few years" (<http://www.newsweek.com/2013/05/15/some-crime-does-pay-art-heist-237342.html>, electronically retrieved July 19, 2014). Conklin (1994) agrees and reports that convicted felons who have committed crimes of larceny, burglary, or robbery of art

objects serve comparatively lighter sentences versus crimes involving other types of objects. Furthermore, in the U.S., some art crime cases are tried in civil rather than criminal courts. Conklin posits that if more severe penalties were threatened and carried out, it would reduce the frequency and occurrence of art crimes in the U.S. (p. 275). For example, when a bold thief was found guilty and convicted of stealing a historic bayonet, cap, and a patch from a veterans' museum in Parkersburg, West Virginia, August of 2014, the museum placed a sarcastic sign outside its building announcing, "Steal From Us, No Jail Time!"

(<http://www.newsandsentinel.com/page/content.detail/id/595214/Detroit-s-CFO-calls-financial-controls--very-poor-.html?nav=5073>, electronically retrieved May 23, 2016).

Hence, portability, high exchange or material value of stolen objects, the lack of transparency and industry regulation for commercial art transactions and the art market, justifiable reluctance by institutions to report art crimes, and the mutual distrust between law enforcement, the judicial system, and the art world that results from what is often excessively lenient prosecution, art objects remain attractive targets for theft worldwide.

The Perpetrators of Art Crime

Art thieves represent a diverse community of criminals. They are neither more or less likely than other criminals to be affluent, poor, or individuals operators of criminal organizations. They come from and operate in virtually every nation throughout the globe. Because of the wide variety of personalities and incentives that drive art thieves in their criminal activities, authorities have historically been unable to generate reliable

personality profiles for art thieves, the way these agencies do for terrorists, serial killers, sex offenders, and other kinds of high risk criminals. As a result, these criminals are even harder to track and apprehend. The shrewdly unethical oligarch with an ever-growing collection of contraband works of art who patronizes various skilled art thieves is largely a myth, and most crimes are not committed to bolster the ego of some criminal mastermind. According to Detective Hrycyk of the Los Angeles Police Department's (LAPD) Art Theft Detail:

Very little art theft is commissioned . . . there is no 'Dr. No' community of art collectors. Why would you put your future in the hands of a thief who'll turn you over in a second? The Cooperstown of art thieves is peopled by students, Hungarian auto mechanics, ophthalmologists, university administrators, and septuagenarians who will goldbrick anyone in nearly any way for nearly any reason: jealousy, collateral, artistic aspiration, wagers, and charity. The one uniting trait? They are consummate opportunists." (Ramsey, 2004, p. unknown).

Former Special Agent Wittman adds that the one element that art thieves share is "brute greed" (Wittman and Shiffman, 2010, p. 15).

Typologies of Art Thieves

Several different typologies or profiles for art thieves have been proposed for various criminal databases. Bonnie Burnham (1978) devised such a theoretical approach after analyzing the data derived from her study of U.S. museums and art dealers and proposed that the ideal target location is most often a large metropolitan area, and the criminal profile is a petty thief stealing for quick sale, or because of some impulsive desire for an object. A small piece currently on display, possibly a sculpture, is the likely choice, and the theft takes place during exhibition hours.

Barelli (1984) conducted face to face interviews with two art thieves in London, UK, as part of his doctoral dissertation on art and antique theft in England. He concludes that there are two types of art thieves: the professional and the amateur. The professional art thief is:

intelligent, possibly well educated, [and] has learned to use the art and antiques market for the purpose of making money illegitimately . . . [he] fits in with legitimate society, and the legitimate art and antique markets. He is articulate, well spoken, and is confident in his approach and presentation. He will research specific objects to meet his needs of disposing the object (s) into the art and antique markets to make money, and avoid detection (p. 212).

The amateur thief is the other typology proposed by Barelli. Art theft is not the exclusive focus of the amateur, and, lacking any extensive criminal network, the amateur thief likely lacks the connections, resources, and expertise necessary to dispose of stolen loot discreetly, making this sort of thief easier for authorities to catch. Barelli suggests the amateur art thief is more impulsive, tending not to conduct extensive research on specific objects or the facilities in which they are kept by museums or commercial galleries. Like employees who steal from their places of work, juvenile criminals, or misdemeanor shoplifters, amateur art thieves take greater risks and act more impulsively (Barelli, 1984, p. 212).

In Ho's (1992) personal interviews with New York art dealers (1994), she learned that 38.2% of the respondents believed specialized professional art thieves steal work the most often, as opposed to the jack-of-all-trades professional (the most frequent offender according to 10.9% of respondents), the common thief (25.5% of respondents), or art-obsessed individuals (24.4% of respondents) (p. 75). The majority of Ho's (1992) respondents believed the main motivation for stealing art was money (67.9%), followed

by art enthusiasts with easy access (11.3%), low risk of arrest (7.5%), and minimal penalties if caught (1.9%) (p. 76). The data on the prevalence, frequency, and characteristics of art theft in Australia, collected by Aarons (2001), found that most curators and dealers believed that the art thieves stole what they could not afford from galleries, or to acquire specific prestigious pieces. Aarons' respondents expressed the belief that opportunism rather than art obsession motivated art theft, however.

MacKenzie (2005) also proposes two different leading types for art thieves aligned along similar but different guidelines: the art-motivated instead of the amateur, and the profit-driven instead of the professional. The art-motivated thief is compelled by an obsessive need to personally possess and control a work of art. The art-motivated thief wants to keep a stolen work for him- or herself and hides his or her loot in a private setting, where the thief can enjoy the pieces or pieces whenever he or she pleases. The art-motivated thief, according to MacKenzie, likely lacks a criminal history and is not systematic (p. 353). This is not to say the art-motivated thief will not engage in an excessive crime spree, such as that of Dr. Frank Waxman, a Philadelphia osteopath, who stole 170 works of art from “dealers desks, gallery stockrooms, and delivery trucks after signing into the galleries with fictitious and often pretentious names,” all over in the United States for eight years. When the police finally caught up to Waxman in 1982, they found him and all 170 artworks, valued at more than \$1 million, in his Philadelphia apartment (Conklin, 1994, p. 132). Similarly, Stefan Breitwiser, a 31-year-old French waiter, managed to steal 239 pieces from various European museums, galleries and antique fairs from 1995 until 2001. When he reflected on the first painting he ever stole, a portrait by the eighteenth-century German painter, Christian Wilhelm Dietrich (1712-

1744), Breitwiser explained how he was captivated by “the beauty, the qualities of the woman, by her eyes,” which he said reminded him of his grandmother (<http://www.nytimes.com/2006/12/17/magazine/17art.t.html?pagewanted=print>, electronically retrieved July 19, 2014). Breitwiser was uninterested in financial gain from the pieces he stole and kept them in his bedroom in the home where he lived with his mother, to enjoy as he pleased. Once apprehended, Breitwiser’s mother burned many of the works to destroy evidence during the investigation.

According to MacKenzie (2005), profit-motivated thieves are professionals and more likely to conduct their criminal endeavors as a group. Profit-motivated art thieves tend to be less inclined to ensure a stolen artwork remains undamaged and heists are more likely to involve violent confrontations. These thieves do what is necessary to capture their loot and complete the transfer of holding in order to earn the highest price, usually as quickly as possible. Nicita & Rizzolli (2009) concluded in their case study of Edvard Munch’s *The Scream* (1893), which has been stolen multiple times by different thieves, that an art thief’s best strategy for successfully turning over stolen loot quickly and profitably is to focus on capturing less famous, second-tier masterpieces since famous masterpieces draw too much scrutiny and risk of discovery (p. 297). This type of thief, a version of Barelli’s professional, or Mackenzie’s profit-driven art thief has also been described as a “smart thief” by Lynn Pearson, a former director at the Art Theft Archive, a division of the International Foundation for Art Research. Pearson describes this common profile of an art thief as someone who pursues more accessible, lesser-known works in smaller collections or gallery inventories, which he or she can quickly transfer to a fence (often an unscrupulous art dealer) at around 10% of the original value.

The dealer can then sell it to an ethically flexible collector for just under market value, or sell it to another dealer so that, after circulating through the market a number of times, the integrity of its provenance is restored enough to appear legitimate. The individuals who run these types of thief-fence scenarios are astute and intelligent professionals who know how to conduct their illicit business in such a way that it attracts minimal scrutiny from investigating authorities and are rarely caught (Pearson, 1986, p. 3).

The criminal profiles discussed above share many similarities, but a lack of a definitive psychological profile for the typical art thief personality inhibits efficient apprehension and prosecution of art crimes. A valuable future research direction in the study of art crimes would be to qualitatively examine the personalities and behaviors of art thieves, to arrive at a more comprehensive profile that could be applied to investigations across the world.

Art Theft Strategies

Art thieves implement different strategies for works stolen from public art museums and private galleries.

Employee theft strategy

Inside jobs are the most common and account for 80% of all museum thefts, according to Special Agent Goldman (<http://search.proquest.com.echo.louisville.edu/pqrl/printviewfile?accountid=14665>, electronically retrieved January 22, 2013). An employee, a volunteer, a visiting scholar, or contractor, and an insider often has special access to collections, and knows the

institution's security protocols for protecting its collection. Eligible for a cut of the profits from the theft of an object or objects from the public collection to which he or she has unprecedented access, the insider either helps professional thieves steal artworks, or absconds with the works themselves (Spadanuta, 2011). Collateral damage to the institution that is victim to inside jobs ranges from public and internal embarrassment along with feelings of being violated and betrayed from a trusted steward of their collection. Lynne Richardson, former manager of the FBI's Art Theft Program, cites that insider-connected thieves usually steal smaller, less noticeable objects (Falkenstein, 2005, p. 136). Such was the case of an art handler, Nick Pace, who worked for the Art Institute of Chicago, who stole three Cézanne paintings valued at a total of \$75 million in 1978. The thief gained access to a closet in one of the museum's storage vaults, and then held them for ransom. The perpetrator claimed to be an intermediary in a Mafia-financed art theft operation. He was arrested and served 10 years in prison (Falkenstein, 2005, p. 136). Approximately 20 years later, Earnest Medford, a longtime custodian at the Historical Society of Pennsylvania in Philadelphia, described by co-workers as "congenial and well-liked," was arrested, tried, and convicted of theft of more than 200 "culturally significant historic artifacts," and sentenced to four years in federal prison (http://articles.philly.com/1999-05-25/living/25515262_1_museum-thefts-earnest-medford-museum-director, electronically retrieved July 31, 2014).

Individual artists can also find themselves victims of art theft by cataloguers and other employees who work with their estate collections. In 2014, James Meyer, Jasper Johns' former assistant, pled guilty to the interstate transportation of stolen unfinished works by Johns. Stealing 22 works that he sold for roughly \$6.5 million total (turning a hefty \$4

million profit for himself) between 2006 and 2012. Meyer pled guilty to the charges and he was recently sentenced to 18 months in prison on April 23, 2015

(http://artsbeat.blogs.nytimes.com/2015/04/23/during-sentencing-jasper-johnss-assistant-says-he-regrets-betrayal/?_r=0, electronically retrieved May 1, 2015).

Art Print Theft as a Strategy

Certain types of institutions and collections are particularly vulnerable to theft. Works on paper, and prints especially, are often stolen, and losses can go unnoticed for long periods of time given the multiple series and states in which art prints are published. Ho (1994) found that 3 New York print dealers reported employee thefts having been an issue because the sheer volume and turnover of print inventories make it difficult to keep track of objects (p. 133).

Art Theft Motivations

The personalities and strategies of art thieves explored, there are likewise myriad reasons that motivate art theft beyond simply financial reward or obsessive fascination. The reasons behind art heists throughout history present as many unexpected and even irrational motivations behind these crimes. Ranging from the band of thieves hoping to pilfer a trophy to a disgruntled security guard seeking revenge, to over-zealous curators convinced they can care for priceless works of art better than their seemingly disinterested institutions, art thieves are driven by as many emotional justifications as predictable financial gain. Conklin (1994) identifies eight common psychological motivations behind art theft: (1) for personal possession, (2) paid commission by

collectors, (3) for sale for dishonest dealers, (4) for consignment to auction houses, (5) on speculation, (6) for investment, (7) for ransom, and, (8) for political purposes” (p. 130).

The Personal-Possession Art Theft Motivation

Motivation for personal possession essentially fits the same profile as MacKenzie’s art-motivated thief, described above. Someone driven by such an obsession was the French alarm technician, Partrick Vialaneix, whose fascination with Rembrandt van Rijn’s, undated *Child with a Soap Bubble* started when he was 13 and first saw it at La Musée Municipal d’Art et Histoire in Draguignan, France. In 1999, Vialeneix, then 28, stole the painting by mastering the museum’s security system, hiding in the museum after hours on Bastille Day, and carefully removing the painting from its plastic case. Vialeneix hid the painting in his bedroom closet for 15 years, until his overwhelming guilt compelled him to turn himself in and return the lost painting to the museum (<http://www.artnews.com/2014/05/28/french-rembrandt-thief-lives-real-life-version-of-goldfinch-story/>, electronically retrieved May 29, 2014).

The Contractual-Obligation Art Theft Motivation

When a thief steals an artwork on commission for a collector, the expectation is that a successful robber will sell his prize to a prearranged collector for a high sum (Conklin, 1994). Such art-crime scenarios are sometime referred to as “made-to-order thefts.” An example of such a professionally-driven, “made-to-order” theft was on December 31, 1999, when a thief broke through a skylight at Oxford University’s Ashmolean Museum, shimmied down a rope, tossed a smoke canister into the gallery

space to obscure the view of the crime being committed by active security cameras, and stole Paul Cézanne's *Auvers-sur-Oise*, valued at \$5 million. The picture was just one in a room full of extremely valuable canvases by the Post-Impressionist, so investigating authorities posited that job was intended to obtain a specific object for a specific buyer. (Lyll, 2000),

(http://www.oxfordmail.co.uk/news/10927154.Cezanne_back_in_the_frame_at_Ashmolean/, electronically retrieved September 20, 2014). Frequently, such crimes prove to be tied to relationships between certain professional thieves and dishonest dealers. Such an unscrupulous dealer knowingly buys stolen art, and may, in some cases, also be the mastermind behind such thefts as of Ashmolean's Cézanne. Boston art dealer Michael Fildes was one such dealer. Convicted in 1984 of conspiracy, and transporting and receiving stolen property across state lines, Fildes worked with a specific art thief to acquire works that met a set of pre-agreed requirements. When the thief eventually testified against Fildes in criminal court, it emerged that Fildes had given the thief clear specifications as to what type of work he wanted in terms of imagery, size and artists. As punishment, the judge sentenced Fildes to serve five years on probation, pay a fine of \$300,000, and complete 1,000 hours of public service by giving lectures on art to disadvantaged urban youth in the Boston region (Conklin, 1994, p. 137).

When thieves steal artworks for consignment to auction houses, the approach and outcome are similar, but the successful thief consigns the work(s) stolen to a third party, in this case an auction house, to sell it for them. The thief discreetly steals a work or works of art, and consigns it to an art auction house, such as Swann Gallery or Skinner, whom he or she urges to include the object as a lot in one of the elegant auction

catalogues such businesses produce ahead of highly anticipated sales. If the object sells the thief will receive a commission, as was the case of a thief who took antique dolls from houses she rented, and consigned them to the major art auctioneer, Christie's. Guiltily, the thief eventually confessed to the crime and returned some of the proceeds from the auction sale to the dolls' owners (Conklin, 1994, p. 141).

The Speculative and Investment Art Theft Motivation

Thieves that work on speculation steal artworks without having pre-arranged with a buyer to off-load the object was obtained. In some instances, thieves will steal an unplanned object along with the others planned, even if they have no idea what they have stolen, how to sell it, or how to pass it off to a fence. For example, drug addicts shoplifted solid bronze sculptures from New York galleries and sold them for the scrap value of the bronze. In one instance of a speculation-motivated theft, a group of thieves travelled from city to city, dressed in workmen's clothes, and stole pieces from public art museums' vitrine cases during daylight hours, and then shipped each object to a central location via Federal Express. Because the group had no fence arranged in advance, they identified potential buyers by looking in the windows of art galleries and antique shops until they spotted objects similar to those they had to sell. Incredibly, although they made it consistently clear to each dealer that they were selling stolen objects, they still managed to find buyers. Their streak of luck came to an end once one of the team asked the price of \$1 million for a vase valued at only \$35,000 to a dealer who turned out to be more honorable, and called the police, who eventually found and arrested those involved in this multi-state art-theft spree (Conklin, 1994, p.142-43). A variation on the speculative theft

is to steal random objects, only to then hide them for a number of years until either the theft is forgotten, and/or the value of the object increases dramatically. In the theft on investment thieves deliberately hold stolen works of art for the long-term until the statute of limitations for prosecution of the theft runs out. Another investment-motivated art theft scenario involves a thief using the stolen work as collateral for a loan. Again, once the statute of limitations expires, the lender can sell the work with the hope of both reimbursing the loan and making profit on top (Conklin, 1994, p. 143-44).

The Ransom Art Theft Motivation

Ransom theft for personal gain, also known referred to as “art-napping,” involves holding high-value objects to extort money from insurance companies or public art museums. Ransom theft is especially risky for the thief, and more often than not the victimized party cannot afford the ransom, or simply refuses to pay it. The considerable financial leverage many large insurers have at their disposal can also empower brokers to counter ransoms with offers of financial reward for the artwork’s return. Sometimes, handling a ransom theft through these means is preferable to paying what can be the more expensive option of paying out the victimized institution’s claim. Technically for a financial institution, this former approach, ethically dubious though it might be, is usually better for business and offsetting risk. Insurance companies that offer such rewards for the return of stolen objects are often criticized by the arts community for short-sightedness, because this approach in the long run can be seen to generate a considerable conflict of interest for insurers whose reward strategies might stimulate the incidence of art theft since it creates financial incentive to enterprising thieves, and thus raise art-

insurance premiums for the victimized institutions. Insurance providers can mitigate this ethical gray area by allowing a lengthy period of time between the theft and the collection of the reward, so that thieves unable to sell loot thus flagged by authorities have no choice but to return the work for compensation for the crime committed. Professional thieves tied to organized-crime networks have greater success in art-napping strategies because they must arrange for collection of the ransom without exposing themselves to arrest. This endeavor is usually only possible through leverage gained also from corruption and bribery in the agencies and authorities pursuing the arrest of the art-nappers.

An interesting example of art-napping occurred in 1975, when Milan's Galleria d'Arte Moderna paid the ransom for the return of 28 paintings stolen from their galleries. Three months later, thieves stole another 38 pictures from the same gallery, half of them the same pictures taken in the first theft (Conklin, 1994; Aarons, 2001; Naylor, 2008; Ramsey, 2004).

The Political Purpose Art Theft Motivation

Art-napping thefts can also be politically motivated, especially in countries rendered unstable from economic difficulties or war. Terrorists, revolutionaries, and others who steal for political reasons will demand ransoms to finance their political activities the same as they would from kidnapped individuals. Other demands might include the release of prisoners who are members of their political group in exchange for the return of the stolen art work. Some thieves can also steal art to raise money for political causes, such as the thief who stole Vermeer's *The Love Letter* (c. 1670) from the

Fine Arts Museum of Brussels in 1971, and then demanded a \$4.8 million ransom be paid to support Bengali refugees. In another episode of politically-motivated or activist ransom theft, a group of art thieves that styled themselves as the Australian Cultural Terrorists stole Pablo Picasso's *The Weeping Woman* (1937), valued at \$1.2 million, from Australia's National Gallery of Victoria in Melbourne in the late summer of 1986. The group threatened to destroy the picture unless the Australian government increased arts funding by 10% and established a \$15,000 annual prize for young artists. Ultimately, the Australian Cultural Terrorists' demands were rejected, the perpetrators apprehended, and the painting recovered. In a far more sinister scenario, Cambodian political factions successfully raised funds to support their military coup through ransom theft of treasured artifacts from the country's ancient Angkor Wat complex, and from various warehouse repositories. These works of art were smuggled into neighboring Thailand and sold secretly. Similar situations are common throughout destabilized regions of Central Asia, where, for example, the Afghanistan Northern Alliance sold three million pounds of looted Bactrian art to a Pakistani group in order to fund their war effort against marauding Taliban (Conklin, 1994; Aarons, 2001; Fidler, 2003). In a curious instance of an unsuccessful though well-intentioned ransom theft described by Ulrich (2009), a thief stole Marc Chagall's 1914 drawing, *A Study for Over Vitebsk*, on loan from a private Russian collection to the Jewish Museum in New York. Investigating authorities found a ransom note in the gallery that announced the stolen work would only be returned when Israel and Palestine made and maintained peace with one another. These demands not being met, the picture resurfaced in the art market the following year

(<http://www.usnews.com/news/articles/2009/05/29/crime-and-picasso-the-shadowy-underworld-of-art>, electronically retrieved 7/19/14).

Another political motive for art theft in Europe specifically has been to create leverage to negotiate early release from prison terms, or the proverbial “get-out-of-jail-free card.” In these instances, criminal organizations stockpile stolen works and tap into the loot for ransoms aimed at bribing officials for more lenient sentences or even early releases from incarceration for other members of the organization who have been arrested and imprisoned for various crimes. Wittman suggests during his interview that the thieves who steal artworks for bribery leverage are usually also stealing cars, trafficking drugs, engaged in arms dealing, and myriad other criminal enterprises, making them easier to prosecute if arrested (<https://sm.asisonline.org/Pages/No-Artistry-in-These-Crimes.aspx> , electronically retrieved 7/18/14). According to Boser (2010), Myles Connor, a notorious art thief, stole Rembrandt’s Portrait of a *Man In A Gold-Trimmed Cloak* (1632) in 1974 from the Museum of Fine Art, Boston, and later offered it in exchange for a lower sentence for a conviction on a different art crime (online.wsj.com/articles/SB10001424052748704026204575266293870407552, electronically retrieved 7/18/14). More recently in 2013, FBI agents offered to drop suspected Gardner art theft perpetrator, Robert Gentile’s charges of weapons possession and illegal sale of prescription drugs in exchange for information about the location of the stolen paintings (http://www.nytimes.com/2015/04/18/arts/design/arrest-by-fbi-is-tied-to-unsolved-boston-art-theft-lawyer-says.html?_r=0, electronically retrieved May 1, 2015).

Art Theft and Money Laundering

Stolen art can be linked to money laundering. Industries such as banking and real estate have tightened regulations. As a high-value, though not necessarily liquid asset, stolen artworks can be used as short- to long-term investment vehicles to sequester illicit profits from criminal activity. As discussed previously, the overall secrecy of the art market, with its lack of enforced accounting regulations, and the arbitrary nature of provenance as the definitive index for the authentication and valuation of works of art, creates incentives within the art market for unethical transactions. According to Purkey (2010) money launderers increasingly turn to the art market to replace off-shore safe haven and subsidiary strategies now under tighter regulations by government agencies worldwide (Purkey, 2010; Fidler, 2003; James, 2000). For example, a drug cartel member may need to quickly hide his cash profits and will buy stolen artwork(s), or, even better, works of art whose value has recently fallen in order to deflect suspicion from the authorities. The cartel member will then sell the art for the same original purchase price to a legitimate art dealer who will create documents that show a significant profit from the sale of the art which will account for the extra cash in the drug dealer's bank account. The piece of stolen art will now become legitimate as a commodity in the art market (Bernick, 1998, p. 105). Organized crime syndicates have, according to Conklin (1994), "consistently been identified as one of the black market's best customers" (p. 496). In some cases, stolen works of art can be used in lieu of large cash positions to transact sales of arms, drugs, human trafficking, and other lucrative illegal activities. (Durney & Proulx, 2011; Naylor, 2008; Conklin, 1994; Bernick, 1998; Dobovšek & Slak, 2013). In 1992, the *New York Times* reported that when Italian police raided the private bunker of a

boss in the Neapolitan Camorra, the equivalent to the Sicilian Mafia, they discovered a large cache of stolen art objects decorating its interior. Italian newspapers called it "the Camorra's Louvre". A year earlier, Italian investigators tracked down 27 additional artworks stolen from a museum in Bettona, in a secret facility in Kingston, Jamaica, where it served as exchange value for large drug shipments

(<http://www.nytimes.com/1992/08/02/arts/art-art-thieves-bleed-italy-s-heritage.html>, electronically retrieved September 21, 2014). Stolen art also adds the allure, ostentation, and prestige desired by higher-ranking leaders in organized crime syndicates. Put bluntly to a *Washington Post* reporter, a federal agent with the Drug Enforcement Administration (DEA) described the air of sophistication stolen works bring to the lairs of the criminals his agency investigates and tracks: "They go out to a business meeting, shoot somebody, come home and there's a Picasso on the wall-it tends to legitimize them"

(<http://search.proquest.com.echo.louisville.edu/docview/307397150/fulltext/32A6B422C7A648B0PQ/1?accountid=14665>; Webb, 2008; <http://www.usnews.com/news/articles/2009/05/29/crime-and-picasso-the-shadowy-underworld-of-art>). Some organized criminal organizations are particularly active in the black market for stolen works of art, including, according to Purkey (2010), East Asian gangsters, the IRA, and Latin-American drug cartels (p. 121). Ordinary individuals might use this market for similar reasons as well, in order to hide income and avoid taxes, much like off-shore banking. Conklin (1994) notes this practice is relatively common in Japan (p. 91).

Some Global Approaches to Fighting Art Crime

Given the variety of motivations, forms of art crimes, huge monetary losses at stake, and costs to global society's cultural heritage and artifacts, many countries have recognized the dire importance to develop solutions to fight art crime. One response has been the formation of specialized art crime units.

Art Crime Law Enforcement Units

Not all law enforcement agencies fail to take art crime seriously, and there are numerous specialized units whose primary objective is the recovery of stolen cultural property. Internationally, the largest such agency is Italy's Carabinieri Headquarters for the Protection of Cultural Heritage (Comando Carabinieri Tutela Patrimonio Culturale - TPC), established in 1969. Over three hundred officers help protect Italy's cultural property by preventing art crime internationally. In the United Kingdom, the Metropolitan Police's Scotland Yard Art and Antiquities Unit (SYAA Unit), formed the same year, disbanded, but then re-established in 1989. Their official mission is to disrupt "criminal networks engaged in theft and laundering of cultural property within London" (<http://content.met.police.uk/Site/artandantiques>, electronically retrieved September 3, 2014). When faced with significant budget cuts in 2007, the SYAA Unit created ArtBeat, a program that utilizes ten special constables, known as ArtBeat officers, which partners with the Metropolitan Police, and the arts industry, from which ArtBeat also recruits its constables. Arts organizations throughout the UK provide allowances for interested employees to train and work one day every two weeks on official duty with the

Metropolitan Police (<http://content.met.police.uk/News/Artbeat-specials-on-patrol/1260267473067/1257246745756>, electronically retrieved September 4, 2014).

Other specialized worldwide art crime teams include Spain's Heritage Team of the Central Operational Unit of the 'Guardia Civil', Poland's National Unit for Combating Crime against National Heritage-the Criminal Investigation Bureau, Peru's Police Division for Historical Heritage (División de Patrimonio Historico Policial), the Netherland's Art and Antiques Crime Unit, Lithuania's Section of Investigation of Cultural and Art Theft, Ireland's Arts and Antiques Unit, Hungary's Art and Treasure Unit, and Greece's Department Against Smuggling of Antiquities (<http://www.unesco.org/new/en/culture/themes/illicit-trafficking-of-cultural-property/partnerships/specialized-police-forces/>, electronically retrieved September 4, 2014).

In the United States there are two main art crime units: the Los Angeles Police Department's Art Theft Detail (est. 1984), and the FBI's Art Crime Team. The LAPD unit is the only municipal law enforcement detail in the country devoted solely to the investigation of all thefts and burglaries involving art, and their cases also include fakes, frauds, and forgeries. Two detectives are assigned to this specialized unit and these investigators "target suspects who prey upon" artists, galleries, art dealers, auction houses, and museums, and provide information on unrecovered stolen art to these organizations, in addition to art associations, publications, and other law enforcement agencies – both nationally and internationally. Since 1993, the LAPD's Art Theft Detail has recovered \$122, 999, 616 worth of stolen cultural property

([http://www.lapdonline.org/about the art theft detail](http://www.lapdonline.org/about_the_art_theft_detail), electronically retrieved March 15, 2018).

The FBI's Art Crime Team was created in 2004 in response to the extensive looting and vandalism of the Iraqi National Museum Baghdad in 2003 during the U.S. invasion, and the subsequent political pressure and public outrage (Webb, 2008; Parmar, 2005). Today, the department consists of 16 special agents, each assigned in a separate geographic region of the United States. The Art Crime Team is coordinated through the FBI's Art Theft Program, managed by Bonnie Magness-Gardiner, PhD. According to Magness-Gardiner, Art Crime Team agents receive yearly specialized training in art and cultural property investigations and assist foreign law enforcement officials and FBI legal attaché offices in art related investigations worldwide. Agents are educated in technical art fields, such as conservation, art handling, as well through lectures and collection visits with auctioneers, art dealers and other experts. Magness-Gardiner emphasizes that "this kind of material requires special expertise. It has special qualities. For example, there are no serial numbers on pieces of art, so they have to be categorized in other ways." Agents need to understand which qualities distinguish one work of art from another, and they need to know who they can call on for advice. (Webb, 2008, p. 29). Three specialized prosecutors are also assigned to the Art Crime Team, in the event of an arrest (http://www.fbi.gov/about-us/investigate/vc_majorthefts/arttheft/art-crime-team, electronically retrieved August 31, 2014).

Recovery rates are comparatively impressive for the FBI's Art Crime Team, and as of 2018, the unit has recovered over 14, 850 items worth \$16 million. The team not only recovers stolen artwork, they manage a stolen art database, the National Stolen Art

File (NSAF), which is “a computerized index of stolen art and cultural property as reported to the FBI by law enforcement agencies throughout the United States and the world.” The NSAF consists of images and physical descriptions of stolen and recovered objects, in addition to investigative case information. The primary goal of the NSAF is to serve as a tool to assist investigators in art and cultural artifact theft cases, as well as function as an analytical database providing law enforcement officials with information concerning art theft. The public can search an online version of the National Stolen Art File, minus the investigative information” (http://www.fbi.gov/about-us/investigate/vc_majorthefts/arttheft/national-stolen-art-file, electronically retrieved April 1, 2018).

Criteria for inclusion in the database are that the stolen object needs to be uniquely identifiable, have historical or artistic significance, and be valued at \$2,000 or over. All the investigation requests must come through a law enforcement agency accompanied by a physical description of the object, a photograph of the object if available, and a copy of any police reports or other information relevant to the investigation” (http://www.fbi.gov/about-us/investigate/vc_majorthefts/arttheft/national-stolen-art-file, electronically retrieved on September 13, 2014). Started in 1979, the database sources information from local and state law enforcement agencies, insurance companies, public art museums, commercial galleries, and private collectors. The FBI, for the most part, does not investigate reports of theft from this database. However, they do investigate the reports that have been entered that meet the criteria for FBI jurisdiction by violating the Interstate Transportation of Stolen Property Act and the Theft of Major Artwork Act. The FBI also enters the cases that meet the above criteria if they are the

agency that initiated the investigation (B. Magness-Gardiner, personal communication, August 22, 2014).

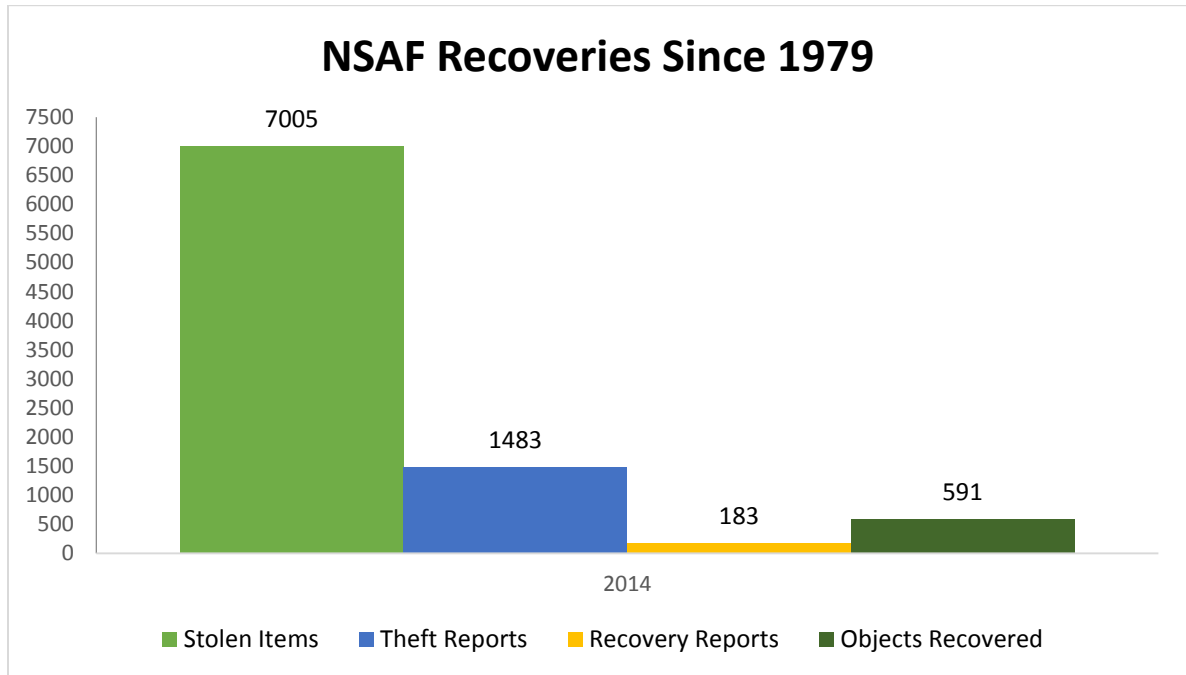


Figure [3.3]: Source: *National Stolen Art File*, Federal Bureau of Investigation (B. Magness-Gardiner, personal communication, August 22, 2014).

As of 2014, the NSAF had 1,483 theft reports with 7,005 stolen objects, and 183 recovery reports with 591 objects secured. Dr. Magness-Gardiner reports that the recovery rate is approximately 6 percent, and the NSAF becomes aware of recovered objects only if the affected person or institution who filed the report notifies the agency, or if the NSAF locates objects through its own investigations. It should be noted that the art crime team and the NSAF recoveries are not always related since the FBI does not investigate all of the stolen objects on the NSAF (B. Magness-Gardiner, personal communication, August 22, 2014).

Other Databases of Stolen Art

In addition to the NSAF, several other law-enforcement databases track stolen cultural property. Interpol, the largest international police organization, does not investigate art thefts, but the agency will act as a clearinghouse for information on stolen art. Interpol art theft posters are published twice a year, and show a sampling of Interpol's reported missing works of art wanted for recovery. Interpol also coordinates information between international agencies and organizations including law enforcement, customs and the art industry, with whom they organize "joint training sessions, conferences and workshops to share knowledge and best practices." Interpol coordinates and integrates the stolen-art data . . . compiled by [its] partner agencies, particularly UNESCO, directly into [its] stolen art database, and disseminate other partner information to member countries, for example lists of cultural experts or of "at risk" objects" (<http://www.interpol.int/Crime-areas/Works-of-art/Works-of-art>, electronically retrieved September 1, 2014).

Interpol's first published notices of stolen art appeared in 1947, following World War II. Today their tracking system is an online database accessible not only to law enforcement agencies but also to specific members of the public who have been provided with special access rights. However, certain information can be garnered by the general public: "the most recent stolen works of art reported to Interpol, recovered works of art, works of art that have been recovered but remain unclaimed by their owners, stolen Afghan items, and stolen Iraqi items." By the end of 2011, the database contained around 40,000 records submitted by 125 countries, with more than 36,500 searches carried out that year. Approximately 2,000 stolen items have been recovered since the database was created" (<http://www.interpol.int/Crime-areas/Works-of-art/Works-of-art>, electronically

retrieved September 1, 2014; Webb (2008); Bazley (2010). The LAPD Art Theft Detail also has their stolen art included in their own online database, as does the Metropolitan Police's London Stolen Art Database (LSAD), which currently contains 57,000 stolen objects. The Italian Carabinieri also maintain a stolen art database, *Leonardo*, which contains 2.6 million objects of missing art. (Amineddoleh, 2014).

There are also useful private databases organizing information on art crimes without ties to law enforcement. The Art Loss Register (ALR) is a London based organization that provides object registration, search and recovery services to collectors, the art trade, insurers and worldwide law enforcement agencies. The ALR is perhaps largest private database of stolen art, antiquities and collectibles. According to *The New York Times*, leads generated by the ALR assisted in the recovery of more than \$250 million worth of art by 2011 (http://www.nytimes.com/2013/09/21/arts/design/tracking-stolen-art-for-profit-and-blurring-a-few-lines.html?pagewanted=all&_r=0, electronically retrieved September 1, 2014). The ALR not only registers stolen art objects but also objects destroyed by fire or other means. Therefore, if a forged replica of the object appears on the market it will be detected as a fake (Webb, 2008). The Association of Art Museum Directors likewise maintains the Object Registry database, which features search engines focused on "New Acquisitions of Archeological Material and Works of Ancient Art," and "Resolutions of Claims for Nazi-Era Cultural Assets" (<https://aamd.org/object-registry/new-acquisitions-of-archaeological-material-and-works-of-ancient-art/browse>, electronically retrieved September 1, 2014).

In conclusion, obviously more solutions to combat art crime must be developed. However, agencies are hampered by limited budgets and crimes that take higher

precedence from the viewpoint of department administrators. Thankfully, protecting the world's cultural treasures continues to be an ongoing mission for representatives within disciplines as diverse as museology, criminology, and political science.

PART TWO – ART VANDALISM

Art Vandalism in Art Museums and Art Galleries

On August 20, 2014, a Canadian performance artist named Istvan Kantor walked into the Whitney Museum of Art with a black bag, wearing dark sunglasses. As he wandered through a highly anticipated Jeff Koons retrospective exhibition, he stopped in the third-floor gallery where Koons' stainless-steel sculpture, *Rabbit* (1986), was on display. The vandal splattered red paint on a blank gallery wall in the shape of a large X and signed "Monty Carlton was here Aug. 20/2014" in black ink. A nearby visitor taking a selfie of her reflection in the iconic bunny alerted guards to the vandal's presence and behavior, and Kantor was apprehended, removed from the museum, and taken to a hospital for a psychiatric evaluation. Meanwhile the museum evacuated the third floor for a few hours until the wall was repainted, and Kantor was released from the hospital a short time later.

The events that took place at the Whitney in August 2014 were not Kantor's first defacement of artwork. In 2005, he attempted to vandalize another Koons sculpture on display in Berlin, Germany, and in 2004 he tried to squeeze a capsule of blood onto Koons' *Michael Jackson and Bubbles* sculpture in the Hamburger Bahnhof Museum, also in Berlin. Although other visitors in the gallery stopped him, and he only managed to spray blood onto an empty wall, Kantor told the *Japan Times* in 2005 that his "blood

campaign” was an ongoing art project: “I have always been breaking the rules of art . . . my art was always anti-establishment and anti-institutional . . . I consider my criminal activities the most creative part of my work” (<http://nypost.com/2014/08/21/critic-spatters-paint-on-wall-at-whitney-museums-jeff-koons-exhibit/>, electronically retrieved August 23, 2014).

Unlike crimes of art theft, less is known about acts of art vandalism, the incidences of which are usually collected under the broad category of vandalism, criminal mischief, or library offenses (Bazley 2010; Williams, 2008). The UCR definition of vandalism is “To willfully or maliciously destroy, injure, disfigure, or deface any public or private property, real or personal, without the consent of the owner or person having custody or control by cutting, tearing, breaking, marking, painting, drawing, covering with filth, or any other such means as may be specified by local law. Attempts are included” (<https://ucr.fbi.gov/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/offense-definitions>, electronically retrieved on May 30, 2018).

There are also no specialized police units devoted to investigating incidents of art vandalism. However, the impact of art vandalism may be graver than the effects of art theft both financially and the impact upon the damage of priceless artifacts of cultural heritage. Additionally, without specific “art vandalism” statutes the true severity of the crime will not be acknowledged and “the tangible and intangible value lost when an artwork is damaged or destroyed” will not be sufficiently punished (Williams, 2008, p. 610). This lack of legal accountability could potentially encourage the commission of art vandalism.

The definition of what constitutes art vandalism has changed over time. Up until the 19th century, the term ‘vandalism’ specifically referred to the destruction of art objects with religious or political meaning, until its use began to refer to general property destruction (Cohen, 1973; Conklin, 1994). In his 1994 book, *Art Crime*, John Conklin defines art vandalism as “the intentional or negligent destruction of a work of art” (p. 227). Excluded from this definition is destruction by the artist who created or still owns a work of art (p. 23), broadening Fine & Shatin’s (1985) definition of art vandalism as an intentionally destructive illegal act towards works of art.

Although the victims of art vandalism are typically whomever owns the work defaced, gallery vandals do not normally single out and target institutions, rather a work’s creator(s), or “the public value [of a piece], what the museum and artwork represent, embody, and create” (Williams, 2008, p. 604). The destruction of art can result in significant financial losses to owners or to the insurance companies that cover damages to the object in question. Depending on the nature of the particular act of vandalism, bystanders’ safety might also be threatened (Williams, 2008).

Similar to art theft, art vandalism differs from its normative counterpart; namely, with respect to the target of a vandal’s aggression-artworks. Works of art represent the unique cultural patrimony of a civilized society, are fragile, and irreplaceable (Williams, 2008). When art work is damaged from a museum or gallery, not only is the work victimized, but so is the “institution, the values it symbolizes, and its mission to care for and display works of art for the public’s benefit” (Williams, 2008, p. 596). Williams (2009) further notes “works of art are not neutral objects but instead aim to elicit judgement and response in their viewer, contain emotive power, and irreplaceability” (p.

594) and “an attack on an artwork assaults the social order by targeting objects that embody shared cultural meaning” as opposed to objects that are attacked by non-art vandals (p. 595-596). Lastly, Williams (2008) also adds that legally, “socially valued works of art are “property plus public interest” and art vandalism thus threatens both interests” (p. 604).

A few scholarly studies offer limited data on art vandalism as a category of art crime. One important study is Cordes & Turcan (1993), who conducted a survey of public museums and commercial art galleries in the UK to determine the frequency and degree of vandalistic acts within these institutions. Their study revealed that, out of the 60 institutions that responded to the survey, 18 respondents experienced no incidents of vandalism within the past ten years, 37 of the respondents reported at least one incidence of vandalism in their galleries within the same time frame. Five respondents did not respond to the questionnaire. Typically, such damages resulted from scratches, scrapes, and mild penning of the works carried out by children under 15 who were trying to impress their friends. These forms of art vandalism were classified as minor acts and these vandals wish to remain anonymous and are rarely caught. The more serious damage such as slashing, stabbing, tearing, arson, or smashing is committed by experienced adult vandals who often wish to be noticed for their destructive acts and are more frequently arrested than the vandals who commit less severe acts of vandalism. Additionally, the vandals who intentionally cause more extensive damage to works of art may in the process risk public harm such as the group of men who violently attacked the Andres Serrano photography exhibit in Sweden.

Scott (2009) also studied the extent and nature of art vandalism in the UK. Her research examined 250 British museums and galleries. Her findings indicate that the majority of her sample experienced no incidences of vandalism (51.9%). The next two highest frequencies reported were one to two incidences (23.7%) and three to five incidences (11.1%). Scott (2009) also examined the types of art vandalism. The most frequent methods of attacking works was pen/pencil marking (30 respondents), scratching/scoring with a sharp instrument (23 respondents), using food/drink (15 respondents), and using physical violence (14 respondents). Motives for destruction of art was another variable which was a subject for inquiry. Accordingly, the top reasons for acts of vandalism stated by the respondents according to the forced answer choices analysis were: destruction for destruction's sake (82 respondents), mental disturbance (52 respondents), accident (46 respondents), publicity seeking (43 respondents), moral outrage (35 respondents), religious conviction (29 respondents), and political consternation (28 respondents).

Occasionally art vandals are apprehended and prosecuted. Fine (1985) analyzed four cases of art vandalism involving Michelangelo's *Pietà* (1498-99) in Saint Peter's Basilica in Rome, Rembrandt van Rijn's *The Night Watch* (1642) at the Rijksmuseum in Amsterdam, *Rokeby Venus* (1647-51) by Diego Velázquez in London's National Gallery, and the Palace of Versailles site, in terms of what motivated the vandals, public response, and the legal consequences for the arrested vandals. In 1972, Lazlo Toth jumped over the barricade at St. Peter's Basilica in Rome and struck Michelangelo's *Pietà* with a hammer four or five times causing serious damage before he was apprehended. Claiming to be Jesus Christ, Toth explained that he attempted to damage Michelangelo's work because

the mother of God did not exist and therefore had to be destroyed (Fine & Shantin, 1985). Instead of serving any prison time, Toth was declared mentally insane and was placed in a mental hospital for two years.

In 1975, Wilhemus De Rijk, an unemployed language teacher, defaced Rembrandt's large painting, *The Night Watch*, after he was refused admittance to Rijkmuseum in Amsterdam because he arrived after the museum had closed. When he returned the next day and gained admittance, De Rijk slashed the painting several times with a small knife until he was stopped by guards. When questioned, de Rijk explained that he had "had been sent by the Lord . . . [and] forced to do this by forces out of this earth" (p.143). De Rijk was committed to a mental institution and he committed suicide after one year of hospitalization.

Mary Richardson's 1914 defacement of Diego Velazquez's *Rokeby Venus* in the National Gallery in London was politically motivated. A member of the British suffragettes in 1914, Richardson claimed the destructive act was meant as a public protest of the imprisonment of suffragette leader, Emmeline Pankhurst. According to witnesses, Richardson stood a few moments in front of the painting, then took out a meat cleaver and smashed the glass container that held the painting, and then hacked at the painting itself, slashing the surface seven times. (Adams, 1993). Mary was sentenced to 6 months in jail for her crime.

In an act of vandalism that would likely have drawn considerable media attention and public rancor were it to occur in the present moment, three groups that called themselves the International Organization of the Jobless, the Revolutionary Workers, and the Breton Republican Army, respectively, planted and exploded a bomb at the Chateau

de *Versailles* on June 25, 1978, causing extensive damage to the building and its art collections. The cost of repair was estimated at millions of francs. Three rooms and several major works of art commissioned by Napoleon were damaged, and two Breton separatists, Lionel Chénevière and Patrick Montauzier, were identified, arrested, and convicted of “crimes tending to harm the state”. They were sentenced to 15 years imprisonment (p. 140).

Fine and Shatin (1985) concluded and categorized the vandalism perpetrated on the *Pietà* and *The Night Watch* were by motivated extra-normal (in the religious or cosmic realm) forces, the media labeled the vandals as insane. The perpetrators of vandalism on the *Rokeby Venus* and *Versailles Palace* were deemed to be motivated by political protest and were labeled insane in a moral sense by the media.

Given the various motives of art vandalism mentioned above it is important to elaborate upon this aspect of art vandalism. Dornberg (1987) asserts, attacks on art are not random occurrences, but typically motivated by divisive political convictions. Like Richardson’s National Gallery attack, or the bomb at Versailles, another British suffragette named Mary Wood slashed John Singer Sargent’s *Portrait of Henry James* (1913) in 1914 to demonstrate to the voting public that their nation’s art treasures would not be secure from willful destruction until women were granted as many political freedoms as men in the United Kingdom (Conklin, 1992, p. 246). In 1987, the *Leonardo Cartoon* (1499-1500), a rare drawing by the Renaissance master named in its title, was shot several times with a sawed-off shotgun by Robert Cambridge in 1987, while the object was being exhibited at The National Gallery in London, UK. Questioned by police, Cambridge explained the attack had been motivated by his disgust with the “political,

social, and economic conditions in Britain” (Fine & Shatin, 1985, p. 143). More recently, Maximo Caminero, a Dominican artist, picked up an ancient Chinese ceramic vase in an installation by the Chinese conceptual artist, Ai Weiwei, on display at the Perez Art Museum in Miami, Florida, and dropped it on the floor, causing it to shatter. According to Caminero, he was inspired by another work by the same artist called, Dropping a Han Dynasty Urn, which is a collection of sequential photographs that show the artist shattering an ancient vase to make a point about the arbitrary valuation of works of art, and the fragility of cultural objects. Caminero said that his own act was thus inspired by Ai Weiwei as a protest against what he contended was the exclusion of Miami artists’ work by the Pérez museum, and by similar institutions in the area (http://www.nytimes.com/2014/08/14/arts/design/man-gets-probation-in-attack-on-ai-weiwei-vase.html?_r=0, electronically retrieved August 23, 2014).

Other art vandals destroy works for religious reasons. A classic example of this rationalization is the damage of the *Pieta* (1498-99) by Lazlo Toth mentioned above. More recently, the world has witnessed ISIS assert its global reign of terror on the world by destroying of thousands of years of history. According to CBS News, ISIS’s archeological vandalism in the Iraqi city of Nimrud in April of 2015 was declared a war crime by UNESCO. The militants videotaped themselves smashing artifacts with sledgehammers and uprooting statues with bulldozers. The group is on a mission to destroy any imagery it deems as heresy in an attempt to erase the past and rewrite history (<http://www.cbc.ca/news/technology/isis-s-archaeological-vandalism-destroys-knowledge-and-history-bob-mcdonald-1.3036473>electronically retrieved July 11, 2015).

Still others have destroyed art in the name of social activism. Homosexuality was protested by Hans Bruan when he attacked *Rosy Times* (unknown year) by Salomé with spray paint. “Assailing the painting, which depicted a homosexual, Bruan wanted to make a statement about how the show was not about art” (Dornberg, 198, p. 102). Additionally, Jabal Brown, a student at the Ontario College of Art and Design, vomited on Mondrian’s *Composition in Red, White, and Blue* (1930) as an “‘artistic statement’ about ‘oppressively trite’ and ‘painfully banal’ art” (Siebers, 2002, p. 238). Modern art was further protested by Pierre Pinoncelli in 2006 when he attacked Duchamp’s *Fountain* (1917), with a small hammer. Pinoncelli also attacked this same work by Duchamp in 1993 by urinating on it and damaging it with a hammer. The reason that Pinoncelli gave for his outrageous behavior was that “he wanted to rescue the Duchamp work from its inflated status and restore it to its original use” (<http://archive.courier-journal.com/article/20071202/SCENE05/712020310/Why-vandalize-art->, electronically retrieved October 6, 2014).

Many instances of art vandalism are the result of psychiatric illnesses and conditions, a prime example of which was Hans-Joachim Bohlmann, who poured sulfuric acid on Ruben’s *Portrait of Archduke Albrecht* (1559-1621) in 1982. Bohlmann claimed that “he had been troubled by the figure’s piercing eyes” (Siebers, 2002, p. 229). His wife had died in 1977 and Bohlmann had been suspected of vandalizing works of art since her death. Bohlmann has been nicknamed the “acid assassin” and in total he attacked 185 works of art in six European cities. Also, in 1982, a young veterinary medicine student, Josef Nikolaus Kleer, who suffered from manic-depression violently struck Barnett Newman’s *Who’s Afraid of Red, Yellow, and Blue IV* (1969-70) (Siebers, 2002).

Preventing Art Vandalism

Security measures intended to prevent object vandalism are standard in most museums and galleries worldwide. In the mid-twentieth century, according to Mason (1975), former retired FBI senior art crime investigator, vandalism of museum collections typically occurred while public museums were open to the public, and little could be done to reasonably deter its activity (p. 66). He notes that the best defense against vandalism is the security guard because a security guard can react immediately to the vandal's action, as opposed to an alarm which, may allow too much time to pass before the museum's or gallery's human element can stop the vandal's actions. Mason does not discount the effectiveness of alarms, he posits that the guards are more efficient. Mason also recommends that local law enforcement be notified immediately.

Steven Keller, a museum security expert and consultant, echoes Mason's sentiments, "Vandalism is probably the most difficult thing to protect against". He recommends that the best strategy is to install a camera above the artwork that registers movement around the objects. When a visitor gets too close, the system will alert a guard stationed in the room. Keller acknowledges that the camera isn't foolproof. Robert Wittman, a former FBI agent with the art crime unit, adds that good sightlines for guards and a camera system are needed to help prevent vandalism. "I'd like to see a Plexiglas case around it, too, but I'm a security guy," he said, "I doubt the curators would want that"

(<http://online.wsj.com/news/articles/SB1000087239639044479990457804888034422605>
0, electronically retrieved August 23, 2014).

In conclusion, art vandalism is an effective vehicle for portraying messages of protest, anger, and even psychological impairment. As militant groups and clever citizens become more effective in their methods of destruction, institutions who display art both inside and outside of their walls must be more prepared to prevent such annihilations from occurring.

Chapter Conclusion

After this granular examination of the dynamics of art theft and art vandalism several themes emerge. First, the deficit of respect and attention given to these crimes by the general public and law enforcement is disturbingly low. Secondly, criminal statutes and prosecution related to these forms of crimes slack rigorous enforcement and strong punitive measures. Third, compared to their general counterparts, art theft and art vandalism are not recognized by state criminal justice systems. In sum, all of these factors contribute to a culture ripe for art crime commission.

The next chapter explores the role and properties of guardianship in art theft and art vandalism within art institutions.

CHAPTER IV

GUARDIANSHIP

Art Museum and Art Gallery Security-Introduction

In 1990, Boston's Isabella Stewart Gardner Museum (ISG) lost \$300 million worth of Old Master paintings from its collections when two thieves dressed as police officers infiltrated the galleries with relative ease. In the aftermath of one of the twentieth century's best-known art heists, the ISG made radical changes to their security program and practice. Prospective guards now undergo extensive training and background checks. Hidden cameras "of every size and capability" monitor the galleries 24 hours a day, and are equipped with lowlight image capture, night vision, and a wide range of motion controlled remotely. "I know of a number of larger institutions that don't have anything close to what we do," says Anthony Amore, who became the security director for the ISG five years ago and has obsessively built the massive case database that he revisits daily. The museum also acquired a theft insurance policy, having "brutally learned," in Amore's words, a "big lesson" (<http://www.bostonmagazine.com/2010/03/gardner-heist/>, electronically retrieved September 20, 2014).

The Gardner theft raised the demand among arts institutions that house and/or exhibit valuable works of art for an agreed-upon industry standard for security programs. In response to collective concern emanating especially from the smaller, older, and

considerably less well-endowed museums than the ISG, the AAM now publishes a detailed “Suggested Practices for Museum Collections Space Security” document on their website for use by accredited museums (<https://www.aam-us.org/docs/professional-resources/suggested-practices-for-museum-collections-space-security.pdf?Status=Master&sfvrsn=2>, electronically retrieved September 1, 2014).

The largest museums typically have the budget to pursue state-of-the-art security systems and the best-trained personnel. The Smithsonian Institution, for example, boasts one of the most effective security teams in the world, and its guards maintain federally-mandated “law enforcement authority” to act against potential risk factors (Benny, 2013, p. 7). Similarly, The Metropolitan Museum of Art’s chief of security, John Barelli, relies upon his department’s strength in numbers, with his team of 600 employees, sophisticated communications center, plainclothes detail, and armed officers at the museum’s entrances. Barelli proclaims “when people come into this museum, they see my security staff, and they know we mean business; they know if they do anything here, we are going to react, and they’re going to be taken care of”. (Danzinger, 2009, p.7).

The larger proportion of the world’s museums, however, cannot replicate the multi-million-dollar security systems at work in gigantic institutions with millions of priceless objects like the Smithsonian or the Met. These institutions can find themselves embroiled in a seemingly unresolvable dilemma, such as in the 2012 case of the art thief, Radu Dogaru, who sued Rotterdam’s Kunsthall museum for negligence in making it too easy for him and his team to steal seven famous paintings worth \$24 million. Contending that the museum’s sloppy security was the real crime committed in the heist, which he

undertook in part to make a public example of the Kunsthal's foolishness and breach of public trust in not adequately securing works of art otherwise considered priceless objects of collective cultural patrimony. When Dogaru infiltrated the Kunsthal's galleries, he found there were not even alarms or motion detectors on the paintings, and that the emergency exit in the back of the museum was unmonitored, not connected to any alarm system, and was unlocked. According to Caesar (2013), the valuable works were displayed close to an exit on the first floor of the museum and the wires that held the objects to the wall were weak. The museum incredibly employed no night-time security staff, and the CCTV did not cover the area of the museum where the thieves broke in. When an alarm did finally activate, it was not until long after the men had entered the institution and they escaped with their full haul of stolen paintings with relative ease. More like "shoplifting . . . than robbing a museum," Dogaru and his colleagues found themselves in a treasure vault that, like the ISG and other smaller museums that have been the victims of art heists in the past 30 years, had less security than a common retail shop (<https://www.nytimes.com/2013/11/17/magazine/what-is-the-value-of-stolen-art.html>, electronically retrieved September 1, 2014). Regardless, the Kunsthal, like other institutions in its predicament, maintains the fiction that "adequate security measures had been taken" and no further investment is needed in its security infrastructure (<http://www.nytimes.com/2012/10/17/world/europe/Picasso-and-Monets-Are-Stolen-From-Dutch-Museum.html>, electronically retrieved September 1, 2014).

The Dogaru versus the Rotterdam Kunsthal was a rare sensational public case, but accusations of criminal negligence between institutions, especially in the context of loan agreements, are more common. A particularly illustrative example of institutional

disputes over adequate custodianship is a 1996 lawsuit brought by the St. Louis Art Museum against the Whitney Museum of American Art, in New York, in which St. Louis had lent the museum Roy Lichtenstein's 1962 *Curtains*. While in the Whitney's custody this work was vandalized. St. Louis maintained that the Whitney's ineffective security service caused the painting lent for a Whitney exhibition to be seriously damaged. More specifically, one of the Whitney's temporary security guards, Reginald Walker, purportedly drew a heart inscribed with "Reggie + Crystal 1/26/91" and wrote "I love you Tushee, Love, Buns". The painting was valued at the time approximately \$1.5 to \$2 million. Similarly, when it was humiliatingly revealed that one of the State Hermitage Museum in Moscow's senior-level staff members had systematically pilfered objects from the permanent collection, which her husband then sold to pawn shops over a six-year period, a judge accused the state museum of incompetence (http://www.nytimes.com/2007/03/16/arts/16herm.html?_r=0, electronically retrieved on July 24, 2014).

These cases pose several questions: 1) What levels of guardianship are reasonable for the public to expect from these public cultural repositories? 2) Do accountability expectations outstrip collections management competence in both commercial and non-profit galleries? 3) how can the restrictive costs associated with the most effective security measures, which must be continually reassessed and improved, be offset, especially in institutions that clearly lack the resources to undertake the programs maintained in the world's most important museums? Recent evidence indicates that security measures are still not where institutions are investing. Stevan Layne (2009) astutely points out in *Art and Crime* that museums comparatively spend millions of

dollars on accessions, or glamorous expansion campaigns that emphasize well-known architects more than updated facilities. Charney states that public art museums' investment in security programs is materially insignificant to the investment incurred for capital construction projects or collection expansion. According to Karl Heinz Kind, a member of the stolen works unit of the Interpol General Secretariat, museums must change this mindset and embrace better security programs that utilize a holistic approach to preserving works of art with a well-trained personnel and the most advanced technology available (<https://sm.asisonline.org/Pages/No-Artistry-in-These-Crimes.aspx>, electronically retrieved September 1, 2014).

The following sections all examine security personnel, target hardening, bag inspection, theft from storage, background checks, commercial art gallery issues, university museums/galleries, and the role of non-security personnel. Overall, the gap between best practices and current norms will be outlined.

Museum and Gallery Security Forces

Museum security is a necessary museum or gallery measure that can be succinctly defined as “a mechanism that provides for the protection of collection, equipment, information, personnel, and physical facilities and that prevents influences that are undesirable, unauthorized or detrimental to the goals or the well-being of the museum” Fennely, 1983, p. 3-4).

The most visible aspect of a public museum's or private gallery's security contingent are uniformed security guards who actively patrol art galleries. Often the

primary interface with the visitor, the museum guard's roles are myriad. According to Wallis (2013) museum guards' duties might be described as:

[to] find the lost, shepherd the confused, and save runaway toddlers from impending collisions with immovable sculptures. The job demands long hours, constant vigilance and a reservoir of patience to put up with illicit picture takers, soda smugglers and pontificating amateur art critics, among other annoyances. Consider these guards the army grunts of the art world

(http://www.nytimes.com/2013/03/21/arts/artsspecial/museum-guards-on-life-beyond-the-galleries.html?pagewanted=all&_r=0, electronically retrieved July 18, 2014).

Evolution of security guards

As collections transitioned from the haphazard walls of private homes to the careful order of the public gallery, security needs were developed to protect viewing spaces and the arrival of crowds focused solely on scrutinizing works of art on display. According to Lillios (2013), initially uniformed security officers enforced both formal and informal social norms with museum visitors. The guards controlled the flow of the visitors throughout the galleries, determined who could and who could not gain admittance, and ensured that proper behavior was maintained. In addition, at times, the guards acted as docents. (p. 52).

Today's security officers

Twenty-first century uniformed museum security officers share more evolved responsibilities as well that go far beyond interfacing with visitors to encompass advanced surveillance practices. For example, security must monitor the often-combined threats of electronic and cyber-attacks that could compromise the elaborate technological security nets that protect public art museums and private commercial art galleries.

Beyond these contemporary threats, museum guards' first-responder training is essential to confront more conventional robbery, vandalism, and the possibility of being struck by natural disaster. The average museum security officer can usually be expected to be able to lead emergency efforts in mass evacuations, medical emergencies, severe weather, flooding and water damage, power outages, explosions, fires, chemical spills, and acts of terrorism (Speed Art Museum training manual). Given the high monetary value and often cultural heritage stature of the objects guards are charged to protect, they should possess considerable curatorial knowledge as well. The guards at the New Mexico Museum of Fine Art in Santa Fe, for example, are briefed by the education department on the entire permanent collection and on special exhibitions. They receive the same training on the curatorial aspects of each exhibit that the docents undergo. They also read and sign off on the exhibit press release, so they are cognizant of every aspect of the exhibition (Smith, 2006).

After the Van Gogh Museum was robbed in 2002, the museum conducted a security overhaul. A portion of the improvements included expanding their guard staff, improved training, and discontinuing the use of contract security guards, as well as using volunteers as security personnel. Drent (2009) and his staff developed five elements that they wanted to see in their guards: "cooperation with other staff, working well with visitors, reacting well to changes and new requests, commitment to their careers and the museum, and the ability to be presentable, articulate and polite" (p. 147).

In addition to securing collections, visitors, employees, and the museum premises, guards are responsible for their own safety. Not only are guards tied up and knocked down by art thieves (as at the Gardner Museum) but one security officer was shot while

on duty by a white supremacist at the Holocaust Museum in June of 2009

(<http://www.cnn.com/2009/CRIME/06/10/museum.shooting/index.html>, electronically retrieved October 3, 2014).

As a result of security technology becoming more advanced, thieves are increasing their *modus operandi* and incorporate more violence into their tactics. Consequently, security guards have to contend with an increased risk of life threatening situations. In response to possible danger while on the job, a few museums have armed security officers, such as the Smithsonian Institution and the National gallery of Art in Washington, DC whose guards at entrances and exits are armed (Falkenstein, 2005, p. 137).

Unfortunately, a full complement of electronic security services for a museum or gallery can be very expensive, and a full guard staff can quickly account for more than half of a museum or gallery's operating budget. Given their high percentage of an institution's daily operating budget, some institutions, such as the Kentucky Museum of Art and Craft in Louisville, Kentucky, forego a human presence within their protection plans and only utilize electronic devices and physical barriers.

Hybrid Security Forces

When donations and other philanthropic activity contracted as a result of the 2008-2014 global recession, operating budgets in many American public museums suffered cut-backs and devaluation. As a result, such institutions found themselves forced to scale back their security programs. While many museums replaced full-time staff with part-time contractors to whom they did not have to pay benefits and whose hourly rates

were considerably lower than their full-time professional counterparts, others opted for a blend of the two, otherwise known as a hybrid security force. Museums still starved for revenues to support essential operations also increasingly hosted public and private events in their gallery spaces increasingly throughout the recession years and through to the present day. These events pose different threats of damage, vandalism, or theft of objects displayed in galleries, and contract security guards not bound by permanent employment contract to the institutions could pose added liability to the institutions in question (Longmore-Etheridge, 2012, p. 58). Ideal institutional practice in these revenue-generating affairs place their International Foundation for Cultural Property Protection (IFCPP)-certified, full-time security staff on the gallery floor, and bring in outside technical support for surveillance and monitoring from the communications center. According to a spokesperson, the Art Institute of Chicago, for instance, will often hire contract guards for high-volume blockbuster exhibitions, for which each “undergo four days of in-house training and then accompany senior [permanent security] staff when the show opens. [The contractors] are not put in sensitive areas” (Falkenstein, 2005, p. 137). Full-time guards with The Institute receive basic training with a professional security contractor called Securitas, followed by object-focused training with the museum’s curatorial department. They receive both museum orientation and art orientation including training from the conservation and curatorial departments. Both forms of guards receive refresher training constantly that includes a daily roll call. All proprietary officers receive International Foundation for Cultural Property Protection (IFCPP) certification of which training in customer service is a key component. Steven Layne, the innovator of the training, believes that a friendly greeting by the guards will take away

the anonymity that thieves and vandals attempt to maintain which in turn might deter any acts of this nature. Other areas of the training include crowd control, package inspection, metal detection, basic first aid, and how to deal with upset and aggressive visitors. Basic self-defense and de-escalation techniques are also included in the training. (Longmore-Etheridge, 2012, p. 62, 64).

The AAM security committee compared and contrasted the benefits/ negatives of hiring both types of guards for museums in the United States. The committee supports the use of contract guards because there is generally no delay in quickly securing them. A separate company or agency performs guards' hiring and training, while a third-party handles billing for the costs incurred with their contractual, short-term employment. In addition, the hiring institution does not have to pay a pension or purchase any work-related equipment. As of now, there are no union issues, and the committee suggests that contract guards are more appropriate for smaller museums (<http://www.securitycommittee.org/securitycommittee/Guards.html>, electronically retrieved September 7, 2014).

Regardless, retention remains a problem, since remuneration for security guard positions has not kept pace with inflation and wages are low versus similar positions in other industries. According to Conklin (1994), "being a museum guard is not a career position, but rather a minimum wage job with high turnover. Most museum guards in the United States are college students and retired people" (p. 125). According to the website Simply Hired, in 2016, the average museum security guards earn an average annual salary of \$41,000, a figure which varies from state to state (<http://www.simplyhired.com/salaries-k-museum-security-guard-jobs.html>, electronically

retrieved February 17, 2016). In 2006, it was reported that an average gallery security guards' starting salary at the New Mexico Museum of Fine Art was just \$15,620, which is inadequate for supporting more than one person, even in a geographic location with a considerably lower cost of living than in the larger metropolitan areas where the larger and much more valuable art collections tend to be located. Even so, wages for security guards are still abysmal versus starting salaries versus other entry-level museum positions. Hence, finding individuals willing to take this important, and occasionally dangerous, a position for so little compensation or career growth exacerbates the widespread practice of not maintaining adequate protection of collections and assets. Without having kept pace with other museum professions, it is of little surprise that so many fewer potential guards choose jobs that have adequate pay and benefits, make one eligible for pay raises, advance in a profession, and "be made to feel like an appreciated part of a trusted team" (Smith, 2006,

<http://search.proquest.com.echo.louisville.edu/docview/331552215/fulltext/53E2995421E74CCEPQ/1?accountid=14665>, electronically retrieved January 22, 2013).

In conclusion, it is recommended that institutions adjust their budgets to invest in adequately compensated security guards who will remain loyal to the museum's mission, works, and visitors.

Museum Security Hardware and Software Technologies (target hardening)

Financial challenges and substandard wages hinder the human side of the museum or gallery security team for many institutions, but ever improving surveillance and protection technologies can offset the adverse consequences of an otherwise less visible

security force. In recent times, thieves are increasingly focused on compromising physical and digital security systems in museums and galleries. Predictably, thieves are typically more attracted to institutions with demonstrated inferior protection in both the human and technological capacity.

In the past, heavy investment in object security has resulted in obstructive panels and other protections that interfere with the visitor's ability to view the given object in the gallery. After Edvard Munch's *The Scream* was stolen in 2004 from The Munch Museum in Oslo, Norway, the museum tightened security with the addition of more guards in the galleries and TSA-style checkpoints that visitors need to pass through when entering or leaving the museum, including x-ray machines and body scanners. In addition, the museum encased Munch's iconic proto-expressionist portrait of the terror of modernity behind thick bullet proof plate glass monitored by such an array of scanners and motion sensors that reporters have dubbed the museum, "Fortress Munch" (Houpt, 2006; Bazley, 2010; Brisman, 2011).

Current security technologies are less obstructive and more efficient at lower cost and prices continue to fall. Public museums and commercial galleries of all sizes have invested in economically-priced security solutions specifically catered to the protection of art objects in gallery settings. Boser (2010) reports that five years ago, small institutions might expect to spend more than \$1 million annually on security. A 2007 government report on the Smithsonian's security program found that the institution pays almost \$70 million annually to protect its collection; even this amount may not be enough. The same report explained that the miscellaneous museums that fall under the Smithsonian's leadership lacked enough guards to respond to alarms. For example, one visitor even

managed to steal some fossils out of a gallery in the National Museum of Natural History” (<http://online.wsj.com/articles/SB10001424052748704026204575266293870407552>, electronically retrieved July 18, 2014). Wilemse and Etman (1995) learned in their study that large museums spend more on security than small museums.

According to Bazley (2010), museum security technology divides into two discrete application groups: perimeter and interior. Perimeter security “detects intrusions through exterior entry points such as doors and windows.” This category of equipment includes electronic sensors such as motion detectors and alarms that are installed at exterior doors and they will activate if an intrusion occurs. Exterior lighting, surveillance equipment, and reinforced doors and windows are also included in this category.

Interior security equipment “detects intrusions into protected area through visual observation and motion, the removal of objects from their display positions and even violation of the secure space between an object and museum visitors.” Some types of hardware that define this category are CCTV, smart tags, infra-red motion detectors, break-beam sensors, scanning devices, and automated fingerprinting systems. Bazley notes that there are “tags that emit signals that distinguish light touches versus a heavy touch and lift” (p. 181).

With the ongoing surge of attacks and theft of cultural heritage objects, more museums and galleries need to acquire appropriate alarms, motion detection and intelligent video analytics. Tom Szczepanski, chief of protective services at the Toledo Museum of Art, has created access points in “sensitive” areas utilizing card readers, high-security locks, and RF keys. (Ritchey, 2010, p. 80). Houpt (2006) suggests that devices such as alarms on windows, infrared sensors that detect temperature changes, motion

detectors, and microwave sensors that can be hidden in walls that pick up unusual sound waves, are all extra devices that can help prevent art theft (p. 143).

Twenty years ago, a Dutch study of museum security found that 83% of the museums sampled did not utilize barriers to separate the public from collections. Electronic measures were found to be more anomalous and comprised only 29% of the sample group (p. 57).

The respondents in this study were also surveyed on their opinion of their institutions' specific security measures. The Dutch researchers found that, on average, the museums sampled agreed that mechanical security measures are most essential, followed by electronic measures, with security management and control as tertiary priorities (p. 57). The researchers could identify "no connection" between a given institution's attentiveness to security, the measures actually taken, and the number of incidents of crime experienced and reported at that museum" (p. 59). Benson's (2013) findings produced similar conclusions in her study on art theft in South Africa. Specifically, according to Benson (2013) "The research shows that a lack of mechanical security (beams and sensors), as well as poor or ineffective physical security contributed to the thefts being perpetrated. The findings also show that theft incidents occur in spite of museums/galleries having very good/good security, as well as physical and additional security" (p. 231). Given these two studies were conducted almost 20 years apart and on two separate continents, it seems prudent to propose similar studies should be conducted in the United States: 1) to determine whether or not it is merely poor security practices that endanger collections or 2) that this form of criminality is difficult to combat regardless of which measures are implemented at an art institution.

Audits

Stevan Layne (2009) recommends that museums conduct both internal and external audits of their institutional security practices. Wilemse and Etman (1995) discovered that 47% of their respondents had never had such a risk analysis conducted at their museums, while 27% did not know if one had ever been conducted. Smaller museums on tighter budgets charged their volunteers with some security duties (p. 56). A contributing factor to the low statistic may be that within the sample of large and small museums only 14% used any form of contract security service and only 56%% of the large museums utilize at least one internal security person (p. 56).

Bag inspection and ID badges

Two security measures that became popular following the September 11, 2001 attacks in New York and Washington, DC, in particular, that are employed by museums of all sizes are bag and package inspection, and limited entry and exit points. Volunteers and docents are required to wear photo IDs at all times at the Toledo Museum of Art, while at the Rock and Roll Hall of Fame and Museum, all the staff and contractors must enter and exit through the same entrance, that features a guard presence 24-hours a day. Bag checks are conducted on every single person on their way in and out of the museum, and these entrances and exits by employees are recorded on a log (Spadanuta, 2011, p. 51).

Theft from Storage Spaces and in Transit

Steven Layne (2009), museum security expert, supports the belief that artwork is not primarily stolen from exhibition cases but rather from storage spaces and while in transit. Collection and storage areas are a treasure trove for thieves; both visitors and insiders. Many times museums and galleries do not inventory their works in storage and a theft of a work stored for many months or years will go unnoticed. Not only should these areas be watched more closely, but the physical security and layout of the grounds should be analyzed in terms of security deficits in any access points to these storage spaces. Houpt (2006) notes that the AAM passed security guidelines that required that museums discontinue their tours of collections in storage (Spadanuta, 2011, p. 48, 52; Houpt, p. 34).

Wilemse and Etman (1995) learned from their study that less than 27% of their sample utilized checks of their collections in storage and these checks were substandard. In 59% of the museums there are no security measures in place to monitor theft from storage and only 20% of the museums check their collection in storage once every three months. Interestingly, nearly 15% of the collection loans made were to the staff for private use (p. 57). To avoid similar statistics, galleries and museums should frequently check their works in storage to ensure that both the inventory is itemized on a regular basis and employees will be hesitant to help themselves to more secure objects.

Traveling exhibitions also present unique security issues. Each time a work leaves its home institution, gallery, or a collector's home, a risk assessment must be conducted to determine the likelihood of theft or damage while *en route* to its borrower. Works in transit are typically classified as either very high, high, medium, or low risk. Best

practices for this scenario are numerous. First, museums should generate risk profiles for each piece in a traveling exhibition based on a work's intrinsic, cultural, and research value, the reputation and focus of an institution and its visitor demographic. Secondly, in some instances, works are transported in custom high security cases with tracking devices and sensors. Third, representatives from the loaning institution may also conduct a site visit to the borrowing institution where a test evaluation will be done. Before the work leaves the home institution, a condition report is made of the work so if any damage occurs after it leaves the museum, the original museum has documentation of the original condition of the work (Turk, 2005).

Additionally, once a loaned work of art is *en route* from its original collection, the transportation vehicle should have GPS and an anti-hijacking system. Curators, registrars, and other museum officials often travel with high-value objects as couriers, accompany the piece to its gallery destination, see it through the insurance paperwork and condition report submission to the other institution's registration department, and often oversee the installation of the work(s) within the exhibition gallery. Couriers also accompany lent works back to their home institution. Because lent works of art can be transported by car or rail, but also by commercial passenger flights, absolute discretion is a must.

In a prime example of careless transport of a work of art, in November of 2006, the Toledo Art Museum in Ohio sent the 1778 painting, *Children with a Cart*, by Francisco Goya to the Solomon R. Guggenheim Museum in New York City. The piece was transported by truck in a carefully designed, unmarked crate. The drivers, it seems, had checked into a hotel en route for a few hours to take a nap due to driving exhaustion, but when they returned to their truck, they found someone had broken into the vehicle,

and the unmarked crate containing the masterpiece was missing (See, <http://www.nytimes.com/2006/11/18/arts/design/18goya.html>, electronically retrieved July 18, 2014). If the museum had employed better security precautions this theft might have been prevented.

Background Checks

As mentioned earlier, the risk of insider theft is a considerable concern in public museums and commercial galleries alike. Security expert, Steven Keller, encourages institutions to conduct extensive criminal background checks and carefully screen all incoming museum staff, paid or volunteer. These background checks should include criminal history, credit history, education verification, employment verification, residential history, and even character references (Layne, 2009; Spadanuta, 2011). In addition to pre-employment screening, Layne (2009) emphasizes that exit interviews “for departing employees are also critical, to determine whether there might be any passive-aggression or a scheming on the part of the departing employee that could lead to any future incidents” (p. 140). Layne advises that museums and galleries must screen any persons with access to galleries, vaults, or other locations where collections are stored, even if these individuals are closely monitored researchers looking at objects. But this strategy is easier said than done and getting the thorough background information on virtually any person poses an array of potential obstacles. Layne remarks, however, that background checks should be conducted on any persons before they are allowed on an institution’s property. Paul J. Steiner, the security manager for the Rock and Roll Hall of Fame in Cleveland, Ohio, emphasizes the importance of access controls, as well as

special entrances, passageways, and exits for different levels of access clearance in order to better track traffic to and from different parts of the museum. Keller also stresses the need for bag and package checks on all persons entering and exiting despite the fact that many museums and galleries do not have the resources to conduct such checks.

(Spadantu, 2011, p. 51). Conklin (1994) still assures that despite increased security efforts, art theft will continue because the thieves will step up to fight the increased security measures by becoming more violent in their crime commissions and some thieves will simply attack softer targets with less security such as churches and residences. (Conklin, 1994; Houpt, 2006).

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Security Issues Within Art Galleries

According to Ho (1992), in order for a gallery to be issued theft insurance, it has to meet the insurer's security requirements. Although not all galleries carry theft insurance, they still are aware of security concerns. Many art galleries are generally smaller than museums and thus devote fewer financial resources to security—usually because the majority of capital in these smaller for-profit businesses is tied up in their collection inventories. Many commercial galleries, such as the galleries located in the Chelsea area of New York City, occupy areas zoned for retail businesses, are located on the street level, and are usually vacant at night and on holidays with the works for sale prominently displayed by the windows with easy view from the outside.

Ho (1992) explored the various security measures utilized by art galleries in New York and discovered common security practices included door locks, good inventory design, small items in plain view, alarms outside and inside ringing, a central alarm,

guards, movement detector, CCTV, mirrors, additional lights, a lobby guard and an admittance buzzer. The respondents had a problem with alarm systems creating false alarms (p. 152). One of the gallery respondents reported they used their buzzer frequently to let their customers in and another respondent reported that they did not use their buzzer frequently because they wanted to send out a message that anyone could come in freely (p. 118).

Ho (1992) also noted that galleries located on upper floors had fewer incidences of art theft. However, Ho (1992) determined that for art thieves the ideal gallery is one located in the business district, heterogeneous in population demographics, with an informal atmosphere, on a busy street, on the ground floor, with a separate showroom, prominently placed price list/stickers, an exit door without a buzzer, blind spots in the gallery space, employees not watching, many visitors, the receptionist desk away from the front entrance, and no CCTV. Ho also determined that for burglars, the most advantageous gallery is one that is located in a semi-residential section or business area with few nighttime activities on a tree-lined street. Preferably, the building has windows and/or glass doors, no guards, and on street level with old business buildings with few stories (p. 163).

Bazley (2010) advises that security concerns should be taken into account prior to opening a new business. He suggests that both the geographic location and the building characteristics are important considerations for new gallery owners. High traffic areas that are crime free are ideal. Bazley recommends that prospective buildings should have well-lit spaces and reinforced exterior doors. Burglars can gain access to galleries via unsecured rooftops; therefore, art galleries are best situated in commercial spaces

inaccessible from the roof (p. 177). Conklin (1994) calls attention to line of sight and urges that office spaces be designed in such a way that the galleries can be observed at all times discreetly. Along these lines, he encourages commercial galleries to limit their number of visitors at once in order to maintain adequate surveillance over as many people as possible, while doing the same for all gallery rooms. Large, open floor plans are best, according to Conklin. Ideally, a selective network ought to be established among gallery owners to share information on suspicious visitors, commonly used techniques of theft, and resources to alert neighborhood dealers to possible real time threats (p. 258). Bazley (2010) also reports that during business hours, galleries are more susceptible to larceny and robbery and more vulnerable to burglary during closed hours (p. 177). Ho's (1994) study reveals that larceny occurred most often on Tuesday and Wednesday afternoons. Burglaries occurred most frequently on Sunday nights from 6 p.m. to 6 a.m. when most art galleries are closed. Aarons (2001) produced somewhat similar results in a study of art theft in Australia. Commercial galleries were victimized more often during business hours and public galleries and residential homes were victimized more frequently at night (p. 23).

Securing University Collections

At Durham University in the UK, on the evening of April 4, 2014, Lee Wildman and Adrian Stanton cut a two by three foot hole into the Oriental Museum's brick wall and stole a Qing Dynasty porcelain sculpture and an 18th-century carved jade bowl, together valued at over £2 million (\$3 million (<http://itsartlaw.com/2013/02/16/bungling-burglars-sentenced-for-durham-university-oriental-museum-theft/>), electronically

retrieved September 7, 2014). Even though colleges and universities are secluded by the venerable walls of academia, they too are vulnerable to art theft and art vandalism.

College and university art galleries and museums form an integral part of the humanities mission in higher education. According to the AAM, these specialized departments on college and university campuses support the institution's mission of education, research and service, as well as enhance the academic experiences of students, faculty, staff, and the general public. The college and university galleries and/or museums frequently act as a cultural bridge between the university population and the non-academic community in which they are located.

These higher-education-context galleries and museums typically fall under the wider operating budget for the entire institution, and have less control over expenditures that may be needed for the proper safeguards for at-risk, high-value art collections. With budget cutbacks, some of these campus institutions have become vulnerable to thieves and vandals

(http://www.securitycommittee.org/securitycommittee/College_Galleries.html,

electronically retrieved September 7, 2014 &

<https://aamd.org/sites/default/files/document/2011ProfessionalPracticesinArtMuseums.pdf>

f, electronically retrieved December 29, 2014).

According to the AAM's Security Committee, there are several challenges university collections face as part of an academic institutions. As campus departments, galleries and/or museums can be compelled to hire work-study student staff as security personnel with little to no security training or experience. A worthy solution is for the museum/gallery to employ both student workers and hire an experienced security guard.

Also, university galleries may occupy spaces not suitable for reliable and effective protection of their collections. Referred to as “mixed use of spaces,” valuable objects from the university’s collection may be displayed in hallways or lecture hall areas, where students and faculty have to pass through or attend their classes. Thus, they have much broader access to the work than in a typical museum or gallery setting. Many times the works in these public areas are not secured well to the walls and no security cameras are installed. For example, at one Midwestern University, a donor included as part of his acquisition agreement that his collection of valuable prints be displayed in a public area within the fine arts building. Unfortunately, the donor provided no additional funding to support additional security measures, and the institution was saddled with the responsibility of providing what protective measure they could afford in order to ensure that the works were not damaged or stolen. Security arrangements are often not specified or required in the gift agreements between the university and the donor. In addition, extra activities and lectures held in gallery spaces and classes may be conducted in the art’s storage sites, which allows students access during hours in which the gallery is normally closed. Thus, access to collections is much wider and deeper than most art institutions’ protocols allow.

Since university galleries and museums use many student workers who may be left alone with the collections, it can be difficult to ensure workers’ ability to adhere to ethical practices. Young and inexperienced, undergraduate students may present challenges for the institutional background checks and can have dubious references (http://www.securitycommittee.org/securitycommittee/College_Galleries.html, electronically retrieved July 2, 2014).

University collections often lend objects out to other facilities and departments across campus, which further complicates the need and ability to inventory and monitor the collections. Lastly, with 24-hour access to all areas of a given institution and its campus, custodial staff generally clean the buildings after hours and are usually unsupervised. In these scenarios, inadvertent damage could result, and alarms and access codes may be unintentionally compromised. It has been suggested that if the facilities management clean the museum or galleries area during the day when the door alarms do not need to be activated, any desire to steal on the part of the facilities management personnel can be reduced. However, this is an increased cost that may not be approved by college and university administrators whose departments are already budget strapped (http://www.securitycommittee.org/securitycommittee/College_Galleries.html, electronically retrieved September 7, 2014; Charney, 2009; J. Begley, personal communication, October 2, 2014).

Ohio State University (OSU) recognized the vulnerability of its museum collections and began an innovative program to create awareness and responsible handling of its institutions' works campus wide. Created by the OSU Police Department, the program educated "administrative and academic members of various departments . . . about the importance of documenting and properly recording important and overlooked items." (Kleberg, 2009, p. 166). There are three facets to this program. The first facet is the distribution of attention grabbing promotional items to various administrative persons instructing them in how to document the valuable objects within their respective areas. Secondly, OSU created a database with information and images of objects within the university's collection. Third, funding was allocated for restoration, security, or display

protection of the objects on display outside the standard museum galleries, on an annual basis.

John Begley advises that while the OSU program is innovative, many colleges and universities are unaware of their collections' total value, do not have objects appraised regularly, or clearly delegate responsibilities within the institution. Undertaking such change is seen as just added work, too expensive, or a lower priority. These circumstances all lead to university collections often being at risk (Kleberg, 2009, p. 166; J. Begley, personal communication, October 2, 2014).

In conclusion, even though, university collections may only be a small portion of the university life, they still deserve, and are legally required to, protection and preservation to the best of the institutions' ability to due to the high value of the art.

Non-security Personnel and Security

Tim Szczepanski, former Chief of Protective Services at the Toledo Museum of Art, reports that "one of his biggest ongoing challenges is to convince *all* staff that they are an integral part of the security of the institution" (Ritchey, 2010, p. 80). Layne (2009) strongly recommends that all museum personnel receive some sort of security related training and remain vigilant of threats to the collection. Some of these non-security staff are encouraged to contribute to the fundamental approaches to installations and exhibitions, for example, the arrangement of the works in the show can affect the degree of the risk of theft. Ian Rosenkranz, an exhibition designer, acknowledges that "if someone wants to steal something and they're smart enough, they'll find a way," but takes into account the museum and gallery spaces' layouts and design. In his spatial

layouts for special exhibitions, for instance, Rosenkranz avoids any hidden dead ends or corners where visitors can stay out of visible range of surveillance cameras and guards. He also considers whether or not the object should be displayed in glass and how far away the object can be from the viewers without minimizing its aesthetic appeal. Rosenkranz utilizes security screws and other forms of securing works to walls along with invisible electric beams. He carefully schedules continuous monitoring by security staff in terms of the availability of guards, their rotation times, the relief schedule, and 24-hour surveillance of high-interest areas. Lastly, Rosenkranz recommends utilizing the most advanced security technology (Smith, 2006).

Szczepanski reports that majority of his museum's staff members are helpful and security conscious. Theft and vandalism affect not only the artwork *but* the entire institution. The more people that can act as guardians for our cultural objects, the more successful detection and prevention of theft and vandalism will be (Ritchey, 2010).

In conclusion, a review of the existing literature and documentation on art museums, art galleries, art theft, art vandalism, and security reveals a lack of clarity surrounding these issues. First of all, professional organizations seem to lack collection security expectations for curators, gallerists, art dealers, and security staff. Secondly, museums and galleries have overlapping roles and they operate under a shroud of secrecy, which makes them unsusceptible to any form of regulation or ethical compass. Further, there is a lack of reliable statistics and financial impact surrounding art crime. Lastly, museums and galleries appear unwilling to involve law enforcement and to allow their security levels to lapse while the thieves and vandals wreak havoc within the art

world. All of these factors contribute to a lack of coordination within the art world that may possibly contribute to the current state of art world victimization.

In the preceding chapters, museum and gallery thefts and vandalism and protective measures have been reviewed. Literature suggests multiple key problems. 1) The first issue is inadequate art theft and art vandalism investigation given the scale of the two forms of crimes examined. 2) Security may contradict art museum's increasing transformation into a space of infotainment, family outings, dating destinations, and mainstream cultural centers rather than as traditional museums. 3) The conceptual delineation between art galleries and museums are now obscured and this creates security concerns that were not formerly considered issues when the two business structures were clearly separate entities. Now with both technological and societal changes that encourage intersection across broad sectors of the cultural environment, these terms and the legal definitions related to art crimes may be no longer pertinent. In sum, due to the abovementioned factors, there is perplexity within the art industry that did not formerly exist regarding the precise role of art world participants, including the security sector as designated guardians of treasured works and the patrons of the visual arts.

The next chapter is a review Cohen and Felson's (1979) Routine Activities Theory and how it could be applied to explain art theft and art vandalism.

CHAPTER V

THEORY

Introduction to Routine Activities Theory

The birth of Routine Activity Theory (RAT) is credited to Lawrence C. Cohen and Marcus Felson and was first presented in 1979. RAT falls under the broader theoretical umbrella of rational choice. The rational choice perspective asserts that offenders are rational actors who carefully consider whether to commit crimes by weighing the pros and cons of their criminal actions (Cornish & Clarke, 1987). From this perspective, the likelihood of a crime occurring can be manipulated by increasing or decreasing the costs of committing the crime (i.e., increasing the likelihood the offender is caught). According to RAT, in order for a crime to take place, there must be a convergence in time and space of three components: a motivated offender; a suitable target; and lack of a capable guardian (Cohen & Felson, 1979, p. 590). A motivated offender is an individual who has both the desire to commit a crime and the ability to perpetrate a criminal offense. A suitable target refers to an object or a person that attracts an offender to criminal perpetration. Lastly, a capable guardian is a person(s) who can prevent a criminal act from occurring (Cohen & Felson, 1979, 1980). When these three elements converge in time and space this leads to what is referred to as criminal

opportunity. This is when crime is most likely to occur. Therefore, if one of the components is absent, according to the theory, crime will not occur.

An individual's, or at a more macro-level—a neighborhood or society's—routine activities affect the likelihood that an individual or a population is in situations where criminal opportunity exists, which is why this theory is referred to as routine activities theory. Cohen and Felson (1979) define routine activities as “any recurrent and prevalent activities which provide for basic population and individual needs, whatever their biological or cultural origins” (p. 593). A person's day-to-day routine activities, such as going to work, participating in leisure activities away from their residence, or spending time at their home may or may not create a situation ripe for criminal victimization. In other words, an individual's routine activities influence the likelihood that they are in situations where a motivated offender, suitable target, and lack of capable guardianship converge in time or space. The next section discusses the three elements of RAT in much greater detail.

Defining and Measuring the Key Elements of Routine Activities Theory

As previously stated, according Cohen and Felson (1979), RAT consists of three integral components: a motivated offender, a suitable/attractive target, and lack of a capable guardian/guardianship which converge in space and time. However, since its birth, RAT has evolved, and each component has undergone definitional and measurement expansions. These next sections discuss each element in detail.

Motivated Offenders

Shortly after Cohen and Felson's inception of RAT, Cohen, Kluegel, and Land (1981) tested each component of Cohen and Felson's original conceptualization of RAT with regards to the influence of age, race, and income on criminal victimization of assault burglary, and larceny. Cohen et al. (1981) surmised that Cohen and Felson's motivated offender component could be divided into two contextual arenas in which predatory violations could occur: exposure to motivated offenders and proximity to motivated offenders. Exposure to motivated offenders refers to "the physical visibility and accessibility of persons or objects to potential offenders at a given time or place and proximity to motivated offenders refers to the physical distance between areas where potential targets of crime reside and areas where relatively large populations of potential offenders are found" (Cohen, Kluegel, & Land, p. 507). *Exposure* to offenders conceptually relies on victims exposing themselves or their property to risky situations and/or interacting with offenders is more important than *proximity* to offenders in which victims live in or frequent a high crime area where there is a higher population of persons with criminal inclinations (Meier & Miethe, 1993; Miethe & McDowall, 1993; Ronek & Maier, 1991). For example, a person exposes themselves to potential crime victimization when their home is unoccupied, they go to a bar or a night club, or engage in risky situations such as committing delinquent acts where they may be exposed to criminally inclined persons (Finkelhor & Asdigian, 1996; Meier & Miethe, 1993; Miethe & McDowall, 1993; Ronek & Maier, 1991) and a person increases their proximity to motivated offenders by living, working, or frequenting a high crime area (Finkelhor & Asdigian, 1996; McNeeley, 2015).

Within the art world art thieves' exposure to the illicit underworld may motivate them to steal art in order to elevate their criminal status. According to former art detective with Scotland Yard's Art and Antiquities Unit Charles Hill, some art thieves may steal a valuable masterpiece or other treasured work of art for a "trophy". The stolen art represents a display of exceptional criminal prowess (Bailey, 2004). Next, we move on to the second component of routine activities theory; a suitable or attractive target.

A Suitable/Attractive Target

The second component of RAT, a suitable/attractive target, has been defined by Felson and Cohen (1980) as an object or a person that contains one or all of these four features: value, inertia, physical visibility and accessibility (VIVA). Value refers to material or symbolic allure of the object. For example, in addition to flaunting their pilfered "trophy", former New York City art cop, Robert Volpe also suggests that some thieves preferred to steal art to "enjoy the high prestige within the criminal underworld because of their skill, the 'touch of culture' involved in their crimes, and the high social standing of the clients for whom they steal" (Conklin, 1994, p. 129).

The inertia of an object generally refers to the target's dimensional size, weight, and any features that prevent it from being removed. For example, a large David Smith steel sculpture bolted into the ground is more difficult to steal than a small Dale Chihuly glass vessel sitting on a pedestal unsecured.

An object's visibility is the prominence or prestige of the object which determines how likely it is that the object will be discovered if missing. As mentioned in chapter two,

art thieves have been unsuccessful selling famous painting stolen from prominent museums and this is largely due to the painting's visibility.

Accessibility refers to the location where a crime is to occur. Offenders consider whether a potential crime scene is easy to access and simple to escape from undetected. For example, according to Ho (1994), an art thief is more likely to steal from an art gallery that is located on the ground floor rather than one that located on the second or third floors of a building because it allows for an easier and quicker exit. Also, works that are close to the windows of a gallery are much more suitable targets than works that are displayed further back in the gallery. Cohen, Kluegel, and Land (1981) only included the target's value and inertia as a feature of target attractiveness. However, they added that value of a target's attractiveness also is based upon the desire of the offender to steal an object or attack a person solely for the thrill of the theft or violence; i.e. no other benefit is attached to criminal action. A prime example of this is the art theft that occurred on April 27, 2003, in Manchester, UK. Thieves stole three paintings from the Whitworth Art Gallery for the mere purpose of highlighting the gallery's poor security. In fact, the thieves left a note behind claiming this was indeed their motive. The paintings were later found in a tube behind a public toilet near the gallery.

(<http://www.theguardian.com/uk/2003/apr/28/ukcrime.arts>, electronically retrieved 7/4/2015).

Several measurements have been used to capture elements of target attractiveness. These include: the social class of the respondent, household income (Miethe, Hughes, & McDowall, 1991; Outlaw, Ruback & Britt, 2002; Zhang, Messner, Liu, 2007), ownership of household valuables such as VCR, home computer, or televisions (Miethe, Hughes, &

McDowall, 1991; Miethe & McDowall, 1993; Outlaw, Ruback & Britt, 2002; Rountree, Land & Miethe, 1994; Zhang, Messner, Liu, 2007)), cash on hand, wearing jewelry in public (Miethe, Hughes, & McDowall, 1991; Miethe & McDowall, 1993; Outlaw, Ruback & Britt, 2002; Rountree, Land & Miethe, 1994), and basic demographics of victims such as age (Fisher, Cullen, Turner, 2002), race, gender, marital status (Fisher, Cullen, Turner, 2002), and household/family income (Cohen & Cantor, 1981; Miethe, Hughes, & McDowall, 1991; Miethe & McDowall, 1993; Moriarty & Williams, 1996; Rountree, Land & Miethe, 1994; Sampson & Wooldredge, 1987). Specific to the target attractiveness for assault victimization are alcohol and drug usage because if a victim is more incapacitated they are less able to defend themselves against perpetration—making them a more suitable target (Lasley, 1989).

Similar to the VIVA model, previously discussed, Finkelhor and Asdigian (1996) divided the concept of target suitability into distinct categories by proposing that potential targets possess three features: target vulnerability, target gratifiability, and target antagonism. Target vulnerability refers to a victim's susceptibility to risk due to a victim's small stature, lack of physical strength, or weakened emotional state. Target gratifiability references characteristics that make the victims a source of gratification to an offender such as the female gender which can fulfill a sexual need to control, manipulate, or violate. Finkelhor and Asdigian (1996) refer to juvenile sexual assault as an example to illustrate this concept. Target antagonism accounts for features of a victim that incite anger, jealousy or resentment in an offender, such as a victim's race or sexual preference, poor behavior within the home, or being disabled. These target features could possibly be applied to victimization of inanimate objects such as art vandalism. Many art

works are vulnerable to destruction simply due the delicacy of the materials used to construct them and/or the ease at which they are to attack due to a lack of protective barriers. In 2014, the Delaware Art Museum was victimized by a group of visitors who effortlessly placed stickers on eleven works including paintings, an outdoor statue, and frames (<http://www.delawareonline.com/story/entertainment/arts/2014/05/01/museums-struggle-protect-art-public-defacement/8574121/?from=global&sessionKey=&autologin=>, electronically retrieved December 12, 2015). Target gratifiability has been exhibited by art vandals such as German serial art vandal mentioned in chapter three, Hans Joachim Böhlmann, who declared the reason behind his destruction of over 50 works over several decades beginning in 1977 was in response to his personal sense of injustice. He proclaimed, “I have hated all art since my wife’s death and draw great satisfaction from destroying it” (Gorvy, 1993, p. 60) Böhlmann’s wife had died a few days prior to the beginning of his string of attacks and the vandal himself had recently been diagnosed with a brain tumor. (Friedberg, 1985; Gamboni, 1997; Scott, 2009). A prime example of target antagonism in which vandals destroyed a work of art due its featured imagery occurred in October of 2014, in Paris, France, when vandals deflated artist Paul McCarthy’s 79-foot inflatable green sculptural installation, *Tree*, that was similar in shape to a Christmas tree. However, according to the artist, the work was also inspired formally by an anal plug (butt plug) and admitted that the work was meant to be a joke. The vandals failed to appreciate the humor and they cut the cables supporting the piece in Paris’ Place Vendôme because the work resembled a giant sex toy which outraged the vandals and several conservative Parisians (reference,

<http://www.telegraph.co.uk/news/worldnews/europe/france/11171441/Vandals-deflate-giant-sex-toy-sculpture-in-Paris.html>, electronically retrieved December 12, 2015) .

Target suitability was further re-conceptualized in 1999 when Ronald V. Clarke published his government report, *Hot Products: Understanding, Anticipating and Reducing Demand for Stolen Goods*. He expanded upon Cohen and Felson's (1980) concept of VIVA due to the belief that VIVA was a primary attempt to describe desirable aspects of targets of a wide variety of crimes. Clarke (1999) created his own characteristics of target suitability specifically for stolen objects: CRAVED. The components of Clarke's characterization of targets refer to whether the stolen object is: concealable, removable, available, valuable, enjoyable, and disposable. Concealable items such as a pair of earrings can easily be hidden on a thief's person as opposed to a piece of luggage. Removability pertains to objects that are lightweight and not secured. They are easily removed from homes, stores, cars, etc. Availability is a necessity to be a hot object. An object must be in existence in order to be stolen. Clarke (1999) explains, for example, that there was no computer theft before there were computers. Availability also refers to the visibility of potential targets. Cars that are parked on the street are at greater risk of being stolen as opposed to cars parked in a garage. Valuable goods are more desirable targets than less valuable ones. Clarke (1999) holds that thieves are more likely to steal goods which command a higher resale value on the black market or in pawn shops. Value can also refer to personal value such as auto thieves that steal simply for joyriding and selected their targets based on the vehicle's performance, rather than monetary value. Enjoyability is a feature of potential targets that attracts burglars. Thieves are more likely to steal objects that provide enjoyment, such as a television as

opposed to a cappuccino machine. Last, disposability refers to whether a stolen good is easy to sell. A thief usually needs a plan of how he/she is going to dispose of their loot or a fence to do the job for them. If the item is not easily disposable, it is less likely to be stolen. As mentioned earlier, stealing art is much easier than selling it, whether it be in the legitimate or illegitimate art market.

Lack of a Capable Guardian/Guardianship

Cohen, Kluegel, and Land's (1981) version of guardianship is more all-encompassing than Cohen and Felson's lack of a capable guardian definition. Accordingly, guardianship is "the effectiveness of persons (e.g. housewives, neighbors, pedestrians, private security guards law enforcement officers) or objects (e.g. burglar alarms, locks, barred windows) in preventing violations from occurring, either by their presence alone or by some sort of direct or indirect action" (p. 508). This definition introduces the inclusion of professional security personnel and non-human protective measures that Cohen and Felson had not yet considered.

Guardianship has commonly been divided into two classifications: social and physical. Social (interpersonal) guardianship is measured by household composition (both membership demographics and quantities such as living alone or with others) (Fisher, Cullen, Turner, 2002; Outlaw, Ruback & Britt; Miethe, Hughes, McDowall, 1991, Miethe & McDowall, 1993; Rountree, Land, & Miethe, 1994), unemployment rates (Miethe, Hughes, McDowall, 1991), and the police (Fisher & Wilkes, 2003) are also included as potential guardians within the category of social guardianship. Physical guardianship (target hardening) is represented by situational or safety measures

implemented by residents such as locking the door when leaving a residence, extra locks, burglar alarms, guard dogs, leaving lights on, special outside lighting, owning a weapon, and joining a neighborhood watch program. (Miethe, Hughes, & McDowall, 1991; Meier & Miethe, 1993; Miethe & McDowall, 1993; Rountree, Land & Miethe, 1994).

In Breetze and Cohn's (2013) study of residential burglary in gated communities in Tshwane, South Africa, the researchers state that within the context of burglary, "social guardianship derives from surveillance activities of people while physical guardianship refers to devices that offer protection such as fences, locks, dogs, and alarms (p. 60)." The researchers also point out, "the physical structure of gated communities with features such as security guards and patrols (often armed), walls and/or electrified fences surrounding the community, controlled access, and CCTV monitoring at entry/exit points should result in significantly increased levels of both social and physical guardianship" (p. 60).

Interestingly, asking a neighbor or someone in a college dorm to watch one's property while either away from one's residential space have been designated as both as measures of social guardianship (Fisher, Sloan & Lu, 1998; Fisher & Wilkes, 2003; Tseloni, Wittebrood, Farrell, & Pease, 2004) and physical guardianship (Miethe & McDowall, 1993; Outlaw, Ruback, & Britt 2002; Rountree, Land & Miethe, 1994). Within the studies in which the measure was categorized as physical guardianship, it was grouped in with other physical guardianship measures such as owning a burglar alarm and leaving the lights on. The variable either reduced victimization or had no statistical significance.

Additionally, many studies do not differentiate between physical or social guardianship; measures are simply identified as “capable guardianship” or “guardianship” (Cass, 2007; Coupe & Blake, 2006; Fisher, Daigle, & Cohen, 2009; Rice & Smith, 2002; Zhang, Messner, & Lui, 2007).

Further, scholars dispute some measures of social and physical guardianship in terms of the proper guardianship classification of guardianship or even if the measures count as guardianship at all, such as security guards (see discussion below).

CCTV is a form of guardianship that is a topic of scholarly discourse. It should be noted that Hollis-Peel, Reynald, van Bavel, Elffers, and Walsh (2011) state that when CCTV is being actively monitored, it is a form of human guardianship rather than physical guardianship or target hardening. However, for the purposes of this study, CCTV will be classified as a form of physical guardianship regardless of whether or not it is being actively monitored or not since it is used in museums and galleries in both capacities.

Closed Circuit Television (CCTV) was first used in the private retail industry in the United Kingdom and in the banking industry in the United States in the 1960s for crime prevention as a form of formal surveillance (Welsh & Farrington, 2009a). Interestingly, in both public and private settings, CCTV technology also helps law enforcement solve crimes and aids in the prosecution of suspected offenders. In terms of crime reduction, the logic behind this surveillance technology is that when offenders observe the cameras they will be deterred from committing crimes due to the possibility of being caught on camera. Paradoxically, Welsh and Farrington (2009b) also note that CCTV may also give citizens within public spaces a false sense of security which, in

turn, could create increased vulnerability to potential crime victims. For example, an art gallery that has CCTV cameras installed throughout their space may hang their paintings close to entrances and exits assuming this is safe to do because the cameras are a deterrent to art thieves or vandals. However, the placement of the artwork within an exhibition space can actually make it easier for a thief or vandal to steal/damage the work, such as the art theft from the Fine Art Firm (FAF) art gallery in Louisville, Kentucky during the evening in October of 2014. According to the surveillance camera, a lone male art thief conducted a “smash and grab” of a small bronze statue, worth \$9,000.00. The sculpture was displayed in the gallery’s front window and has not been recovered. However, the thief was arrested and prosecuted (<http://www.wlky.com/news/man-accused-of-stealing-valuable-art-from-downtown-gallery/29127482>, electronically received December 21, 2015).

According to the *Security in Museums, Archives, and Libraries* manual (2003), CCTV in museums has numerous benefits: deterrence, aid to keeping watch over works, recording for post-incident investigation, entry control, aid to management, and site monitoring after hours. Despite the listed benefits of CCTV, many art thefts captured on surveillance cameras go unsolved. For example, on July 16, 2015, two men stole Rodin’s bust, *The Man with the Broken Nose* (1863), from the Ny Carlsberg Glyptotek Museum in Copenhagen, Denmark during broad daylight. Apparently, none of the security guards, museum employees, or visitors noticed the men steal the \$300,000, 10.5-inch work from the pedestal where it was displayed and supposedly secured. The event was captured on CCTV. Additionally, the two men were also observed on CCTV visiting the museum a week before the theft. According to BBC News, the Danish police suspect that the two

men had loosened “the sculpture from its base and disabled the alarm” during their prior appearance at the museum (<http://www.bbc.com/news/world-europe-34013451>, electronically retrieved August 22, 2015).

With regards to art vandalism, CCTV has provided some relief to cultural institutions. According to the Washington Post in 2007, two Smithsonian Art Museums had experienced a slew of vandalistic perpetration such as vandals writing on works and visitors kissing or spitting on the art on display. This criminal activity was affiliated with a lack of patrolling security guards. Once the surveillance cameras were installed, the incidences of vandalism ceased. The presence of the cameras was presumed to deter potential vandals (<http://www.washingtonpost.com/wp-dyn/content/article/2007/09/28/AR2007092801990.html>, electronically retrieved October 18, 2015). As the study of guardianship became more expansive, the concept was divided into three components—the handler, place manager, and super controllers.

The Handler

In 1986, Marcus Felson introduced the concept of “the handler” to the field of criminology as a component of guardianship whose role is to discourage offenders (the handle) from committing crimes due to the emotional bond an offender forms with his handler such as a parent, teacher, or coach. Felson (1986) contends that once potential offenders deviate from their handlers, they are more inclined to perpetrate crimes.

The handler concept inspired Eck (1994) to create his Crime Triangle. This triangle consists of three sides; each with two supporting players who comprise a revised version of routine activities theory: 1) handler/offender, 2) place manager/place setting,

and 3) guardian/target. Here guardianship has been broken down into three subtypes: handlers, place managers, and guardians. According to Eck (1994), a revised version of Routine Activities Theory is, “Crime occurs when there is a convergence in time of a desirable target without an effective guardian, a motivated offender without an effective handler at a facilitating place without an attentive manager” (p. 29).

Within the context of art crime this theoretical based concept could apply to juvenile art vandals. As stated in chapter two, art vandalism is often perpetrated by minors. For example, in late evening of December 14, 2017, in Calgary, Canada several minors boys were captured on CCTV vandalizing three student works on display at Alberta College of Art and Design (ACAD). The vandalistic acts took the form of smashing and painting over the art (<https://globalnews.ca/news/3922887/calgary-police-investigate-after-student-art-vandalized-at-alberta-college-of-art-and-design/>, electronically retrieved April 5, 2018). The vandals were alone without adult supervision or anyone to “handle” their deviant behavior.

Place Managers

The second subtype of actor within Eck’s crime triangle are place managers. Place managers are a form of social guardianship. They are actors who discourage crime and reduce the potential for criminal activity by their mere presence and daily activities at specific places. These managers are not guarding a potential target; rather, these actors are controlling activities at specified locations. Place managers are also referred to as controllers. Examples of place managers are business owners, store managers, landlords, store employees, security guards, or maintenance workers (Eck, 1994, 1995; Felson,

1995; Mazerolle, Kadleck, & Roehl, 1998). Felson (1995) created four levels of crime discouragement for place managers—personal, assigned, diffuse, and general. These levels of place management, while labeled differently, have been empirically examined.

Mazerolle et al. (1998) focused specifically on the role of the four levels of place managers within the context of drug dealing in 100 street blocks in Oakland, California. These researchers labeled the four levels of place management responsibility as: primary, secondary, tertiary, and quaternary. Accordingly, primary responsibility for places is assigned to the owners of places or those people who have a high stake in the place. Within the art museum context, the person with the primary responsibility is the museum director who oversees every aspect of the museum's functioning. Secondary responsibility is delegated to the people who are employed to regulate behavior and are often assigned a crime prevention role, such as a beat officer, either directly or indirectly at particular places. At a museum, this individual is generally a private or contract security guard hired by the museum with or without peace officer powers. Also, within a museum context, all museum employees, other than the executive director, such as a curator, a registrar, or a human resources officer are also categorized at the secondary level of responsibility.

Place managers have tertiary responsibility for discouraging crime when they are assigned generally to a task, but not employees of a business such as a service technician or delivery person. At a museum, the person who delivers packages to the museum usually has to sign in on the visitor log and this person could notice unfamiliar faces claiming to work for another delivery company trying to gain access to the museum close to closing time. Lastly, people can assume general or quaternary responsibility by virtue

of their occasional presence at a place such as a customer. When museums hold blockbuster exhibitions such as a retrospective of Monet's works, the museum's foot traffic is increased exponentially. Photography is allowed at many museums and the constant photographing of works may discourage an art vandal from harming an artist's masterpiece because there will be a strong chance that any destructive acts are likely to be captured on a camera or a smart phone. Additionally, it will be difficult for the vandal to get close to his or her intended target within a crowded gallery.

Mazerolle et al. (1998) also notes that many place managers take initiative and extend their place management duties beyond their specific areas of supervision. For example, a store owner may organize community crime control activities that unite an entire street block. Within the art world, it is key for all the place managers within a museum or gallery to unite together to prevent criminal perpetration. Mike Kirchner, former director of security for Harvard Art Museums, remarks that the first line of defense in protecting artworks is "alert guards and museum employees". He further states, "Everyone has to start a relationship with a smile, a nod, and a good morning with people coming into the museum. You can scan the crowd, you can try to look for people who don't want to make contact. Everyone should always be on alert"

(https://www.washingtonpost.com/lifestyle/style/museums-fine-art-of-protecting-masterpieces/2011/08/15/gIQAfRfvHJ_story.html, electronically retrieved December 9, 2015). Moreover, Meredith, Kadleck, and Roehl (1998) reveal that when place managers act together as a cohesive group, crime rates are reduced. Anthony Amore, the head of security at Boston's Isabella Stewart Gardner Museum, advises in his interview with Noah Charney (2009), to "engage the entire museum community, including employees

and volunteers, to take an active role in the security of the facility. Let them know how important they are to identifying problems and potential thefts or vandalism. Museum frontline staff can be invaluable in identifying or taking immediate action in the case of an incident of theft or vandalism” (p. 135). Furthermore, a collections manager at a large museum noted in Scott’s (2009) study, “I think good invigilation is 95% of the answer” to effectively reduce art vandalism. Invigilation is the supervision of others and not necessarily by security personnel.

Museums and galleries should also exercise social cohesion within their respective communities by communicating with each other in order to disseminate information regarding suspicious visitors and activities.

Security Guards and Police Officers As Place Managers

It should be noted that Mazerole et al. (1998) included beat officers within their classification of place managers as with a guardianship role. However, there is somewhat of a debate within the literature as to whether law enforcement officers should be considered place managers or a form of physical target hardening. Some scholars have considered place managers or a form of physical target hardening. Some scholars have argued that police officers and/or security officers act as formal guardians (Bosse, Effers, & Gerritsen, 2010; Lawton, Taylor, Luongo, 2005) and others have argued that police provide guardianship to their communities either merely their physical presence and surveillance actions, or explicit or implicit acknowledgement of their ability to administer criminal sanctions (Crank et al, 2010). They also point out that frequent positive police visibility within a community should establish the police as trustworthy, which in turn, can inspire residents to act as informal guardians within their neighborhoods.

Conversely, Felson and Clarke (1998) encapsulate Cohen and Felson's (1979) original conception of a guardian and maintain that a guardian is not a security person or a police officer; only a non-law enforcement affiliated person whose presence or proximity would discourage a perpetrator from carrying out their criminal action. Felson and Clarke (1998) cite examples such as a resident, a neighbor, or a co-worker. In addition, Felson (2006) adapted the definition to "a guardian keeps an eye on the potential target of a crime. This includes anybody passing by, or anybody assigned to look after people or property. This usually refers to ordinary citizens, not police or private guards" (p. 80). Further, Felson and Eckert (2016) add "that guardians should not be mistaken for police officers or security guards, who are very unlikely to be on the spot where a crime occurs" (p. 31). While there continues to be a debate surrounding the categorization of security personnel, for the purposes of this study, private and contract security officers, school resource officers, and campus police officers are considered formal guardians.

Welsh and Farrington (2009a) report that security guards are a growing industry who outnumber sworn police officers. According to Welsh, Mudge, and Farrington (2010), security guards' main function is to act as a deterrent to potential criminal offending. They also monitor and are expected to intervene if they witness any criminal or potentially criminal activity. However, security guards are rarely armed, and they lack the arrest powers of formal peace officers.

Many museums utilize contract private security officers for their after-hours events and special exhibitions. Scott (2009), in her study of iconoclasm in the UK, points out that some museums might contemplate replacing their in-house security staff with

private security guards in order to more effectively prevent vandalism. However, Scott (2009) is strongly opposed to that measure due to the fact that contract guards, despite their expertise in security related incidences, are not familiar with an institution's collection or proper methods of caring for these collections. In addition, according to Reynald (2010), "Felson's (2006) theory that that contextual familiarity and knowledge is a fundamental precondition for capable guardianship, as it enhances the ability to discern individuals who are at a place for illegitimate purposes" (p. 383). Felson (2006) supports the notion that in-house guardians possess superior familiarity and awareness compared to a non-permanent, contract guardian.

However, regardless of the effectiveness or ineffectiveness of the various physical and social guardianship implementations, controlling crime does not stop at the place management level of responsibility. Super-controllers monitor and give incentives to place managers, handlers, and guardians to limit criminality.

Super controllers

Super controllers are the entities (the media, the government, institutions, organizations, etc.) who exercise power and control over place managers, guardians, and handlers by providing incentives to them to prevent and control crime (Sampson, Eck, & Dunham, 2010). In their analysis of super controllers, Sampson, Eck, & Dunham (2010) explore why some crime prevention strategies fail and under what circumstances crime control is unsuccessful. Sampson et al. (2010) contend that the controllers (place managers, handlers, and guardians) have the tools to optimize crime control activities but for various reasons they do not utilize these resources. For example, a particular museum

may be continually robbed. Several reasons for the repeated victimization could be because the museum does not allocate enough of their budget to update security equipment, run background checks on all employees and volunteers, have internal policies that require security personnel make sure all doors are locked at night, do not inventory storage areas once a week, and do not require bags are checked upon entry and exit of the museum.

According to Sampson, Eck, & Dunham (2010), the incentives that super controllers exert have the potential to be positive or negative. For example, in the scenario mentioned above, the museum's super-controllers, namely the board, may threaten to leave the board unless changes are implemented to remedy the museum's grave security issues, which would leave the museum without a governing body and support. Also, the museum may lose their art insurance policy and valuable donors will lose confidence in the museum and cease any charitable donations. In addition, other museums will stop lending works to the museum which is continually victimized by thieves and the negative media coverage may also deter potential museum visitors.

Conversely, if a museum demonstrates exemplary security procedures they will be positively reinforced by their super controllers. For example, the Dallas Museum of Art, was designated by the Transport Security Administration (TSA) as a certified cargo screening facility in 2013 in order to ensure the works receive proper handling and care during the shipment process. The clearance level has only been afforded to very few American museums. In order to qualify for this certification, the museum had to undergo a year and a half certification process and now the museum can continue to maintain their high quality of security and care of its works (<https://www.dma.org/press-release/dallas->

[museum-art-receives-transport-security-administration-certification-ship-works](#),
electronically retrieved August 9, 2015) .

Guardianship adopted a multi-contextual meaning when Wilcox, Madensen, and Tillyer (2007) expanded guardianship to include not only several forms of individual level guardianship methods but also several forms of neighborhood level methods of guardianship. This study improved upon former studies of guardianship at both the individual and neighborhood level by examining four forms of guardianship methods rather than only one or two. The forms of guardianship examined at both the individual and neighborhood levels are physical guardianship measures of target hardening (safety precautions) such as use of a burglar alarm, personal guardianship measures of home occupancy such as the number of days a resident is present at their home, social guardianship measures of informal social control such as having a neighbor watch over one's home when away, and guardianship by natural surveillance through environmental design of the residential spaces. These are features of residential properties that enhance natural surveillance such as ground floor windows. Wilcox et al. (2007) found that the effectiveness of the individual level measurements is augmented when the neighborhood level guardianship measures increased. Accordingly, "individual efforts are most effective when carried out in neighborhoods where many people are making similar efforts. Because collective effort has the potential to "make or break" individual effort, crime prevention policy must be multi-level with a clear focus on enhancing environmental or collective guardianship" (Wilcox, Madensen, & Tillyer, 2007, p. 794).

Lastly, as methods and measurements of crime prevention evolved, guardianship studies moved from the arena of mere passive observation and secondary data collection

to active field research observation. Criminologists coined this new area of scholarship “guardianship in action.”

Guardianship in Action

Active surveillance became a bold new approach to studying crime prevention when Reynald (2009) added a new observational action-based research approach, “guardianship in action” to the body of guardianship studies. Reynald (2009; 2010; 2011) measured what she referred to as guardianship intensity. Reynald’s (2009; 2010; 2011) studies measure the guardianship intensity of household residents and neighborhoods by observing residential guardianship in real time via field research rather than creating proxy measures to test guardianship capability. According to Reynald (2009), “residential guardianship intensity is the product of a two-fold process that involves both the physical potential to carry out supervision of people and places, as well as, the acts of monitoring and intervention when necessary” (p. 1). Reynald (2009) proposed a four-stage model of guardianship intensity in which researchers could observe residents’ guardianship actions or inactions. Reynald’s (2009) novel four stage measure of guardianship is as follows. Stage one is invisibility, which is when the resident is not home or visible.

However, due to the fact that at level 1 there is no potential guardian, guardianship in action technically only includes three levels of guardianship potential: availability, capability, and willingness to intervene.

Interestingly, Reynald’s (2009, 2010) four stage Guardianship In Action model is applicable to the art world. Reynald’s (2010) study, in particular, applies to the consideration of why capable, available guardians, such as art museums or art galleries,

do not become active or intervening guardians. As mentioned in chapter two, the art world and the culture in which it thrives is notorious for perpetuating the shroud of secrecy in which it operates by not reporting any forms of art crimes perpetrated by outsiders, protecting its own malfeasance, avoiding any transparency within the industry, and failing to comply with ethical regulations set forth by the various governing bodies within the art world. Art museums and art galleries have a fiduciary responsibility to maintain the integrity of its own institutions and the profession itself by fostering forthrightness and industry unity. Paradoxically, the museum and gallery community may not be entirely culpable for their reluctance to become active guardians. Fear of negative reactions from the public and art industry contemporaries accounts for many victims of theft and vandalism to remain quiet when victimized. Also, when a missing work is discovered there may be some confusion as to why it is missing. Was it stolen or merely lost in storage. Lastly, when a vandal or thief is armed with a lethal weapon, museum personnel are hesitant to intervene for fear for their own safety and the safety of other staff or visitors who may be present during the criminal perpetration.

GIA concludes the discussion and measurement of the three components of routine activities theory to date. The next section addresses the various tests of RAT within several contexts, as well as for a range of forms criminal perpetration.

Empirical Effectiveness of Routine Activities Theory

Routine Activities Theory has undergone a multitude of tests within various contexts, crime typologies, and levels of analysis. Overall, RAT has proven to be a theory with

diverse predictive utility. However, this theory and/or specific components of the theory, has had limited success regarding some specific criminal victimization and environmental arenas. Since this dissertation is addressing and analyzing the guardianship construct of RAT, the review of the analytical effectiveness will only focus on guardianship. The next section begins with a brief summary of tests of Cohen and Felson's guardianship component.

Guardianship empirically tested

The discussion of this theoretical construct will commence with the analytical successes and failures of tests of physical and social guardianship and then proceed to a specific empirical examination of CCTV and security guards. Tests of measures of guardianship have produced mixed results; especially in the area of physical security measures. This may be due Hollis-Peel, Reynald, Bavel, Effer, & Welsh's (2011) assertion of the lack of research in this area of scholarly exploration.

Physical and social guardianship

As mentioned above, many scholars have divided the third component of RAT into two categories: social and physical guardianship. Briefly, physical guardianship is "the implementation of situational or target hardening measure (e.g. burglar alarms, door locks, window locks, guard dogs)" (Fisher & Wilkes, 2003, p. 531). Social guardianship is informal and formal surveillance of people and objects by property owners, neighbors, friends, passer-byers, and police/security personnel. Without the utilization of either form of guardianship, offenders are at a distinct advantage to commit a predatory violation.

The following section discusses the empirical literature on physical and social guardianship.

Residential Victimization

Meithe and Meier (1990)'s study on residential burglary, personal theft, and assault measured physical guardianship by whether the respondent carries a weapon or has a burglar alarm. It was determined that lack of possession of these protective measures increases one's risk of burglary and violent victimization, but this measure was found to be insignificant when predicting theft victimization. Meithe and Meier (1990) measured social guardianship by whether the respondent lives alone or has at least one person over the age of 16 living with them. The study determined that persons who lived alone were at greater risk for all three forms of victimization.

D'Alessio, Eitle, and Stolzenberg (2011) analyzed how unemployment rates affect residential burglary rates during two time periods: weekday residential burglary (6 a.m. – 6 p.m.) and during the weeknights/weekend. Their results confirmed that unemployment reduces residential burglary rates of incidences during weekday hours. The researchers did not find any statistically significant relationship between unemployment and residential burglary rates during the weeknights or weekends.

Within Breetzke and Cohn's (2013) research on the effects of gated barriers on day time and night time burglary rates in gated and partially gated communities Tshwane, South Africa, three measurements of guardianship were utilized. These variables were: population density; road density; and partially or fully gated. Population density was chosen by the researchers due to previous research indicating that the greater the number

of persons in an area could increase the rates of burglary by those potential offenders who live close to the affluent gated communities or increase the potential for more capable guardians which would decrease burglary rates. Breetzke and Cohn (2013) hypothesized in the context of their study that a pool of motivated offenders living within close proximity to the affluent gated communities would increase burglary rates. Gated communities contain aspects of both social and physical guardianship.

Contrary to their hypothesis that living in a gated community would decrease the rates of residential burglary, Breetzke and Cohn (2013)'s analysis revealed that living within a gated community actually increases one's chances of daytime and night time burglary victimization. Both the variables of population density and partially/fully gated communities are positively associated with day time and night time victimization within an enclosed neighborhood in South Africa. Road density was not found to be a statistically significant guardianship measure.

In conclusion, guardianship measures utilized within the context of residential burglary, appear to produce for the most part inconsistent Physical security measures generally reduce victimization or have no significant effect on victimization and population density both increases and decreases victimization.

Empirical Tests of Residential Guardianship In Action

Reynold's (2009) first test of her new Guardianship In Action measurement scheme was conducted by field observation of 814 properties located on randomly selected street segments in three neighborhoods in The Hague, Netherlands, between 9 a.m. and 7 p.m. during June and July of 2007. Each property was scored for guardianship

intensity observations. A score of 1 was given to homes where the guardian was invisible up to a score of 4 if the guardian demonstrated intervention by interacting with the field researcher. Reynald (2009) notes that two limitations to this study are that some capable guardians (level 3) may not have intervened due to the fact that the field researcher was not perceived as a security threat and the issue that each property was observed at only once during daylight hours.

Within the evaluation of this study, the researchers also empirically tested the validity of the measures of guardianship in action with the presence of environmental correlates (a territorial definition of each property, surveillance opportunities for each property, and the image/maintenance of each property), the social interaction and cohesiveness between neighbors, and the activity level within the neighborhoods). All of these factors theoretically impact the residents' guardianship intensity capacity. Simply stated, are the property and neighborhood environment of each resident ideal to exercise the highest level of guardianship intensity? The results indicate that higher levels of surveillance opportunities correlate with higher levels of guardianship intensity and when territoriality levels are low in order to optimize the surveillance potential of each resident. A positive correlation is also representative of the relationship between the social interaction between neighbors and guardianship intensity. When the researchers examined the relationship between the effectiveness of guardianship intensity and activity level of the neighborhoods, the relationship was negatively correlated; but statistically insignificant. The primary results of the study indicate that "property crime decreases consistently guardianship intensity increases at each stage although the decrease between the monitoring and intervening stages is not significant" (Reynald, 2011, p. 70). Hollis-

Peel and Welsh (2014) replicated Reynald's (2009) test of the role of guardianship in explaining property crime by utilizing Reynald's GIA measures in Boston neighborhoods and Hollis and Welsh (2014) found the GIA instrument to be both reliable and valid.

Reynald (2010) expanded upon her 2009 guardianship in action study, by interviewing 255 residents in 13 neighborhoods within the Dutch province of South-Holland in April of 2008 about their guardianship behaviors and willingness to intervene in order to explore the reasons why available, capable guardians can or cannot be transformed into intervening guardians; i.e. what factors contribute to distinguishing between why some guardians chose to remain in the capable guardianship stage and other guardians advance to the stage of active guardianship.

In this study, Reynald (2010) proposed that becoming an active guardian is dependent on three broad factors: whether a guardian chooses to monitor, if monitoring a guardian's ability to detect criminal activities and questionable persons who might commit criminal activities, and whether or not the guardian who has detected a criminal activity chooses to intervene either indirectly by calling the police or another authority or directly intervening either verbally or physically.

Of the 255 residents interviewed, 217 revealed that they supervised their residential space. 15% of the sample reported that they did not have the ability to identify specific cues that would cause suspicions of criminal activities or suspicious persons. 9% of the sample reported that they chose to ignore something suspicious because they did not want to get involved. 80% of the sample reported that they would initiate some form of either indirect or direct intervention action if they noticed criminal activities. Of the 80% of respondents who would intervene, 41% preferred to take indirect intervention and

16% indicated they would directly intervene. Lastly, 23% of the residents agreed that they would intervene either indirectly or directly. However, the form of intervention depended upon the seriousness of the activity.

Reynald (2010) also examined the impact of a resident's neighborhood characteristics such as level of crime, income levels of residents, and ethnic heterogeneity within the neighborhood, influence a resident's decision to intervene. Results indicate that persons who live in neighborhoods with lower crime levels, residents with higher incomes, and neighborhoods with a higher percentage of ethnic homogeneity are more likely to supervise their properties and intervene either directly or indirectly when a criminal or potential criminal situation arises.

Lastly, Reynald (2010) examined the primary categorical factors which impacted a resident's willingness to intervene. These factors are: whether or not a resident feels a sense of obligation or responsibility to intervene, a resident's perception of how their neighborhood will react to intervention, whether or not a resident feels that they are trained to intervene, whether or not a resident feels there is a risk to their personal safety, whether or not a resident has the proper tools for protection immediately available, and whether or not a resident feels physically competent to intervene.

In sum, this study moves beyond mere observation of residential guardianship levels to the verbal inquiry of reasoning behind a residents' choice to intervene or not. Adding a qualitative component to a quantitative concept allows researchers to acquire advanced insight into guardian's thoughts and behaviors.

College and University Victimization

In their study, examining the factors related to forms of on-campus violence and theft victimization, Fisher, Sloan, Cullen, and Lu (1998) utilized only components of social guardianship for the individual-level measures and a general guardianship heading for institutional level measures. Three measures are used on the individual level: living alone without roommates on campus, participating in a non-mandatory crime prevention or crime awareness seminar, and how often someone is asked to watch personal property while items are left unattended. The last variable is only used in theft victimization analysis. Three measures of guardianship are used on the institutional level. Fisher et al. (1998) did not specify whether these variables are measures of social or physical guardianship. The first measure includes three components and it is only used for predicting violent victimization: a university's requirements for attending a mandatory rape prevention program, a mandatory alcohol awareness program, and a mandatory drug awareness program. The researchers also examined the effect of a campus wide crime watch which is only used in the theft model. The last contextual guardianship measure is the total number of full time guards (either sworn officers or private security guards) per 1,000 students. Findings indicate, that at the individual level, attending a non-mandatory crime prevention or crime prevention awareness seminar reduced a student's risk of violent victimization and asking someone to watch unattended property reduced a student's risk of theft victimization. No other individual level variables were significant and none of the institutional level variables were significant in predicting either violent or theft victimization on the twelve college campuses.

Mustaine and Tewksbury's (1998a) guardianship measures consisted only of target hardening measures and were categorized under "home security measures" such as installing a security system in their study of minor and major theft victimization of college students. Students who had a dog in their residence decreased their chance of minor theft victimization and students who both installed extra locks on their door and had dog in the residence reduced their risk of major theft victimization. No other physical guardianship measures were statistically significant with predicting theft.

Even though Tewksbury and Mustaine's (2003) examination of college student's exposure, proximity and target suitability to potential offenders as a predictors of a student's use of self-protective measures did not utilize guardianship as an independent variable, the descriptive statistics surrounding the self-protective measures is worthy of discussion. Mace (21.5%) and guns (17.0%) were the objects used at the highest percentages and forty-two percent of the sampled population uses some form of self-protective measure. Tewksbury and Mustaine (2003) note that they "find strong support for the notion that routine activity theory can be used as a theory that explains all elements of the criminal incident not just the frequently assessed victimization risks of individuals" (p. 323). Tewksbury and Mustaine (2003) further posit that "this analysis suggests the exploration of guardianship element of routine activity theory is a valid and valuable endeavor. The importance of guardianship should not be taken as a given but considered more fully as a potential influence over criminal events" (p. 323).

Regarding vandalism, the measurement of guardianship has been more limited. Tewksbury and Mustaine's (2000) operationalization of capable guardianship was categorized by, "types of security present at residence." These variables represent

measures of target hardening such as owning a burglar alarm, extra exterior and interior lights, extra locks on doors, and owning a dog. None of these measures were significant in predicting the odds of increasing or decreasing one's chances of vandalism victimization.

Lagrange (1994) operationalized guardianship in general as residential areas with a high rental occupancy compared to home ownership, the number of young (age 20-24) male residents, the number of single males residents, unemployment rates, the number of residents who are new to the area (less than a year) as representative of transitory rental trends, and population density. The findings showed that the variables that increased the rates of vandalism were high unemployment rates, high rental occupancy and high proportion of young male residents. The variables that decreased the rates of vandalism were the number of new residents and a high population density.

In conclusion, except for Lagrange's (1994) study which not utilize college students as respondents, guardianship measures have been shown to be primarily non-significant in preventing or promoting college student victimization. Other than Tewksbury and Mustaine's (1998) study of major and minor theft of college students, no other study found any significance with any variables representing physical guardianship measures. Fisher et al.'s (1998) work on college student's violent and theft victimization only resulted in one measure of social guardianship and one measure of general guardianship (which is actually a measure of social guardianship) producing any significant results. Therefore, even though a few studies were carefully examined, it appears that guardianship is either an ineffective crime prevention or promotion measure

or scholars and college administrators should conceptualize how they are enacting guardianship on college and university campuses.

Grades K-12 Student Victimization

As the violence in primary schools continued to escalate, many schools adopted several guardianship techniques such as: the placement of full time police officers (school resource officers), private security guards, CCTV, metal detectors, identification cards for students, staff and visitors, clear-back pack policies, lockless student lockers, staff training on lock down procedures, campus design changes, removal of student lockers, walkie-talkies for administrators, and frequent hall monitoring (Addington, 2009; Johnson, 1999).

Schreck, Miller and Gibson's (2003) research on risk factors determining victimization of junior high and high school students utilized many measures of social and physical guardianship. However, the measures were only present in the school context and the student individual characteristics category. Ten variables measuring guardianship were utilized within the school context. The target hardening measurements included: guards, metal detectors, locked doors, visitor sign-in, and supervision of hallways, locker checks, and hall passes. Three additional guardianship measures within the school category were: restroom limits, drug education, and corporal punishment. Three social guardianship measures were tested within the individual characteristics category: the student's first year at the school, does the student believe that the rules are unfair, and does the student express alienation toward the school. The other guardianship measure is designated as target hardening in which a student brings a weapon to school to

protect himself or herself. Locker checks, bringing weapons to school, belief that rules are unfair, and alienation toward school increased a student's risk of overall victimization. Only three guardianship measures increased a student's odds of violent victimization were a school's use of corporal punishment, bringing a weapon to school, and belief that rules are unfair. Similar to the violent victimization analysis, only three guardianship variables were found to increase a student's odds of theft victimization: locker checks, belief that rules are unfair, and alienation toward school. No guardianship measures were found to reduce any form of victimization. Lastly, of particular interest is that none of the security measures put in place at schools had any significant effect at either reducing or increasing the odds of victimization other than locker checks which increased the odds of student overall and theft victimization.

Burrow and Apel's (2008) comparison of youth community and assault victimization utilized many guardianship measures many of which were mentioned in the above empirical tests of exposure due to Burrow and Apel's (2008) multiple measurement conceptualization of several variables within their study. The variable representing solely indicators of guardianship are students who have siblings attending the same school, physical security measures incorporated by the school such as surveillance cameras, non-physical security policies such as requiring students to wear ID badges, and rule clarity regarding policies and their enforcement? These proxy measures are contained within the school related predictors category. The analytical results add to the body of previous literature illuminating ineffectiveness of physical measures and non-physical security procedures within the school systems. The only guardianship measure that affected a student's risk of school assault or larceny victimization was rule clarity

which reduced the odds of both forms of victimization. Burrow and Apel (2008) do note that at the bivariate level of analysis the presence of security guards, a measure of physical security, is positively associated with larceny risk and locker checks, a measure of non-physical security, is negatively associated with larceny risk within schools.

Lastly, Tillyer, Fisher, and Wilcox's (2011) examination of the effects of school crime prevention on students' risk, perception of risk of, and fear of serious violent victimization employed many measures of guardianship. The following individual level exposure measures were utilized: a student's attachment to school such as the strength of the relationship of a student with their teachers, a student's attachment to their peers such as how strongly a respondent values the opinion of his or her closest friends, a student's frequency of involvement in school sports, and a student's frequency of involvement in school activities other than school sports. The school level measures of crime prevention representing guardianship are school efficacy such collaboration between teachers and administrators, the degree of police involvement, the usage of metal detectors, and whether or not backpack and book bags are banned from campus.

The findings indicated that two of the individual level measures of guardianship, strong attachment to school and strong attachment to peers reduced the likelihood of a student being a victim of serious violence. In addition, a student's involvement in school sports increased his or her chances of being a victim of serious violence.

None of the guardianship measures within the set of school crime prevention variables had any predictive power with any of the dependent variables except metal detectors which reduced a student's fear of serious violent victimization while enrolled in a school that utilized this form of guardianship.

Overall, K-12 guardianship measures and policies do not appear to be an effective use of a school's resources given that this form of crime prevention appears to be consistently successful.

Empirical Tests of CCTV

Generally, the effectiveness of CCTV in crime prevention from a scholarly standpoint has been mixed. Welsh and Farrington (2009b) conducted a systematic review and meta-analysis of 41 studies of the effects of CCTV surveillance on crime prevention in the following public places: city and town centers, public housing areas, subway systems (public transportation sites), and car parks (public parking lots), Welsh & Farrington's (2009b) results concluded that the CCTV studies have revealed that surveillance cameras produce the best results in crime reduction in public parking lots (51%). A 7% reduction in crime was observed in both the city and town center and public housing areas. The CCTV placement in the subway systems produced a 23% decrease in crime. It should be noted, though, that the many of the studies (approximately 77%) analyzed, utilized CCTV that was actively monitored by a police officer or another form of security personnel with a link to the police. Also, many of the successful studies, contained additional environmental features at the test sites such extra lighting to enhance visibility of persons inhabiting the locations being monitored. (Welsh & Farrington, 2009b).

Within the primary school systems, CCTV has been successful in monitoring criminal behavior (Hope, 2009), but not particularly useful in preventing criminal activity

(Burrow & Apel, 2008; Hope 2009) or reducing students' fear of criminal victimization (Tanner-Smith, 2015),

Hurley's (2002) study on the effects of calls of service to the police regarding crime and disorder after the implementation of CCTV at three tests sites in Cincinnati, Ohio produced mixed results. Only two sites experienced a reduction in calls for service of crime and disorder after the CCTV equipment was installed and the reduction in calls was most significant in calls for disorder rather than crime.

Lastly, Eck and Guerette (2012) evaluated 149 studies of various place based crime intervention methods within various settings and crime typologies. The findings revealed that CCTV was overall slightly more effective than not effective in crime reduction. Within residential areas, CCTV was effective in one study and not effective in another study in reducing burglary/theft. Within public places, CCTV showed a mixed effectiveness in reducing burglary/theft in one study and was shown to be effective in two other studies. CCTV was effective in reducing multiple forms of crime in eight studies, non-effective in three studies, and was found to have a mixed effectiveness in five studies within public places. Within the retail establishments, CCTV was effective in reducing burglary/theft in four studies, exhibited a mixed effectiveness in one study, and the effectiveness of CCTV of reducing burglary/theft within retail establishments was found to be inconclusive in one study. Eck and Guerette's (2012) final exploration was the public transportation stations which includes trains, buses, planes, and taxis. CCTV was found to be effective in reducing burglary/theft in one study, effective in reducing disorder in one study, and effective in reducing violence in one study. In sum, Eck and Guerette (2012), presented CCTV as effective in 22 of the studies that examined CCTV,

not effective in five of the studies that examined CCTV, providing a mixed effectiveness in nine of the studies that utilized CCTV, and inconclusive results regarding CCTV effectiveness were revealed in one study.

In conclusion, despite the inconclusive crime prevention potential of CCTV, this technology remains a popular form of surveillance. Another, perhaps more effective, form of surveillance is the place manager.

Empirical Analysis of Place Managers

Place managers have been proven to deter criminal activity or create criminal hot spots such as bar owners/managers or landlords who own apartment buildings or complexes. Landlords who exhibit poor management by allowing their properties to decline, cheat their tenants in rent, knowingly allow drug dealing and other crime to occur on their properties, or simply cannot control the antisocial behavior of their tenants are referred to as slumlords. In addition, if a slumlord acquires additional properties the criminal activities from the original properties may spread to the newly acquired ones creating new hot spots of crime. (Clarke & Bichler-Robertson, 1998). Tenants who are attracted to properties owned by slumlords are those who may be illegal immigrants or are persons with criminal records who cannot meet the screening requirement of more stable housing complexes.

Clarke and Bichler-Robertson (1998) conducted two cases studies in Santa Barbara, California on the effects of intervention of one form of place managers, the police, and super controllers (the media and the courts) upon altering the actions of apartment building slumlords. The goal of the study is to evaluate the effects on the high crime rates in each set of apartment complexes if one slumlord of one group of housing

units receives police intervention, threat of abatement, intense media attention and pressure from local businesses and if the other slumlord of another group of units receives no intervention. The slumlord with whom intervention was directed improved the quality of how his or her properties were managed and maintained his properties. In addition, the crime and arrest rates at the apartment complexes that he or she owned drastically decreased. The slumlord who received no intervention had no improvements in crime occurrences or arrest rates.

The effects of police intervention with place managers of rental properties plagued with drug dealing and criminal behavior was further investigated by Eck and Wartell (1998) in San Diego, California. The properties were divided into two treatment groups and one control group. One treatment group (42 places) received only a letter from the San Diego Police Department's specialized drug unit, Drug Abatement Response Team (DART), warning impending civil action of forced property closure and a \$25,000.00 fine if the drug dealers were not evicted; along with offers of assistance from law enforcement with the eviction of the offenders. The other treatment group (37 places) received both a letter and a follow up visit from a DART detective along with a member of the city of San Diego's Code Compliance Department. A control group (42 places) received no police intervention. More drug dealers were evicted by place managers involved with the treatment groups; the meeting group evicted more tenants than the letter group. Lastly, there was a significant reduction (60%) in incidences of crime in the treatment group over a 30-month period who had personal interaction with DART detectives relative to the control group. The crime reduction from the group who

received a letter was inconclusive due to fluctuations of increase and decreases of crime over the 30 month period.

Mazerolle, Kadleck and Roehl (1998) also conducted a study surrounding the role of place managers within the context of controlling drug activity, signs of disorder, and indications civility; specifically, in 100 street blocks of Oakland, California. Fifty of the street blocks were assigned to the Oakland's Police Department's specialized program "Beat Health", which is responsible for exerting concentrated efforts to control drug dealing and other criminal activities by working with the landlords, homeowners, and business owners of the blocks they were assigned. The Beat Health officers educated the place managers about simple crime prevention measures, their rights and responsibilities as tenants and landlords. The Beat Health officers also engaged in formal actions such as sending warning letter to assess the condition of the properties for levels of decline, conducting warning telephone communications, issuing beat orders, and helping property owners with tenant evictions. The remaining fifty blocks were not assigned to a specialized police unit. Two measures of guardianship were examined: place management activity and levels of social cohesion on each street blocks. The results revealed that if place managers acting as a cohesive group and working together to improve community activity on their street blocks is positively associated with the reduction of drug dealing and disorder and increased levels of civility, while place managers who acted on their own (individually) to reduce crime did not reduce drug dealing and disorder. Furthermore, the residents on the aforementioned street blocks experienced more fear. The results also indicate that the formal efforts of the Beat Health

officers did decrease crime and disorder within the street blocks they targeted independent of the cohesiveness or the collective activities of the place managers.

The place management at criminal hot spots such as bars was examined by Madensen and Eck (2008). Madsen and Eck (2008) hypothesized that crime is a result of poor management regardless of the neighborhood crime levels, that bar patrons are predisposed to commit crimes and bars are their locale of congregation, and that incidences of crime are a combination of the type of neighborhood the bar is located, level of criminogenic potential of the patrons, and the management style of the bar managers.

The study focused on the incidences of physical and threatened violence within a sample of 184 bars located within the city limits of Cincinnati, Ohio. Madensen and Eck (2008) determined that the 'violent' bars were located next to 'non-violent' bars, there it was not the geographical location of the bar which affected victimization, rather it was the place management style of the bar managers that affected the incidences of violence at their facilities, as well as enhance or assuage the negative influences from external sources not related to their specific bar. Accordingly, "bar managers create and maintain settings that can suppress, permit, or facilitate acts of violence" (Madensen & Eck, 2008, p. 117).

In conclusion, research demonstrates that place managers can be effective in reducing crime if they chose to be engaged in crime prevention. Another form of place managers, security guards, will be empirically examined next.

Security Guards Empirically Analyzed

The existing literature provides mixed results for security guards as effective deterrents to crime. On college campuses, security officers appear to not have had any impact on crime reduction or production (Cass, 2007; Fisher, Sloan, Cullen, & Lu; 1998). Also, within the primary school's system, school resource researchers have indicated that school resource officers (SRO) which can be sworn police officers or non-peace officers in the role of security guards have no significant impact on crime reduction (Brown, 2006; Burrow & Apel; 2008; Schreck, Miller, & Gibson, 2003; Tillyer, Fisher, & Wilcox; 2010) or any influence in reducing students' fear of criminal victimization (Tanner-Smith, 2015). Furthermore, Swartz, Osborne, Dawson-Edwards, and Higgins (2015) found that both the mere presence of SROs and SROs performing guardianship duties actually increased the reporting of serious violent victimization within primary schools.

Additionally, Brown's (2005) survey of 250 high school students indicate that the majority of the students believe that the police officers (68.4%) and security officers (71%) do a good job. However, despite the fact that the majority of the students believed the officers did a good job, only 41.9% of the students supported the school increasing the number of security officers. Upon examination, of the effectiveness of the implementation of the security measures in the Brownsville school system, the data indicated that there was still a strong presence of drugs and weapons in the high schools. Conversely, Johnson's (1999) study revealed that school resource officers were effective in reducing incidences of violence and non-violent delinquent behaviors.

Within public spaces, Welsh, Mudge, and Farrington (2010) conducted five evaluations of the effectiveness of security guards were conducted across four different

countries including two in the United States, one in Canada, one in the Netherlands, and one in the United Kingdom. Three of the security guard evaluations were performed in car parks, one in a city redevelopment area, and one was conducted in a subway station. Before and after effects were measured. The only evaluation that indicated a decrease in crime commission was the placement of security guards in car parks.

In conclusion, security guards as place managers may not be as effective at crime reduction or prevention as other forms of place managers. However, more research should be conducted to obtain a more accurate empirical picture.

These empirical studies, when examined in their entirety, facilitate the potential applicability of the guardianship construct to art theft and vandalism within art institutions; especially the effectiveness of social guardianship measures. Furthermore, despite the conflicting results of physical guardianship measures, there may be findings which indicate reduction of victimization within the above-mentioned context. This concludes the discussion of empirical studies of guardianship. The next section is a brief commentary on the validity of RAT in general.

Predictive Validity of Guardianship

In conclusion, the guardianship component of Routine Activities can be empirically relevant in many criminological contexts and analytical models as illustrated in the above sections. However, RAT overall does present a few limitations. First, is the frequency overlap of measurements among each of the three components which creates contrary theoretical predications that weakens that strength of RAT'S validity. For example, Burrow and Apel (2008) operationalized the variable "brought a weapon" to

school as a measure of guardianship, exposure, and target suitability in their study of school assault and larceny victimization. In Burrow and Apel's research, bringing a weapon to school had no statistical significance on a student's risk of either form of victimization. As guardianship, the weapon was conceived as a form of self-protection against any potential predatory confrontation, as exposure the variable was conceptualized as an indicator of a student who is likely to engage in activities that would expose them to potential victimization, and as a measure of target attractiveness, bringing a weapon to school was envisioned as an indication that a youth who possess weapons are more likely to be aggressive and antagonistic which will attract youths with similar characteristics.

Furthermore, measurements used to operationalize the same construct within the same criminal context have resulted in conflicting findings. Employment status, used as a measure of guardianship, has both empirically been proven to increase and decrease one's chances of residential burglary. In addition, the measurement of population density has both increased and decreased the odds of property theft, most likely due to the fact that the increased number of persons can either aid as capable guardians or increase exposure to pool of motivated offenders

Lastly, since the focus of this dissertation is on social and physical guardianship, it is prudent to assess the empirical successes and failures of these two conceptual areas in order to formulate theoretical derived explanations for the results of the data analysis. Measures of physical guardianship overall do not appear to successfully decrease or increase predatory violations either for individuals as uses for self-protection or as security devices to prevent criminal invasions of residential or commercial properties.

Social guardianship, especially in the form of social cohesiveness and proactive place management, has presented more scholarly success in crime reduction within a variety of settings and criminal violations. Two crime typologies in which both forms of guardianship have never been empirically tested are art theft and art vandalism. In fact, art theft and art vandalism in art museums and art galleries has never been empirically explored within any context of routine activities theory. The next section will address the empirical utility of the RAT within the aforementioned forms of criminal perpetration.

Routine Activities Theory and Art Theft and Art Vandalism

Despite the extensive body of literature, examining the applicability of RAT measures, it is surprising that these researchers could not find any scholarly endeavors empirically testing the utility of any measures of RAT to predict art theft or art vandalism. However, given the shroud of secrecy and elusiveness in which the art world functions, the paucity of any tests of RAT within the realm of art crime is none-the-less to be expected.

Many art crime scholars have proposed Routine Activities theory as a viable criminological theory to explain various forms of art crime (Aarons, 2001; Balcells, 2016; Conklin, 1994; Durney, 2011; Dietzler, 2013; James, 2000; Kerr, 2015; MacKenzie, 2005).

Conversely, Lane, Bromley, Hicks, and Mahoney (2008) argue that RAT is not a suitable theory to explain the transnational nature of the art and antiquities theft market because RAT is primarily a micro-level theory. The researchers maintain that RAT cannot adequately explain the three core elements of the transnational market of supply,

demand, and regulation. However, Durney and Proulx (2011) proclaim in their introduction to art crime in *Crime, Law, and Social Changes*' 2011 issue devoted to solely art crime, including theft of art and antiquities, that "criminal conduct involving art and antiquities occurs when three factors converge in time and space: a motivated offender, a suitable target, and the absence of a capable guardian" (p. 127).

None of the above-mentioned scholars mentioned nor any scholars have used RAT to explain art vandalism.

Studies of the destruction of property have been used to quantitatively support RAT (Lagrange; 1994; Tewksbury & Mustaine, 2000). Therefore, RAT may prove to be an effective tool of analysis to predict art vandalism. Art vandals are motivated by attention-seeking ploys, revenge on the art world, anger with an art works' morality or imagery, and social or political protest (Conklin, 1994; Passas & Proulx, 2011). For many vandals, art work is a suitable object in which to express the above-mentioned motivations and once again the museums and galleries which house the suitable vandalistic targets may not be as rigid in their guardianship techniques in order to prevent the destruction of their cultural treasures.

Therefore, given the deficit in the scholarly literature regarding empirical tests of routine activities theory in the arena of art theft and art vandalism, as well as, the endorsements of highly respected art crime scholars who have logically proposed RAT as a viable theory to explain the above forms of art crime, this study seeks to empirically analyze RAT. More precisely, measurements of the guardianship component of RAT will be quantitatively tested to predict the chances of art theft and art vandalism victimization due to the fact that there are a myriad of motivated offenders attracted to an abundance of

suitable targets, and a host of documented cases of a lack of capable guardianship within American art institutions. The next chapter will explain the research methodology of this process

CHAPTER VI
RESEARCH METHODOLOGY

Introduction

The purpose of this research is to apply the lack of capable guardianship component of Routine Activities Theory (RAT) to art crime and explore the quantitative relationship between physical guardianship and social guardianship activities engaged at American art museums and art galleries and its relationship to the prevalence of art theft and art vandalism. Although, both forms of guardianship practices have proven to be successful in reducing criminal victimization, many art industry professionals and non-art crime criminological scholars have posited greater success rates of social guardianship (the human element) measures compared to physical guardianship (the security devices and procedures element) measures in reducing predatory violations. Accordingly, the following hypotheses will be tested:

Hypothesis 1: Both social and physical guardianship measures will reduce the odds of both art theft and art vandalism victimization.

Hypothesis 2: Social guardianship measures will reduce the odds of art theft at higher rates than physical guardianship measures.

Hypothesis 3: Social guardianship measures will reduce the odds of art vandalism at higher rates than physical guardianship measures.

Data Collection Methods

Survey

The data for the current analysis was obtained using a survey developed for the purposes of the current study that identified, through self-report, incidences of museum and gallery art theft, art vandalism, and security practices and devices. The survey contained primarily objective-based, closed-ended questions. However, provisions were made for some open-ended responses. The survey was mailed to directors of art institutions within the United States, due to directors possessing the knowledge required to complete the survey or the authority to distribute the questionnaire to an employee within another management or oversight role with the ability to complete the questionnaire. The survey was part of a mailed packet that included a cover letter describing the purpose of the survey, promising anonymity of the respondent as well as the institution, and a self-addressed stamped return envelope. The preamble consent document from the University of Louisville Institutional Review Board was also included in the survey packet.

The cover letter was addressed to the Director of each art institution. The cover letter was signed by Peter Morrin, (who at the time was the former Director of the Speed Art Museum and the Director of the University of Louisville's Center for Arts and Cultural Partnerships), as well as Dr. Deborah Keeling, (who at the time was the Chair of the Department of Justice Administration, University of Louisville). The letter was printed on letterhead with the names of both the Fine Arts and Justice Administration Departments at the University of Louisville. In the letter, the research was described as a

joint effort between the University of Louisville Department Of Fine Arts and the Department of Justice Administration.

Sample

The population for this study was identified from the Official Museum Directory's online database in 2013. This source consists of a listing of "14,600 art institutions including museums, houses/sites, planetariums, science-technology centers, art galleries/centers, aquariums and zoological parks" (<http://www.officialmuseumdirectory.com>). This resource is highly regarded as the most comprehensive listing of U.S. art museums and galleries by art industry professionals.

Specific search parameters were utilized to narrow down the study population to institutions that exhibit art. These categorical descriptors included art museums and galleries; arts and crafts museums; china, glass, and silver museums; civic art and cultural centers; decorative arts museums; folk art museums; textile museums; and college and university museums. These categories were entered within the search engine of the database at the same time and a list of 4,160 art institutions resulted from this search.

In order to make the study more manageable and the survey more affordable, every fifth institution that "exhibited art" was sampled from the larger population. This resulted in a sample of 832 institutions. Following a review of each of the 832 entries, many of the institutions had to be rejected due to replication in names, institutions that were no longer in existence, inclusion of contacts that were used as survey pre-testers or survey construction consultants, incorrect collection descriptions, or categorical error of institutional type. This narrowed the sample to a total of 633 art institutions.

All contact information for each institution was entered into a spreadsheet. Each individual institution was then contacted, by telephone, to verify the name of the institution's director. The survey packets were mailed in January of 2014. A follow up reminder card was mailed two months later to the same institutions. The final sample included 111 respondents, or 17.5% of the original sample. While this might seem to be a very low return rate, it seems quite reasonable given the nature of the survey. According to Hagan (2006), non-response is a common issue with mail-in surveys and a 20% response rate is "fortunate" for a "one-time-only survey" distributed by a researcher without sponsorship (p. 162). Additionally, Friedrichs (2007) notes that a profound challenge associated with conducting research utilizing corporate entities as respondents is acquiring access and gaining the trust of the institution in order to garner information.

Furthermore, the survey asked respondents to provide guardianship (security) information about their facility, a type of information they are hesitant to disclose. For instance, a Director of Security of a prominent American museum respectfully informed the researchers that it was not their policy to answer surveys or any questions regarding their security practices. Also, in 2014, Janis Tomlinson, Director of the University of Delaware museums was quoted in Delaware's *The News Journal* stating she would not discuss their security procedures because "part of security is that people don't know about it" (<http://www.delawareonline.com/story/entertainment/arts/2014/05/01/museums-struggle-protect-art-public-defacement/8574121/>, electronically retrieved November 4, 2015). Consequently, the current study encountered many hurdles for a robust sample response.

Survey construction

The questionnaire was composed of 149 questions. The majority were closed-ended questions. A copy of the survey is contained in Appendix A. The survey was divided into three sections: the general characteristics of each institution, security topics, and vandalism and theft victimization. The survey was pre-tested by ten former and/or current museum directors. The survey, cover letter, and an on-line application were submitted to the University of Louisville's Institutional Review Board (IRB) for approval in early July of 2013. This study qualified for an expedited review and was approved in late July of 2013.

Measures

Dependent variables

Two dependent variables will be used for this study: "Yes art vandalism incidence(s)" and "Yes art theft incidence(s)". Several challenges dogged the survey: the infrequent occurrence of vandalism and theft within the respondent sample, the perceived hesitancy of the museums and galleries to report these forms of crime, and the concern within the art world to determine the overall chances of being victimized (rather than the exact number of victimization incidences). Therefore, the decision was made to utilize yes/no dichotomous dependent variables rather than continuous variables that capture the precise number of incidences within the sample set. The variable, "Yes art vandalism incidence(s)" refers to whether or not a museum or gallery experienced any incidences of art vandalism over the past five years, in which 0= no incidences of art vandalism and 1= yes at least one incidence of art vandalism. This variable was created by transforming the

actual number of vandalism incidences reported by each institution into a dummy variable. The second dependent variable “Yes art theft incidence(s)” refers to whether or not a museum or gallery experienced any incidences of art theft over the past ten years as reported by each respondent. This variable was coded 0= no incidences of art theft and 1= yes at least one incidence of art theft. This variable was created by transforming the actual number of art theft incidences reported by each institution into a dummy variable. It should be noted that there was inconsistency with one of the respondent’s reporting of incidences of vandalism. Because this respondent did not report any incidences of art vandalism in the forced answer choice but did report occurrences of intentional destruction of art within the comments section of the survey instrument, their response for the variable, ‘Yes art vandalism incidence(s)’ was recoded as 1.

The objects that were included as possible theft or vandalism targets as listed in the survey were outdoor sculpture, sculptures (larger than 10 inches in height), small sculptures (less than 10 inches in height, small paintings (8.5”x11” or smaller), paintings larger than 8.5”x11”, small photographs (8.5”x11” or smaller), photographs larger than 8.5”x11”, decorative arts objects, large glass objects, small glass objects, china objects, silver objects, textiles, rare books or manuscripts, posters, or other (please specify). Respondents to the survey were asked how many of each specific item had been vandalized (over the past five years) or stolen (over the past ten years). It should be noted that even though the researchers collected this granular data, the primary analytical objective of this study is the existence of art vandalism and art theft within the sample.

Independent Theoretical Variables

The independent or predictor variables used in this study are proxy measures of social guardianship and physical guardianship. The variables measuring the two components of guardianship have been grouped into theoretically derived categories that represent various aspects of guardianship measures within art museums and art galleries. The first set of categories relate to social guardianship within cultural institutions.

Social guardianship

There are sixty-six variables used to measure social guardianship. These variables are divided into eight separate categories: 1) non-security variables relevant to place managers, 2) security variables relevant to place managers, 3) training variables relevant to place manager activities, 4) variables that examine place manager activities relating to due diligence, 5) variables that describe security guard related practices, 6) variables that are designated as measures of possible place manager improvements, 7) variables that represent various aspects of guardianship in action for vandalism, and lastly, 8) similar variables that represent aspects of guardianship in action for theft.

Place Managers

Place managers have the potential to reduce and discourage crime merely by their presence and activities at specific places. Place managers can be anyone from an owner of a store or establishment to a customer or visitor of the establishment. Many types of place managers are present within art museums and galleries. It was mentioned in chapter three that primary place managers are museum directors or gallery owners. Secondary

level place managers are employees of the museum or gallery, such as the security officers, or non-security personnel, such as a curator. Volunteers also are included in this level of place management even though they are not paid employees. Art institutions could not survive without volunteers due to funding constraints within the art world, and often it is the volunteers who compose the majority of the staff. Tertiary level place managers are not employees of the museum or gallery but are service providers to the facility, such as the mail delivery persons. Quaternary level place managers are non-employees and non-service providers to the museum or gallery who frequent the facility, such as visitors.

Meredith, Kadleck, and Roehl (1998) argue that when place managers act together as a cohesive group, crime rates are reduced. Anthony Amore, the head of security at Boston's Isabella Stewart Gardner Museum, advises in his interview with Noah Charney (2009), to "engage the entire museum community, including employees and volunteers, to take an active role in the security of the facility. Let them know how important they are to identifying problems and potential thefts or vandalism. Museum frontline staff can be invaluable in identifying or taking immediate action in the case of an incident of theft or vandalism" (p. 135).

Place Managers-Non-Security

The first theoretical categorical grouping of social guardianship variables is three types of non-security place managers present in art galleries and museums. These three forms of place managers represent the primary, secondary, and quinary levels of place managers. Data was not collected on any tertiary level of place managers. The variable

“non-security employees” is defined as the total number of full time and part-time employees (excluding full time equivalents) minus the number of full-time and part-time security guards. The variable “volunteers” is defined as the annual number of volunteer employees (excluding full time equivalents) and the variable “visitors” is defined as the number of visitors present at a respondent’s museum or gallery. These continuous variables are measured at the interval/ratio level of measurement.

Place Managers- Security Guards

The next categorical grouping of place manager theoretical measures, types of security guards, refer to the museum or gallery’s security personnel. This group of variables represent the secondary level of place managers. Admittedly, many scholars (Felson, 2006; Felson & Clarke, 2006; Felson & Eckert, 2016) have asserted that security guards are not guardians. However, for this study we are including them as a form of place managers. Security guards have been regarded as a museum and gallery’s best defense against theft or vandalism. Charles Hill (2003), former Scotland Yard Art and Antiquities detective remarks, “all of the security locks, bolts, CCTV systems and gadgetry in the world could turn a museum into Fort Knox, but that would defeat the purpose of being a museum. For those responsible for security, the human dimension is all-important in dealing with potential theft” (p. 16). Additionally, the respondents in Cordess and Turcan’s (1993) study on art vandalism reported that, in order to substantially reduce the number of major acts of destruction to their artworks, adequate human supervision would be more effective than the somewhat effective usage of target hardening devices such as glazing on pictures. Lastly, Burmon (2017) designated security

guards as a measure of guardianship in her study of characteristics of art theft in the U.S. and recovery of stolen art which lends credence to the designation of security guards as a measure with the guardianship construct.

Six variables refer to various types of security guards present at a museum and/or gallery. The first two variables are “full time guards” and “part time guards”. Museums and galleries struggle with security budgets, which contributes to the low salaries of security staff and high turnover for cultural institutions (Conklin, 1994; MacKenzie, 2005). Full-time guards can be perceived as preferable to part-time guards due to the job security and benefits that a full-time guard is afforded. In addition, full-time guards can be considered more effective guardians than part-time guards due to their increased hours of exposure to an institution’s day-to-day functioning and collections. However, according to Peter Morrin, former director of the J.B. Speed Art Museum, “many believe that in contrast to the tedium suffered by full-time guards, part-time guards may be more vigilant with fresher eyes.” (P. Morrin, personal communication, November 12, 2015).

The variable, “number of full-time or part-time roving security guards” refers to the guards who regularly patrol a designated area within a museum or gallery to observe any change in circumstances that would indicate any form of victimization to an institution.

The variable “number of full time or part time guards who are stationary at entrance” refers to the number of guards who are stationed at the entrance of the museum or gallery to monitor the flow of visitors and/or staff entering and leaving the facility. At some institutions, such as the Smithsonian’s Hirschhorn Museum, these guards conduct bag inspections and are armed.

The variable “number of full time or part time security guards manning a security station” refers to the number of guards who are assigned to a specific security area, such as the number of guards that are assigned to monitor activity within separate exhibition spaces within a museum or art gallery. For example, five guards may be assigned to the exhibition areas that contain the recent exhibit of Picasso sculptures at the Museum of Modern Art (MOMA) and two guards may be assigned to observe the area with the CCTV monitors at the same museum.

Lastly, the variable “number of full time and part time guards employed for at least 5 years” refers to the number of guards employed by the respondent’s institution for at least five years. A security guard with more than five years’ experience is more likely to be acclimated and loyal to their institution, as well as more experienced as an effective place manager. These continuous variables are operationalized as the exact number of the security guards and are measured at the interval/ratio level of measurement.

It should be noted that, similar to the reporting of vandalism, several respondents left the closed ended answer choices pertaining to security guards blank. However, in the comments section of the questionnaire one respondent reported that they were a state museum located within a government building and the security service they utilized was the state police. Therefore, in order to attempt to accurately account for this revelation, the number 1 was assigned to both the variables, “number of security guards” and “number of roving security guards”. Additionally, a few respondents wrote in the comments section that their student workers were the security guards without specifying the exact number of student workers acting in a security guard capacity. Given the fact that the respondent used the plural version of “worker”, the researchers assigned the

number 2 to both the variables “number of part-time security guards” and “number of roving security guards”.

Place manager activities

The theoretical category “place manager activities” contains measurements of place management duties within an art museum or gallery. Place managers engage in activities that either make them effective or ineffective place managers (Clarke & Bichler-Robeton, 1998; Madensen & Eck, 2008; Sampson, Eck & Dunham, 2010). Within the art world, place managers can either be proactive about the care of their collections or elect to adopt the minimum requirements, depending on budgets, resources, and institutional attitudes to performing due diligence. Eighteen variables composing two separate categories of place manager activities are utilized.

The first-place manager activity category, training, is an important activity that place managers may or may not be required to participate in. A method of creating cohesiveness among the museum community is providing guardianship training for all staff, including volunteers. Place manager security training refers to security training for security and non-security staff, as well as for volunteers that will help reduce art theft and art vandalism. This category contains 14 measures that represent the various forms of training conducted at art institutions. The measures for security staff training include “SS training in suspicious objects”, “SS training in detection systems”, “SS training in safety of artworks”, “SS training in greeting & visitor reception”, and “SS training in CCTV management”. Each respondent was given the choice of yes=1 or no=0 to indicate whether or not their institution provided their security staff with each aspect of the above

training options. The same measures were utilized for the assessment of the extent of security related training for museum employees (“MS training in suspicious objects”, “MS training in detection systems”, “MS training in safety of artworks”, “MS training in greeting & visitor reception”, and “MS training in CCTV management”), and volunteers (“VS training in suspicious objects”, “VS training in detection systems”, “VS training in safety of artworks”, and “VS training in greeting & visitor reception”). It should be noted that generally, volunteers are not exposed to CCTV camera operations.

The second place manager activity category, due diligence, refers to how proactive an art institution is regarding the works they acquire, as well as how frequently they catalog the works within their collections. Five variables compose this theoretical grouping. The variable “consult stolen art databases” refers to whether or not a museum or gallery searched one of the many stolen art databases, such as the FBI’s National Stolen Art File, the Art Loss Register’s stolen art database or Interpol’s stolen art database, to ensure that the works in their collections, travelling exhibitions, or works being considered for acquisition are not stolen. This variable is coded 0=never, 1=sometimes, 2=most of the time, 3=always, and 8=non-applicable (N/A) and is measured at an ordinal level of measurement.

The variable “outside risk analysis performed” is defined as whether or not an outside security consultant has conducted a formal annual security risk analysis at the respondent’s respective museum or gallery. Risk analyses assess the overall effectiveness of an institution’s security department and security practices. Normally, it is conducted by an external party. This variable is coded 0=never, 1=yes, 2=don’t know, and 3=missing and is measured at an ordinal level of measurement.

The variable “time elapsed since last risk analysis” is defined as the timeframe in which a risk analysis assessment by an outside consultant was conducted. The following codes were employed 0=never had a risk analysis, 1=had risk analysis conducted 15-19 years ago, 2=had a risk analysis conducted 11-14 years ago, 3=had a risk analysis conducted 6-10 years ago, 4=had a risk analysis conducted 2-5 years ago, and 5=had a risk analysis conducted within the last year. This variable is measured at an ordinal level of measurement.

The next two variables in this category pertain to the inventory practices of a museum and gallery. Many times works that have been stolen are not known to be missing or are noticed as missing long after the theft occurred because the museum or gallery did not bother to check their collection of works on view or in storage. Refraining from this practice is also a factor that contributes to the unreliable statistics regarding the true extent of art theft. The variable “inventory works on view” is defined as the frequency with which an institution’s on-view collection is inventoried and is coded as 0=less than once a year, 1=once a year, 2=every six months, 3=every three months, 4=monthly, 5=weekly/more frequently, 6=daily, and 7=missing. It should be noted that even though 0= ‘less than once a year’ was not an answer choice on the survey form, this code was created because one respondent indicated in writing that they had their last inventory of works on view inspection conducted “less than once a year”. The variable “inventory works in storage” is defined as the frequency with which an institution’s collection in storage is inventoried and is operationalized as 0=non-applicable (N/A), 1=every 10 years, 2=every 5-10 years, 3=every 2-4 years, 4=annually, 5=more than once a year, and 6=missing. Both variables are measured at an ordinal level of measurement. It

should be noted that even though 0= “N/A” was not an answer choice on the survey form this code was created because many respondents indicated that they either did not have a permanent collection, did not hold any works in storage, only showed temporary exhibitions, or simply wrote N/A on the survey form.

The last two variables measure whether or not the art facilities conduct pre-hiring background checks on potential employees and volunteers. As mentioned in chapter two, it has been estimated that 80% of thefts from museums are committed by insiders. Therefore, this simple proactive measure may alleviate insider theft and/or vandalism. The variable “pre-hiring background checks on potential employees” is operationalized as 0=never, 1=sometimes, 2=most of the time, 3=always, and 8=non-applicable (N/A). The variable “pre-hiring background checks on potential volunteers” is operationalized as 0=never, 1=sometimes, 2=most of the time, 3=always, and 8=non-applicable (N/A). These variables are measured at an ordinal level of measurement.

Security Guard Related Practices

Security guards’ specific duties are an important component of the measurement of security guard place management. This theoretical category contains five variables that pertain to art museum and art gallery security guards’ daily functioning. The variable “average square footage of roving” pertains to the average square footage a guard patrols in his or her designated roving circuit. This variable is a continuous variable, is measured at the interval/ratio level of measurement and assumes values from zero to 250,000 square feet. The variable “number of designated security posts” refers to how many designated stationary posts or designed roving circuits exist at each respondent’s museum

or gallery. This continuous variable is operationalized as the exact number of designated security posts and is measured at the interval/ratio level of measurement.

The variable “where surveillance rounds are made” is defined as 0=internally only and 1=internally and externally, and 2=missing. This categorical variable is measured at the nominal level of measurement. At some cultural institutions, security guards patrol both inside the museum and outside of the museum’s interior spaces that are open and closed to the public. The variable “how often surveillance rounds are made” is defined as the number of surveillance rounds performed at the respondent’s museum or gallery within half hour intervals. This variable is operationalized as the exact number of surveillance rounds made within half hour intervals. The last variable in this category is “length of time security is on duty” refers to the number of hours, each day (24-hour period) the museum or gallery utilize security staff. This variable is coded as 0=missing, 1=public hours only, 2=extended hours (for special events/normally extended hours), 3=24 hours, and 4=special events only and measured at a nominal level of measurement. It should be noted that the code 4= “special events only” was not a forced answer choice on the questionnaire. However, one respondent wrote this answer on their survey form. Consequently, it was added to the coding of the survey instrument.

Place Manager Perceived Improvements

A portion of evaluating place manager effectiveness is measuring a place manager’s perceived ability to proactively improve the spaces in which they are performing guardianship duties. Within the art world, art museums and galleries are chronically battling budgetary issues, and security departments and security related items

tend to be mandated as a low priority. The next grouping of six measures addresses the respondents' perceptions of how to improve the guardianship capabilities of their respective museums and galleries. The answer choices to each item were 1=yes and 0=no. The specific variables included are: "a larger budget", "more security personnel", "improved staff training", "enhanced level of security", "modern security equipment", or "other improvements".

Guardianship in Action

The last two categories of the social guardianship component of Routine Activities Theory's element of guardianship pertain to Reynald's (2009) groundbreaking four stage Guardianship in Action theoretical model with regards to art vandalism and art theft, in which she formulated four levels of residential guardianship intensity. As mentioned in chapter three, Reynald's (2009) four levels of guardianship intensity begins at stage one, in which the guardian is invisible (i.e., not home and unavailable to act as a guardian). A score of zero is assigned to this level of guardianship. Stage two is the capable guardian, which is when the resident is at home but he or she is not willing or capable to conduct any surveillance of their property or street. A score of one is assigned to this level of guardianship. Stage three is when the capable guardian is home and is actively conducting surveillance of their property and street. A score of 2 is assigned to this level of guardianship. Stage four is when the available capable guardian is actively conducting surveillance of their property and street and will intervene by approaching the unknown person and asking questions if they notice a predatory crime or unusual event occurring that threatens security. A score of 3 is assigned to this level of guardianship.

Essentially, Reynald (2009) determined that the higher level of guardianship one exercises, the greater the crime reduction. Reynald's (2009) study was conducted by mere observation of neighborhood residents.

Reynald's (2010) study explores specific reasons why capable guardians do not become active guardians or, stated another way, why an available guardian does not become an intervening guardian. This study moved beyond the residential observation stage to researchers engaging and interacting with residents through structured and semi-structured interviews surrounding guardianship actions and inactions.

The art world is notorious for perpetuating the shroud of secrecy in which it operates by not reporting any forms of art crimes perpetrated by outsiders, protecting its own malfeasance, avoiding any transparency within the industry, and failing to comply with ethical regulations set forth by the various governing bodies within the art world. In the April 25, 2016, online edition of *ARTnews*, seasoned art industry writer M.H. Miller wrote, "The art market is notoriously opaque—the cliché is that it is the largest unregulated industry in the world, besides guns and drugs. There are certain rules, but chief among them is an almost pathological level of discretion. There is little oversight, and players can get away with a lot of ethically dubious behavior"

(<http://www.artnews.com/2016/04/25/the-big-fake-behind-the-scenes-of-knoedler-galleries-downfall/>, electronically retrieved May 8, 2016). Nonetheless, despite the art industry's clandestine culture, art museums and art galleries have a fiduciary responsibility to maintain the integrity of its own institutions and the profession itself by fostering forthrightness and industry unity. A combined total of twenty-six variables are used to measure Guardianship in Action within museums and galleries.

Guardianship in Action-Vandalism

Ten variables within this category explore how cultural institutions deal with vandalism victimization. The categorical measures are used to determine whether a museum and/or gallery, as a capable guardian, will become an active guardian by intervening and reporting victimization. The first three measures assess how an institution deals specifically with employee perpetrated vandalism: “employee fired if committed vandalism”, “employee reported to police if committed vandalism”, and “other action with employee if committed vandalism”. These three variables are coded 0=no, 1=yes, and 3=missing. The next seven variables measure how cultural institutions additionally address vandalism victimization: “contact national law enforcement if vandalism”, “inform the local police if vandalism”, “contact the local media if vandalism”, “report to insurance agency if vandalism”, “inform your board if vandalism”, “fill out an incident report if vandalism”, and “other action taken if vandalism”. Since these seven variables only pertain to victimized institutions, the sample size of respondents is reduced from 111 to 25. These variables are coded as 0=no, 1=yes and are measured at a nominal level of measurement.

Guardianship In Action-Theft

The first ten variables are identical to the above Guardianship In Action measures for vandalism except that they pertain to theft. Accordingly, the insider art thief measures include: “employee fired if committed theft”, “employee reported to police if committed theft”, and other action with employee if committed theft”. These three variables are

coded 0=no, 1=yes, and 3=missing. The next seven variables measure how cultural institutions additionally address theft victimization: “contact national law enforcement if theft”, “inform the local police if theft”, “contact the local media if theft”, “report to insurance agency if theft”, “inform your board if theft”, “fill out an incident report if theft”, and “other action taken if theft”. Since these seven variables only pertain to victimized institutions, the sample size of respondents is reduced from 111 to 17. These variables are coded as 0=no, 1=yes, and are measured at a nominal level of measurement.

The next six variables explore the respondents ‘rationale’ for not reporting theft. The following reasons are the theoretical measures: “didn’t report theft due to fear of bad publicity”, “didn’t report theft due to fear of future thefts”, “didn’t report theft due to fear of public embarrassment”, “didn’t report theft due to fear of increased insurance rates”, “didn’t report theft due to fear of extortion”, and “other reason”. These variables are coded as 0=no and 1=yes and are measured at a nominal level of measurement. Once again, since these variables only pertain to victimized institutions, the sample size of respondents is reduced from 111 to 17.

Physical Guardianship

The theoretical derived variable groupings, that represent the physical guardianship component of the guardianship element of Routine Activities Theory within cultural institutions, are divided into two categories: target hardening devices and mechanisms, and preventative physical guardianship actions. Admittedly, there is also dissent among Routine Activities Theory scholars regarding which construct of Routine Activities Theory target hardening devices should be categorized. For example, Hollis,

Felson, & Welsch (2013) declare that “targeting hardening activities do not increase the availability of capable guardians; they merely make it more difficult for the offender to complete the criminal act” (p. 74). Hence, target hardening measures should be conceptualized as measures of target suitability. Conversely, a compelling number of scholars categorized target hardening variables as measures of guardianship (Breetze & Cohn, 2013; Fisher & Wilkes, 2003; Meithe & Meier;1990; Mustaine & Tewksbury (1998a); Rountree, Land, & Miethe, 1994; Schreck, Miller, & Gibson, 2003; Wilcox, Madensen, & Tillyer, 2007). Furthermore, Burman (2017) utilized target hardening devices such as cameras and alarms as measures of guardianship in her study of art theft characteristics and recovery of stolen art. In line with Burman (2017), for this study, target hardening devices and mechanisms will be measures of physical guardianship. Fifteen variables comprise this theoretical construct.

Target Hardening Devices and Mechanisms

The first category, target hardening devices and mechanisms, is composed of twelve theoretical measures. Target hardening devices and mechanisms are present in almost every institution that collects and/or exhibits art works. Access to collections takes many forms. However, museums and galleries are caught in a paradoxical situation of protecting their cultural treasures from defacement or theft while simultaneously offering the public ideal engagement with the works.

Each respondent was asked whether or not their facility utilizes each of the following security devices or physical barriers: “door alarms”, “window alarms”, “motion detectors”, “CCTV”, “individual object alarms”, “other type of security systems”,

“glazing on some pictures”, “glazing on all pictures”, “vitrines”, “barriers in front of artworks”, “ropes and stanchions”, and “other type of physical barriers”. The answer choices are coded as 0=no and 1=yes and are measured at a nominal level of measurement.

Preventive Physical Guardianship Actions

The last theoretical category grouping relating to physical guardianship is preventive physical guardianship actions. This category is comprised of three physical guardianship measures that address non-target hardening physical guardianship actions performed by security personnel to ensure that any employees, volunteers, visitors, and/or objects entering museums and galleries are not apt to perpetrate or aid in the perpetration of any vandalistic or theft incidences. The variable “bag/package inspection” refers to the extent of diligence that a museum or gallery requires within its security practices regarding purse, bag, and package inspection at the time of entry and/or exit of the institution. This practice can be perceived as a deterrent to a terrorist, art theft, or art vandal. This categorical variable is coded 0= missing, 1=no package inspections are required, 2= yes, only on the visitors entering the museum/gallery, 3=yes only on employees and volunteers entering the museum/gallery, 4=yes, only on employees and volunteers entering and leaving the museum/gallery, 5=yes, on all persons entering the museum/gallery, 6=yes, on all persons entering and exiting the museum/gallery, and 7=yes, on all packages and bags except purses. This variable is measured at a nominal level of measurement.

The second measure within this grouping, “oversized bag storage” refers to whether or not a museum or gallery requires that visitors leave their oversized bags or large items in a designated area before the visitor will be permitted to enter the exhibition space. This preventative measure allows museums and galleries to hinder visitors from carrying and concealing larger objects when entering the gallery space and exiting the building, as well as preventing the oversized bag from becoming a potential hazard to the works of art. Large bags, such as backpacks, can accidentally rub against a delicate sculpture or unglazed painting, thus possibly damaging the work. Additionally, in a crowded museum gallery space oversized bags can be a hindrance to visitors’ range of vision and the bags may constantly bump against other visitors due to space limitations. Institutions without a policy requiring storage for oversized bags were coded as 0, those with a policy requiring storage for oversized bags were coded as 1, and if the answer was missing a code of 2 was entered. This is a categorical variable and is measured at a nominal level of measurement.

The last variable in this categorical grouping, “ID badges required for staff and volunteers”, refers to an institution’s requirement for its staff and volunteers to be identified as members of a museum or gallery’s organization. This use of visual identifiers allows visitors to recognize who is associated with the museum and who is not when they need help or advice. These badges and ID’s can also act as a deterrent of theft and vandalism due to the apparent presence of an employee or volunteer. The responses to this survey item include the following and are coded, numerically, as indicated: 0=no one is required, 1=staff only, 2=volunteers only, 3=staff and volunteers and is measured at a nominal level of measurement.

Demographic/Control Variables

Information on demographic and institutional characteristics was collected for each of the responding art institutions. These measures are designated as control variables, which are “extraneous variables that researchers can control to determine its effect on the dependent variable” (Abu-Bader, 2006, p. 3). Four measures are included within this group of variables. The variable “population of the institution’s city” is the population of the city in which the respondent’s institution is located and is coded as the exact population. The variable “number of volunteer hours” is defined as the total number of volunteer hours a museum or gallery receives in one calendar year and is coded as the exact number of hours. The variable “operating budget” is defined as an institution’s annual operating budget in dollar amounts and is operationalized as the exact monetary budget amount. The last control variable, “square feet of institution” is defined as the size of the museum or gallery in square footage and is operationalized as the exact square footage. These continuous variables are measured at the interval/ratio level of measurement. Additionally, these four variables are transformed for ease of interpretation, beginning at the bivariate level of analysis. Specifically, “population of institution’s city” was divided by 10,000, “volunteer hours” was divided by 100, “operating budget” was divided by 10,000, and square feet of museum/gallery” was divided by 1,000.

Non-Theoretical Variables

There are forty-six variables included as non-theoretical and non-demographic/control variables contained within seven categories. This set of variables relate to the number of specific objects stolen and/or vandalized, the precise number of art theft or vandalism incidences, the perpetrator of art thefts and vandalism, the recovery of stolen works, and the locations of the two forms of victimization.

The first non-theoretical category, objects vandalized, contains sixteen variables which document the number of types of artworks that were vandalized. The variables in this category relate to these specific objects: “number of outdoor sculptures vandalized”, “number of sculptures (larger than 10 inches in height) vandalized”, “number of small sculptures (less than 10 inches in height) vandalized”, “number of small paintings (8.5”x11” or smaller) vandalized”, “number of paintings larger than 8.5”x11” vandalized”, “number of small photographs (8.5”x11” or smaller) vandalized”, “number of photographs larger than 8.5”x11” vandalized”, “number of decorative arts objects vandalized”, “number of large glass objects vandalized”, “number of small glass objects vandalized”, “number of china objects vandalized”, “number of silver objects vandalized”, “number of textiles vandalized”, “number of rare books or manuscripts vandalized”, “number of posters vandalized”, and “number of other (please specify) vandalized”. These variables are coded as the exact number of each object vandalized and are measured at the interval/ratio level of measurement.

The second non-theoretical category, objects stolen, contains sixteen variables which document the number of types of artworks that were stolen. The variables in this category relate to the same specific objects as the previous category: “number of outdoor

sculptures stolen”, “number of sculptures (larger than 10 inches in height) stolen”, “number of small sculptures (less than 10 inches in height) stolen”, “number of small paintings (8.5”x11” or smaller) stolen”, “ number of paintings larger than 8.5”x11” stolen”, “number of small photographs (8.5”x11” or smaller) stolen”, “number of photographs larger than 8.5”x11” stolen”, “number of decorative arts objects stolen”, “number of large glass objects stolen”, “number of small glass objects stolen”, “number of china objects stolen”, “number of silver objects stolen”, “number of textiles stolen”, “number of rare books or manuscripts stolen”, “number of posters stolen”, and “number of other (please specify) stolen”. These variables are coded as the exact number of each object stolen and are measured at the interval/ratio level of measurement.

The next non-theoretical category of variables, all objects victimized, capture the composite number of works illegally removed from a museum or gallery or intentionally attacked; “total number of objects stolen”, “total number of objects vandalized”, and “total number of objects victimized” which is the total number of objects both stolen and vandalized. These variables are coded as the exact total number of objects stolen, vandalized, and victimized. These variables are measured at the interval ratio/level of measurement. Lastly, the non-theoretical category, incidences of victimization, pertains to exact counts of incidences of perpetration. Three variables are included in this group of measures: “total number of incidences of vandalism, “total number of incidences of theft” and “total number of vandalism and theft incidences” which is the total number of both art theft and art vandalism incidences added together. These variables are coded as the exact incidences of each form of victimization and are measured at the interval/ratio level of measurement.

The non-theoretical category, vandalism/theft perpetrator, contains four variables which address aspects of the perpetrator. The variables “how often was the vandalism perpetrator identified?”, and “how often was the theft perpetrator identified?” are defined as the frequency with which the art thief and/or art vandal was identified. These variables are operationalized as 0=never, 1=a few times, 2=most of the time, and 3=always, and are measured at an ordinal level of measurement. These variables only pertain to institutions that experienced victimization and the sample size was reduced from 111 to 25 for vandalism victimization and to 17 for theft victimization.

The variables “acts of vandalism likely committed by” and “acts of theft likely committed by” are defined as the category of the art vandal and art thief and the variables are operationalized as 0=non-applicable (N/A), 1=employee, 2=visitor(s), 3=contract worker(s), 4=unknown, and 5=other, such as. These categorical variables are measured at a nominal level of measurement.

The non-theoretical category, recovery of stolen work, address the recovery of stolen artwork and contains two measures. The variable, “how often was the stolen work recovered?” is defined as the frequency with which the respondent’s institution was able to recover their stolen artworks and this ordinal variable is operationalized as 0=never, 1=a few times, 2=most of the time, and 3=always. The variable, “on average, how quickly did your institution manage to recover the stolen art object?” narrows the frequency of recovery of stolen works into specific timeframes. This ordinal variable is operationalized as 0=never, 1=more than 5 years, 2=3-5 years, 3=1-2 years, 4=less than 1 year. These variables are measured at an ordinal level of measurement. These variables

only pertain to institutions that experienced art theft victimization and the sample size was reduced from 111 to 17.

Two variables pertain to the location of the incidences of theft and vandalism. The variables “location of vandalism incidence(s) and “location of theft incidence(s)” are defined as the locations where the vandalism and/or theft victimization occurred. These variables are operationalized as 1=gallery space, 2=storage space, 3=while in transit, 4=while on loan to another institution, 5=at a construction site, 6=on the museum premises, but outside the museum, 7= in the rare book room, and 8=other location, such as. These are categorical variables and are measured at a nominal level of measurement. These variables only pertain to institutions that experienced victimization and the sample size was reduced from 111 to 25 for vandalism victimization and to 17 for theft victimization.

The next section will discuss the analytical steps which will be undertaken to determine whether social or physical guardianship measures increase or decrease the odds of an art museum or art gallery being victimized by an art vandal or art thief.

Table 6.1

THEORETICAL VARIABLE GROUPINGS

| Measures | Metrics | Range | Level of Measurement |
|---|--|-------------|----------------------|
| <u>Victimization Dependent Variables</u> | | | |
| Yes art vandalism incidence(s) | (0=no incidences of art vandalism, 1=yes, at least one incidence of art vandalism) | 0-1 | Nominal |
| Yes art theft incidence(s) | (0=no incidences of art theft, 1=yes, at least one incidence of art theft) | 0-1 | Nominal |
| | | | |
| | | | |
| <u>Theoretical Independent Variables</u> | | | |
| <u>Social Guardianship Measures</u> | | | |
| <i>Place Managers-Non-Security</i> | | | |
| # of non-security employees | (# of employees) | 0- infinity | Interval/Ratio |
| # of volunteers | (# of volunteers) | 0- infinity | Interval/Ratio |
| # of visitors | (# of visitors) | 0-infinity | Interval/Ratio |
| | | | |

| | | | |
|---|--------------------------|------------|----------------|
| <i>Place Manager- Security Guards</i> | | | |
| # of full time security guards | (# of guards) | 0-infinity | Interval/Ratio |
| # of part- time security guards | (# of guards) | 0-infinity | Interval/Ratio |
| # of FT or PT roving security guards | (# of roving) | 0-infinity | Interval/Ratio |
| # of FT or PT guards who are stationary at entrance | (# of stationary guards) | 0-infinity | Interval/Ratio |
| # of FT or PT guards who man a security station | (# of guards that man) | 0-infinity | Interval/Ratio |
| # of FT and PT guards employed for at least 5 years | (# of guards) | 0-infinity | Interval/Ratio |
| | | | |
| <i>Place Manager Activities</i> | | | |
| <i>Training</i> | | | |
| SS training in suspicious objects | (0=no, 1=yes) | 0-1 | Nominal |
| SS training in detection systems | (0=no, 1=yes) | 0-1 | Nominal |
| SS training in safety of artworks | (0=no, 1=yes) | 0-1 | Nominal |
| SS training in greeting & visitor reception | (0=no, 1=yes) | 0-1 | Nominal |
| SS training in CCTV management | (0=no, 1=yes) | 0-1 | Nominal |

| | | | |
|---|---|--------|---------|
| MS training in suspicious objects | (0=no, 1=yes) | 0-1 | Nominal |
| MS training in intruder detection | (0=no, 1=yes) | 0-1 | Nominal |
| MS training in safety of artworks | (0=no, 1=yes) | 0-1 | Nominal |
| MS training in greeting & visitor reception | (0=no, 1=yes) | 0-1 | Nominal |
| MS training in CCTV management | (0=no, 1=yes) | 0-1 | Nominal |
| MV training in suspicious objects | (0=no, 1=yes) | 0-1 | Nominal |
| MV training in detection systems | (0=no, 1=yes) | 0-1 | Nominal |
| MV training in safety of artworks | (0=no, 1=yes) | 0-1 | Nominal |
| MV training in greeting & visitor reception | (0=no, 1=yes) | 0-1 | Nominal |
| | | | |
| <i>Due Diligence</i> | | | |
| Consult stolen art databases | (0=never to 3=always; 8=N/A) | 0-3; 8 | Ordinal |
| Outside risk analysis performed | (0=never to 3=missing) | 0-3 | Ordinal |
| Time elapsed since last risk analysis | (0=never had a risk analysis conducted to 5=had risk analysis conducted within last year) | 0-5 | Ordinal |
| Inventory works on view | (0=less than once a year to | 0-7 | Ordinal |

| | | | |
|--|--------------------------------------|------------|----------------|
| | 7=missing) | | |
| Inventory works in storage | (0=N/A to 6=missing) | 0-6 | Ordinal |
| Pre-hiring Background checks on potential employees | (0=never to 3=always; 8=N/A) | 0-3; 8 | Ordinal |
| Pre-hiring Background checks on potential volunteers | (0=never to 3=always; 8=N/A) | 0-3; 8 | Ordinal |
| | | | |
| <i>Security Guard Specific duties</i> | | | |
| Average sq. footage of roving | (# of roving sqft.) | 0-infinity | Interval/Ratio |
| # of designated security posts | (# of posts) | 0-infinity | Interval/Ratio |
| Where surveillance rounds are made | (0=internally to 2=missing) | 0-3 | Interval/Ratio |
| How often surveillance rounds are made | (# of time intervals) | 0-infinity | Interval/Ratio |
| Length of time security is on duty | (0=missing to 4=special events only) | 0-4 | Nominal |
| | | | |
| <i>Place Manager Perceived Improvements</i> | | | |
| Would a larger budget improve level of security? | (0=no, 1=yes) | 0-1 | Nominal |

| | | | |
|--|------------------------|-------------|---------|
| Would more security persons improve level of security? | (0=no, 1=yes) | 0-1 | Nominal |
| Would improved staff training improve level of security? | (0=no, 1=yes) | 0-1 | Nominal |
| Would modern security equipment improve level of security? | (0=no, 1=yes) | 0-1 | Nominal |
| Other improvements? | (0=no, 1=yes) | 0-1 | Nominal |
| Other improvement | (Exact Improvement) | Categorical | Nominal |
| | | | |
| <i>Guardianship In Action - Vandalism</i> | | | |
| Employee fired if committed vandalism | (0=no to 2=missing) | 0-2 | Nominal |
| Employee reported to police if committed vandalism | (0=no to 2=missing) | 0-2 | Nominal |
| Other actions with employee if committed vandalism | (0=no to 2=missing) | 0-2 | Nominal |
| Other action taken | (name of other action) | Categorical | Nominal |
| Contact national law enforcement if vandalism | (0=no, 1=yes) | 0-1 | Nominal |
| Inform the local police if vandalism | (0=no, 1=yes) | 0-1 | Nominal |

| | | | |
|--|------------------------|-------------|---------|
| Contact the local media if vandalism | (0=no, 1=yes) | 0-1 | Nominal |
| Report to insurance agency if vandalism | (0=no, 1=yes) | 0-1 | Nominal |
| Inform your board if vandalism | (0=no, 1=yes) | 0-1 | Nominal |
| Fill out an incident report if vandalism | (0=no, 1=yes) | 0-1 | Nominal |
| Other action if vandalism | (0=no, 1=yes) | 0-1 | Nominal |
| Other action taken | (name of other action) | Categorical | Nominal |
| | | | |
| <i>Guardianship In Action - Theft</i> | | | |
| Employee fired if committed theft | (0=no to 2=missing) | 0-2 | Nominal |
| Employee reported to police if committed theft | (0=no to 2=missing) | 0-2 | Nominal |
| Other actions with employee if committed theft | (0=no to 2=missing) | 0-2 | Nominal |
| Other action taken | (name of other action) | Categorical | Nominal |
| Contact national law enforcement if theft | (0=no, 1=yes) | 0-1 | Nominal |
| Inform the local police if theft | (0=no, 1=yes) | 0-1 | Nominal |
| Contact the local media if theft | (0=no, 1=yes) | 0-1 | Nominal |

| | | | |
|--|------------------------|-------------|---------|
| Report to insurance agency if theft | (0=no, 1=yes) | 0-1 | Nominal |
| Inform your board if theft | (0=no, 1=yes) | 0-1 | Nominal |
| Fill out an incident report if theft | (0=no, 1=yes) | 0-1 | Nominal |
| Other action if theft | (0=no, 1=yes) | 0-1 | Nominal |
| Other action if theft | (name of other action) | Categorical | Nominal |
| Didn't report theft due to fear of bad publicity | (0=no, 1=yes) | 0-1 | Nominal |
| Didn't report theft due to fear of future thefts | (0=no, 1=yes) | 0-1 | Nominal |
| Didn't report theft due to fear of public embarrassment | (0=no, 1=yes) | 0-1 | Nominal |
| Didn't report theft due to fear of increased insurance rates | (0=no, 1=yes) | 0-1 | Nominal |
| Didn't report theft due to fear of extortion | (0=no, 1=yes) | 0-1 | Nominal |
| Didn't report theft due to fear of other reason | (0=no, 1=yes) | 0-1 | Nominal |
| Other reason | (name of other reason) | Categorical | Nominal |
| | | | |
| | | | |

| | | | |
|---|------------------------------------|-------------|---------|
| <u>Physical Guardianship Measures</u> | | | |
| <i>Target Hardening Devices & Mechanisms</i> | | | |
| Door alarms | (0= no, 1=yes) | 0-1 | Nominal |
| Window alarms | (0=no, 1=yes) | 0-1 | Nominal |
| Motion detectors | (0=no, 1=yes) | 0-1 | Nominal |
| CCTV | (0=no, 1=yes) | 0-1 | Nominal |
| Individual object alarms | (0=no, 1=yes) | 0-1 | Nominal |
| Glazing on some pictures | (0=no, 1=yes) | 0-1 | Nominal |
| Glazing on all pictures | (0=no, 1=yes) | 0-1 | Nominal |
| Vitrines | (0=no, 1=yes) | 0-1 | Nominal |
| Barriers in front of artworks | (0=no, 1=yes) | 0-1 | Nominal |
| Ropes and stanchions | (0=no, 1=yes) | 0-1 | Nominal |
| Other type of security systems | (0=no, 1=yes) | 0-1 | Nominal |
| Other type of security systems | (name of other security system) | Categorical | Nominal |
| Other type of physical deterrents | (0=no, 1=yes) | 0-1 | Nominal |
| Other type of physical | (name of other physical deterrent) | Categorical | Nominal |

| | | | |
|--|---|------------|----------------|
| deterrents | | | |
| | | | |
| <i>Preventive Physical Guardianship Actions</i> | | | |
| Bag/package inspections | (0=missing to 7=on all packages & bags except purses) | 0-7 | Nominal |
| Oversized bag storage | (0=no to 2=missing) | 0-2 | Nominal |
| ID badges required for staff and volunteers | (1=no one to 3=staff & volunteers) | 1-3 | Nominal |
| | | | |
| | | | |
| <u>Demographic/Control Variables</u> | | | |
| Population of institution's city | (population #) | 0-infinity | Interval/Ratio |
| # of volunteer hours | (# of hours) | 0-infinity | Interval/Ratio |
| Operating budget | (\$ amount) | 0-infinity | Interval/Ratio |
| Square feet of museum/gallery | (# of square feet) | 0-infinity | Interval/Ratio |

Table 6.2

NON-THEORETICAL VARIABLE GROUPINGS

| Measures | Metrics | Range | Level of Measurement |
|--|----------------|--------------|-----------------------------|
| | | | |
| <i>Objects Vandalized</i> | | | |
| # of outdoor sculptures vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of large sculptures (larger than 10'' in height) vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of small sculptures (smaller than 10'' in height) vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of small paintings (8.5'' by 11'' or smaller) vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of large paintings (8.5'' by 11'' or larger) vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of small photograms (8.5'' by 11'' or smaller) vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of large photographs (8.5'' by 11'' or larger) vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of decorative objects vandalized | (# of objects) | 0-infinity | Interval/Ratio |

| | | | |
|--|------------------------|-------------|----------------|
| # of large glass objects vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of small glass objects vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of china objects vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of silver objects vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of textiles vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of rare books or manuscripts vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of posters vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| # of other objects vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| Name of other object vandalized | (name of other object) | Categorical | Nominal |
| | | | |
| <i>Objects Stolen</i> | | | |
| # of outdoor sculptures stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of large sculptures (larger than 10'' in height) stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of small sculptures (smaller than 10'' in height) stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of small paintings (8.5'' by 11'' or smaller) stolen | (# of objects) | 0-infinity | Interval/Ratio |

| | | | |
|---|------------------------|-------------|----------------|
| # of large paintings (8.5" by 11" or larger) stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of small photograms (8.5" by 11" or smaller) stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of large photographs (8.5" by 11" or larger) stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of decorative objects stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of large glass objects stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of small glass objects stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of china objects stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of silver objects stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of textiles stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of rare books or manuscripts stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of posters stolen | (# of objects) | 0-infinity | Interval/Ratio |
| # of other objects stolen | (# of objects) | 0-infinity | Interval/Ratio |
| Name of other object stolen | (name of other object) | Categorical | Nominal |
| | | | |
| <i>All Objects Victimized</i> | | | |

| | | | |
|---|---|-------------|----------------|
| Total # of objects vandalized | (# of objects) | 0-infinity | Interval/Ratio |
| Total # of objects stolen | (# of objects) | 0-infinity | Interval/Ratio |
| Total # of objects victimized (vandalized & stolen) | (# of objects) | 0-infinity | Interval/Ratio |
| | | | |
| <i>Incidences of Perpetration</i> | | | |
| Total # of vandalism incidences | (# of incidences of vandalism) | 0-infinity | Interval/Ratio |
| Total # of theft incidences | (# of incidences of theft) | 0-infinity | Interval/Ratio |
| Total # of vandalism and theft incidences combined | (# of incidences of both vandalism & theft) | 0-infinity | Interval/Ratio |
| | | | |
| <i>Vandalism/Theft Perpetrator</i> | | | |
| How often was the vandalism perpetrator identified? | (0=never to 3=always) | 0-3 | Ordinal |
| How often was the theft perpetrator identified? | (0=never to 3=always) | 0-3 | Ordinal |
| Acts of vandalism likely committed by | (1=employee to 5=other, such as) | 1-5 | Nominal |
| Acts of vandalism likely committed by other | (name of other category of perpetrator) | Categorical | Nominal |

| | | | |
|---|---|-------------|---------|
| Acts of theft likely committed by | (1=employee to 5=other, such as) | 1-5 | Nominal |
| Acts of theft likely committed by other | (name of other category of perpetrator) | Categorical | Nominal |
| | | | |
| <i>Recovery of Stolen Work</i> | | | |
| How often was the stolen work of art recovered? | (0=never to 3=always) | 0-3 | Ordinal |
| On average, how quickly did your institution manage to recover the stolen art object? | (0=never to 4=less than one year) | 0-4 | Ordinal |
| | | | |
| <i>Location of Vandalism/Theft</i> | | | |
| Location of most vandalism incidence(s) | (1=in the gallery space to 8=other location, such as) | 1-8 | Nominal |
| Other location of vandalism incidence(s) | (name of other location) | Categorical | Nominal |
| Location of theft incidence(s) | (1=in the gallery space to 8=other location, such as) | 1-8 | Nominal |
| Other location of theft incidence(s) | (name of other location) | Categorical | Nominal |

Analytic Plan

In order to present a detailed picture of art theft and vandalism in American art museums/galleries, univariate and bivariate descriptive statistical analyses, bivariate binary logistic regression analyses, and multivariate binary logistic regression analyses will be conducted.

Descriptive Statistics

The first step will utilize univariate descriptive statistical analysis of the demographic/control and theoretical independent measures, which presents a general description of the sampled institutions. This analysis will reveal the mean and standard deviation of the interval/level variables and the frequencies and proportions of the categorical and ordinal level variables. The statistical description of the non-theoretical variables will be contained in Appendix B using a graphical format of pie charts and bar graphs. The second step and third steps will also utilize a description of the sampled institutions. However, a bivariate descriptive statistical exploration will be conducted as subgroup comparisons analyses between the victimized versus non-victimized institutions. One series of analyses will compare the means and proportions of the museums/galleries that were victimized by art vandalism to the means and proportions of those not victimized by art vandalism. The other series of analyses will compare the means and proportions of the museums/galleries that were victimized by art theft to the means and proportions of those not victimized by art theft. Before these analyses commence, all variables with answer choices of unknown, N/A, or missing will be transformed into the “missing” column of SPSS.

Bivariate Logistic Regression Analysis

Bivariate binary logistic regression will reveal any significant relationships among the control and/or theoretical independent variables and each dependent variable. Binary logistic regression is utilized when dichotomous or binary categorical variable(s) represent the dependent variable(s) (Field, 2013). The two dependent variables utilized, “Yes art vandalism incidence(s)” and “Yes art theft incidence(s)” are both binary categorical variables, consequently binary logistic regression is the appropriate analytical method for this study. Additionally, logistic regression does not represent a linear relationship between the dependent and independent variables. Rather, this form of analysis predicts the odds or probability of an event occurring and the dependent variable does not need to be normally distributed (Field, 2013; Menard, 2002). The independent variables that are determined to have p-values between 0.00 and 0.10 in the bivariate binary logistic regression analyses will be included in the multivariate logistic regression analysis.

Multivariate Analysis

Lastly, there are several forms of multivariate statistical regression analyses that examine the relationships between a dependent variable and multiple independent variables. The current study will be using multivariate binary logistic regression. At this level of analysis, more than one independent variable will be analyzed as a group with each dependent variable to determine how each measure within the group influences each form of victimization.

The variables selected for potential inclusion in the binary logistic regression model will be subjected to two types of diagnostic tests to ensure that the measures ultimately utilized for a full regression model fulfill the diagnostic criteria.

The first test is to check for multicollinearity between independent variables. It is assumed that there is a strong correlation between the dependent and independent variables. However, when two or more independent variables are highly correlated they lend little to the predictive potential of a multiple regression model. Various tests for multicollinearity can be used, such as the Tolerance and Variance Inflation Factor (VIF) tests. The VIF test will be used in this study because this method of determining multicollinearity not only indicates whether there is an issue with collinearity but it allows the researcher to interpret which variables are problematic and the severity of the problem. The scores of the VIF range from 1 to infinity (Champion & Hartley, 2010). According to Walker and Maddan (2013) “A VIF of 4 or less indicates no problem with multicollinearity in the model. A VIF of 5 is acceptable, but anything greater should lead to other collinearity diagnostics to assess problems” (p. 419).

Next, the presence of any outliers will be examined. Outliers are cases that fall far above or below the mean of the majority of the data and they can affect the estimates of the regression coefficients. Failure to detect and address any issues with outliers that are determined to be influential cases could ultimately affect the validity of the regression model (Sarker, Midi, & Rana, 2011). Therefore, the outliers need to be identified and if necessary, permanently removed (Agresti & Finlay, 2009; Field, 2013). The inspection of outliers will be based on the examination of errors within the model, often referred to as residuals (Field, 2013). A residual is the difference between the observed value of a

dependent variable in the sample and the predicted value of a dependent variable in the regression model (Agresti & Finlay, 2009; Field, 2013).

One test will be used to identify any outliers: the Standardized Pearson Residual test. This test will examine the standardized residuals and their effects on the regression model. A standardized residual is “a residual which has been converted into a z-score; i.e. they have been converted into standard deviation units. They are now distributed around a mean of 0 and have a standard deviation of 1” (Field, 2013, p. 306). This transformation is accomplished by calculating the standard deviation of the residuals of all cases together and then one by one take each case’s residual and dividing by the standard deviation of all the residuals (D. Roelfs, personal communication, February 3, 2017). Furthermore, according to Field (2013), when residuals are standardized they can be compared within various statistical analytical models and their values can be interpreted from a universal standard. For example, if a confidence interval of 95% is declared within any statistical model, then 95% of the z-scores should fall within the threshold of -1.96 and +1.96 within a normally distributed sample. A standardized residual value outside of these numerical ranges would be considered an outlier. Additionally, Roelfs (2017) further posits, if a confidence interval of 99% is declared then any case that has a standardized residual value of more than +2.65 or less than -2.565 presents evidence of possible outlier cases within the model.

After this step is completed, the influence of the outliers is determined by three criteria. First, have any new significant variables appeared which were not significant prior to removal of the outlier cases or vice versa? Second, have any of the p-values of the variables that were significant in both models (with and without outliers) increased or

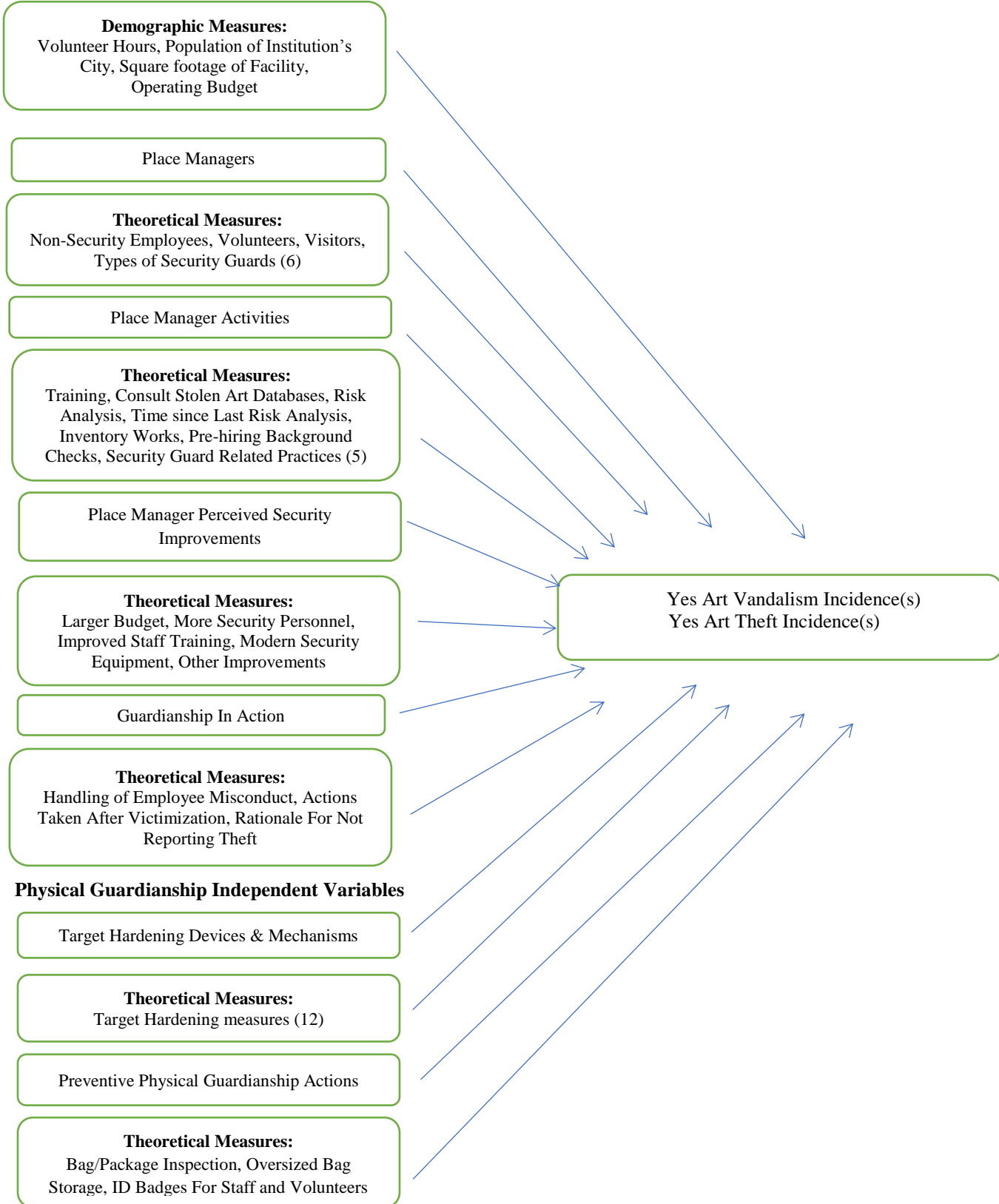
decreased substantially? Third, have any of the log odds coefficients (B) of the variables that were significant in both models (with and without outliers) increased or decreased substantially or changed direction? If any of these scenarios occurred, then a decision must be made as to how to handle the outlier cases that are significantly influencing the regression model (D. Roelfs, personal communication, February 3, 2017). The outliers can either be retained and the investigative results reported, the outliers can be permanently removed, or the outliers can be transformed with an appropriate mathematical function (Aguinis, Gottfredson, and Joo, 2013).

The variables that remain after the examination and resolution of multicollinearity and outlier issues will be included in the initial full multivariate binary logistic regression model. Next, a parsimonious model will be derived from the full regression model, containing the variables that withstood the above-mentioned diagnostic tests. A parsimonious model is a regression model that does not include any predictor variables unless they have an explanatory benefit; each variable that does not make a significant or marginally significant contribution to the model will be removed (Field, 2013). Lastly, a separate model will be constructed for art vandalism and art theft.

The next chapter will present the results of the multi-step examination of the data.

Figure 6.1– Proposed Conceptual Model

Social Guardianship Independent Variables



CHAPTER VII

RESULTS

The analytical portion of this study took place in four stages. First, a univariate statistical description of both the demographic and theoretical variables was presented. Next, bivariate descriptive statistics of a refined selection of theoretical measures was examined within the context of victimized versus not-victimized museums and galleries for each dependent variable. Following the first two steps of rudimentary analyses were the bivariate binary logistic analyses of the same select theoretical variables, and lastly the multivariate binary logistic regression analyses were conducted.

Stage 1: Descriptive Statistics

Due to the exploratory nature of this study, two phases of descriptive statistics were conducted. First, a univariate description of demographic and theoretical variables was examined for the entire sample of 111 respondents. The results of the analysis of the demographic and theoretical measures are reported in **Table 7.1**. It should be noted that to reduce the length of this chapter, the demographic and theoretical variables not included in the table are included in Appendix B (in a graphical format rather than a tabular format). Additionally, the univariate descriptive statistics of the non-theoretical

variables (such as the number of each form of object vandalized or stolen and the location of the victimization) are included in **Appendix C and D**.

Among the 111 museums/galleries that were included in this analysis, 22.5% (25) experienced at least one incidence of art vandalism, 15.3% (17) experienced at least one incidence of art theft, and 31.5% (35) experienced at least one incidence of either art vandalism or art theft. Within the sample, the mean population of the museum/galleries' respective cities was 334,832.39 (SD, 823,150.05). The average number of annual volunteer hours donated was 2,161.43 (SD, 3,623.94). The average operating budget of the sample was \$1,287,473.60 (SD, \$3,452,546.93). Lastly, the museum/gallery average square footage of the sample was 74,135.72 (SD, 462,018.93).

As mentioned in chapter 6, the variables have been divided into theoretical measures that represent several forms of social and physical guardianship. The description of theoretical variables began with social guardianship measures that were divided into multiple theoretical categories. Place Managers-Non-Security were the initial theoretical grouping analyzed within a univariate descriptive statistical format. The first variable within this category is non-security employees and within this sample there was an average of 15.81(SD, 42.69) non-security employees. Volunteers are also a measure of a non-security categorical place manager in which there was an average of 58.97 (SD, 88.50). Additionally, the sample contained an average of 52,780.48 (SD, 178,534.94) visitors.

Several forms of security guards are found in American art museums and galleries and for the purposes of this study, they are categorized within a separate category of place managers (Place Managers-Security Guards). Within the sample, the average

number of full-time security guards was 2.76 (SD, 16.72), the average number of part-time security guards was 2.29 (SD, 5.39), the average number of full-time or part-time roving security guards was 1.46 (SD, 2.78), the average number of full-time or part-time security guards stationary at the entrance of an museum/gallery was 0.67 (SD, 1.72), the average number of part-time and full-time security guards who man a security station was 0.48 (SD, 1.28), and the average number of full-time and part-time security guards employed for at least five years was 2.26 (SD, 5.78).

Place managers' effectiveness or ineffectiveness depends on their actions. The first category of place manager activity is training. Within this category are variables representing training for museum and gallery security staff, non-security staff (museum and gallery staff), and volunteer staff. Security staff training in identification of suspicious objects occurred in 21.6% of the sample and it did not occur 78.4% of the sample. Security staff training in intruder detection systems occurred in 24.3% of the sample and it did not occur in 75.7% of the sample. Security staff training in safety of artworks occurred in 31.5% of the sample and it did not occur in 68.5% of the sample. Security staff training in greeting and visitor reception occurred in 32.4% of the sample and it did not occur in 67.6% of the sample. Lastly, security staff training in CCTV management occurred in 24.3% of the sample and it did not occur in 75.7% of the sample.

Measures of non-security staff training (museum and gallery staff) were the same for security staff. Within the sample, museum staff training in identification of suspicious objects occurred in 23.4% of the sample and it did not occur in 76.6% of the sample. Museum/gallery staff training in intruder detection systems occurred in in 39.6% of the

sample and it did not occur in 60.4% of the sample. Museum/gallery staff training in safety of artworks occurred in 85.6% of the sample and it did not occur in 14.4% of the sample. Museum/gallery staff training in greeting and visitor reception occurred in 80.2% of the sample and it did not occur in 19.8% of the sample. Lastly, museum/gallery staff training in CCTV management occurred in 26.1% of the sample and it did not occur in 73.9% of the sample.

The theoretical measures representing volunteer staff training were the same for security staff and museum staff except CCTV training was not included in this group of place manager training. Within the sample, volunteer training in identification of suspicious objects occurred in 8.1% of the sample and it did not occur in 91.9% of the sample. Volunteer training in intruder detection systems occurred in 15.3% of the sample and it did not occur in 84.7% of the sample. Volunteer training in safety of artworks occurred in 65.8% of the sample and it did not occur in 34.2% of the sample. Lastly, volunteer training in greeting and visitor reception occurred in 65.8% of the sample and it did not occur in 34.2% of the sample.

The second theoretical category of museum/gallery place manager activities is the presence or absence of the performance of due diligence. The consultation of stolen art databases ensures that a museum/gallery's collection is not comprised of any "questionable" works. The consultation of stolen art databases primarily never occurred in 48.6% of the sample, sometimes occurred in 7.2% of the sample, occurred most of the time in 3.6% of the sample, always occurred in 13.5% of the sample, and this question was non-applicable to 27.0% of the sample. An outside risk analysis was never performed by 54.1% of the sample, 24.3% of the sample answered "yes", an outside risk

analysis had been performed, and 21.6% of the sample did not know if an outside risk analysis had ever been conducted. Additionally, 0.9% of the sample had a missing response. The respondents were also directed to document the year that the most recent outside risk analysis was conducted if applicable. Consequently, the variable “time elapsed since last analysis” was created and subsequently, the results indicated that 54.1% of the sample never had a risk analysis conducted, 0.9% of the sample had a risk analysis conducted 15-19 years ago, 0.9% of the sample had a risk analysis conducted 11-14 years ago, 2.7% of the sample had a risk analysis conducted 6-10 years ago, 11.7% of the sample had a risk analysis conducted 2-5 years ago, and 7.2% of the sample had a risk analysis conducted within the last year.

Inventorying works on view and in storage are proactive measures to ensure that a museum/gallery’s collection is intact. Only 0.9% of the sample inventoried their works on view less than once a year, 22.5% of the sample inventoried their works on view once a year, 3.6% of the sample inventoried their works on view every 6 months, 6.3% of the sample inventoried their works on view every 3 months, 11.7% of the sample inventoried their works on view monthly, 15.3% of the sample inventoried their works on view weekly/more frequently, 30.6% of the sample inventoried their works on view daily, and 9.0% of the sample had a missing response.

Not all museums/galleries have a permanent collection of work; rather they only exhibit temporary shows. Consequently, because there is no need to inventory works in storage for museums without permanent collections, 9.0% of the sample gave a non-applicable answer choice to this question. The lowest percentage of the sample inventoried their collection in storage every ten years (8.1%), 14.4% of the sample

inventoried their works in storage every 5-10 years, 20.7% of the sample inventoried their works in storage every 2-4 years, 27.9% of the sample inventoried their works in storage annually, 9.0% of the sample inventoried their works in storage more than once a year, and 10.8% of the sample had a missing response. Additionally, as mentioned in chapter four, many of the respondents did not have a permanent collection, keep any works in storage, hold only temporary exhibitions, or wrote in non-applicable (N/A) as their answer choice. These factors contributed to the moderately high number of missing responses.

Additional measures of due diligence are conducting pre-employment background checks on potential employees and volunteers. Within this study, 18.9% of the sample never conducted a pre-employment background check on any potential employees, 9.0% of the sample only sometimes conducted a pre-employment background check on any potential employees, 8.1% of the sample conducted a pre-employment background check on any potential employees most of the time, 57.7% of the sample always conducted a pre-employment background check on any potential employees, and 6.3% of the sample answered non-applicable to this question.

With regard to pre-employment background checks on any potential volunteers, the majority of the sample (54.1%) never conducted a pre-employment background check on any potential volunteers, 15.3% of the sample only sometimes conducted a pre-employment background check on any potential volunteers, 7.2% of the sample conducted a pre-employment background check on any potential volunteers most of the time, 13.5% of the sample always conducted a pre-employment background check on any potential volunteers, and 9.9% of the sample answered non-applicable to this question.

Security guard specific duties were categorized within their own theoretical grouping. The average square footage of roving for a security guard was 3,429.46 sq. ft. (SD, 10,359.41sq. ft.). The average number of designated security posts was 1.64 (SD, 6.65). Surveillance rounds were made internally by 18.9% of the sample and both internally and externally by 18.9% of the sample. Furthermore, 62.2% of the sample had a missing response. Several factors could account for the high number of missing responses. First, many of the respondents did not employ security guards and consequently this question would be non-applicable to those respondents. Secondly, if the respondents did employ security guards, this measure of security guard duties was not considered relevant or did not apply to the security guard functions.

Security guards also were monitored for frequency of their surveillance rounds. The average number of rounds within half hour intervals was 2.91 (SD, 6.79). The response for the length of time a security guard is on duty was missing for the majority of the sample (64.0%). However, 9.9% of the sample's security guards were on duty for public hours only, 19.8% of the sample's security guards were on duty for extended hours (for special events/normally extended hours), 5.4% of the sample's security guards were on duty for 24 hours, and 0.9% of the sample's security guards were on duty for special events only. Once again, possible reasons for the high number of missing responses could be that the respondents did not employ security guards and consequently this question would be non-applicable to those respondents. Or, if the respondents did employ security guards, this measure of security guard duties was not considered relevant or did not apply to the security guard functions.

In addition to the physical activities that museum/gallery place managers engage in daily, they also conceptualize perceived improvements to their security practices and procedures. The majority of the sample (76.6%) answered “yes” that a larger security budget would improve their level of security and 23.4% of the sample answered “no”. The majority of the sample (58.6%) also answered “yes” that more security personnel would improve their level of security and 41.4% of the sample answered “no”. The majority of the sample (58.6%) also answered “yes” that improved staff training would improve their level of security and 41.4% of the sample answered “no”. The majority of the sample (54.1%) also answered “yes” that modern security equipment would improve their level of security and 45.9% of the sample answered “no”. Lastly, in terms of other improvements that would improve a museum/gallery’s level of security, 7.2% of the sample answered “yes” and 92.8% of the sample answered “no”. Examples of other suggestions given were: a better relationship with local and campus police, a clearer delineation between the art building and the museum building, a patch-through ability to police and fire departments, and support from the university administration for further security measures.

The next two theoretical categories represent measures of Guardianship In Action (GIA) relating to vandalism victimization. Specifically, these categories measure how willing a museum or gallery is to report either internal employee malfeasance and/or instances of victimization. The first group of variables relate to employee vandals. If an employee committed vandalism, 32.4% of the sample reported that they would fire the employee, 4.5% of the sample would not fire the employee, and 53.1% of the sample had a missing response. If an employee committed vandalism, 24.3% of the sample reported

that they would report the employee to the police, 10.8% of the sample would not report the employee to the police, and 64.9% of the sample had a missing response. If an employee committed vandalism, 3.6% of the sample reported that they would utilize other actions against the employee, 28.8% of the sample would not would utilize other actions against the employee, and 67.6% of the sample had a missing response. Only one “other action” taken against an employee vandal was reported and that was requiring the employee to pay the institution restitution to have the damaged work repaired. Possible reasons for the high percentage of missing responses is that within the 111 respondents only 22.5% of the sample were victimized by art vandalism and the respondents may have misinterpreted this question to pertain only to victimized institutions. Additionally, the respondents may have chosen to withhold their policy regarding employee perpetration or the respondents did not have a policy regarding employee criminal misconduct.

The next group of GIA variables relate to actions taken after an incidence of vandalism by the victimized museum/gallery. It should be noted that this group of answer choices applied only to museums/galleries that were victimized. Consequently, the total number of museums/galleries within this sample is 25 as opposed to 111. Only 4.0% of the sample reported that they contacted national law enforcement if there was an incidence of vandalism and 96.0% of the sample did not. Within the sample, 44.0% contacted the local police if there was an incidence of vandalism and 56.0% of the sample did not. Only 4.0% of the sample contacted the local media if there was an incidence of vandalism and 96.0% of the sample did not. Only 28.0% of the sample reported an incidence of vandalism to their insurance agency and 72.0% of the sample did not. Only

40.0% of the sample informed their board of an incidence of vandalism and 60.0% of the sample did not. Only 20.0% of the sample filled out an incident report if they experienced vandalism victimization, and 80.0% of the sample did not. Only 24.0% of the sample utilized another form of action if an incidence of vandalism occurred and 76.0% of the sample did not. Examples of “other actions” taken by the sample include art conservation, contacting the artist/owner, repairing the artwork, and seeking funding to repair and remove the object.

The second theoretical category represents measures of Guardianship In Action relating to theft victimization. The first group of variables relate to employee thieves. If an employee committed theft, 24.3% of the sample reported that they would fire the employee, 0.9% of the sample would not fire the employee, and 74.8% of the sample had a missing response. If an employee committed theft, 22.5% of the sample reported that they would report the employee to the police, 0.9% of the sample would not report the employee to the police, and 76.5% of the sample had a missing response. If an employee committed theft, 1.8% of the sample reported that they would utilize other actions against the employee, 19.8% of the sample would not utilize other actions against the employee, and 78.4% of the sample had a missing response. “Other actions” against taken against an employee thief that were reported were reporting the employee to the board and giving the employee the option to return the property undamaged to avoid prosecution. As stated above, possible reasons for the high percentage of missing responses is that within the 111 respondents only 15.3% were victimized by art theft and the respondents may have misinterpreted this question to pertain only to victimized institutions. Additionally, the

respondents may have chosen to withhold their policy regarding employee perpetration or the respondents did not have a policy regarding employee criminal misconduct.

The next group of variables relate to actions taken after an incidence of theft by the victimized museum/gallery. It should be noted that due to this group of answer choices applying only to museums/galleries that were victimized, the total number of museums/galleries within this sample is 17 as opposed to 111. Only 5.9% of the sample contacted national law enforcement if there was an incidence of theft and 94.1% of the sample did not. The majority of the sample (64.7%) contacted the local police if there was an incidence of theft and 35.3% of the sample did not. Only 17.6% of the sample contacted the local media if there was an incidence of theft and 82.4% of the sample did not. Only 35.3% of the sample reported an incidence of theft to their insurance agency and 64.7% of the sample did not. The majority of the sample (70.6%) informed their board of an incidence of theft and 29.4% of the sample did not. The majority of the sample (70.6%) filled out an incident report if they experienced theft victimization and 29.4% of the sample did not. The majority of the sample (94.1%) utilized another form of action if an incidence of theft occurred and 5.9% of the sample did not. The only “other action” reported by the sample was discussing the incident with the artist.

In addition to measures representing the reporting of art theft, this study examined why a victim of art theft would not report the incident. Once again, due to this group of variables applying only to museums/galleries that were victimized, the total number of museums/galleries within this sample is 17 as opposed to 111. The variables utilized as reasons for not reporting theft are: fear of bad publicity, fear of future thefts, fear of public embarrassment, fear of increased insurance rates, fear of extortion, and fear of

other reason. Not one respondent answered yes for the reasons listed above other than for “fear of other reason”. Only 25.3% of the sample acknowledged that they would report a theft for an “other reason” and 76.5% of the sample did not. The other reasons given for not reporting were: the police or insurance company isn’t interested, the total value of the work did not warrant it, and the value of the item was low.

The next set of theoretical variables represent measures of physical guardianship. The first category is composed of security measures such as security devices and physical barriers that are commonly classified as target hardening mechanisms. Within this study, several variables were designated as such. The majority of the sample (84.7%) used door alarms and 15.3% of the sample did not. Window alarms were utilized by 43.2% of the sample and were not utilized by 56.8% of the sample. A large percentage (71.2%) of the sample utilized motion detectors and 28.8% of the sample did not. CCTV was utilized by 49.5% of the sample and was not utilized by 50.5% of the sample. Individual object alarms were utilized by 16.2% of the sample and were not utilized by 83.8% of the sample. Glazing on some pictures was utilized by 52.3% of the sample and was not utilized by 47.7% of the sample. Glazing on all pictures was utilized by 5.4% of the sample and was not utilized by 94.6% of the sample. Vitrines were utilized by 71.2% of the sample and were not utilized by 28.8% of the sample. Low lying barriers in front of artworks were utilized by 36.9% of the sample and were not utilized by 62.2% of the sample. Ropes and stanchions were utilized by 42.3% of the sample and were not utilized by 57.7% of the sample. Other types of security systems were utilized by 8.1% of the sample and were not utilized by 91.9% of the sample. Examples of other types of security systems that the sample reported were alarm push buttons at strategic points of public

contact, silent alarms, and a double alarm system. Other types of physical barriers were utilized by 9.9% of the sample and were not utilized by 90.1% of the sample. Examples of other types of physical barriers that the sample reported were a line on the floor, platforms, and signage with the message “Do not touch. This gallery is monitored by video surveillance”.

Museums and galleries cannot rely on target hardening measures alone to protect their collections. The final theoretical category of variables relates to other forms of preventative physical guardianship measures that are incorporated in museum’s and gallery’s guardianship protocols. A widely-used procedure is bag and package inspections of visitors, volunteers, and employees. This question had a missing response for 2.7% of the sample. The majority of the sample (86.5%) conducted no bag or package inspection, 3.6% of the sample conducted a bag or package inspection only on visitors entering the museum/gallery, 0.9% of the sample conducted a bag or package inspection only on employees and volunteers entering the museum/gallery, 1.8% of the sample conducted a bag or package inspection only on employees and volunteers entering and exiting the museum/gallery, 0.0% of the sample conducted a bag or package inspection on all persons entering the museum/gallery, 1.8% of the sample conducted a bag or package inspection on all persons entering and exiting the museum/gallery, and 2.7% of the sample conducted an inspection only on all packages and bags except purses.

An additional policy that aides in the reduction of theft or vandalism of art works is to require visitors to check their oversized bags in a specific storage area. Over half (58.6%) of the sample required oversized bag storage, 40.5% of the sample did not, and for 0.9% of the sample the response was missing. Lastly, a frequently utilized proactive

measure of guardianship by staff and volunteers is to wear ID badges that will alert visitors to the presence of staff surveillance. The majority of the sample (56.8%) required neither their staff nor their volunteers to wear an ID badge, 9.0% of the sample required only their staff to wear an ID badge, 5.4% of the sample required only their volunteers to wear an ID badge, and 28.8% of the sample required both their staff and their volunteers to wear an ID badge.

Table 7.1. Descriptive Statistics of Theoretical Variables For Full Sample of 111 Respondents.

| <i>Variable</i> | <i>Central Tendency Measure</i> | <i>Variability Measure</i> | <i>Number of Missing Cases</i> |
|---|---------------------------------|----------------------------------|--------------------------------|
| <i>Victimization Dependent Variables</i> | | | |
| Yes Art Vandalism Incidence(s) | | 22.5% (25 museums/galleries) | |
| Yes Art Theft Incidence(s) | | 15.3% (17 museums/galleries) | |
| <i>Demographic/Control Variables</i> | | | |
| <u>Population of institution's city</u> | 334,832.39 residents (mean) | 823,150.05 residents (Std. Dev.) | 4 (3.6%) |
| <u>Volunteer hours</u> | 2,161.43 hours (mean) | 3,623.94 hours (Std. Dev.) | 15 (13.5%) |
| <u>Operating budget</u> | \$1,287,473.60 (mean) | \$3,452,546.93 (Std. Dev.) | 13 (11.7%) |
| <u>Square feet of museum/gallery</u> | 74,135.72 sq.ft. (mean) | 462,018.93 sq.ft. (Std. Dev.) | 12 (10.8%) |
| Theoretical Measures-Social Guardianship | | | |
| <i>Place Managers-Non-Security</i> | | | |
| <u># of non-security employees</u> | 15.81 (mean) | 42.69 (Std. Dev.) | 2 (1.8%) |
| <u># of volunteers</u> | 58.97 (mean) | 88.50 (Std. Dev.) | 2 (1.8%) |
| <u># of visitors</u> | 52,780.48 (mean) | 178,534.94 (Std. Dev.) | 4 (3.6%) |

Place Manager-Security Guards

| | | | |
|--|-------------|-------------------|----------|
| <u># of full time security guards</u> | 2.76 (mean) | 16.72 (Std. Dev.) | 0 (0.0%) |
| <u># of part- time security guards</u> | 2.29 (mean) | 5.39 (Std. Dev.) | 2 (1.8%) |
| <u># of FT or PT roving security guards</u> | 1.46 (mean) | 2.78 (Std. Dev.) | 0 (0.0%) |
| <u># of FT or PT guards stationary at entrance</u> | 0.67 (mean) | 1.72 (Std. Dev.) | 2 (1.8%) |
| <u># of FT or PT guards who man a security station</u> | 0.48 (mean) | 1.28 (Std. Dev.) | 2 (1.8%) |
| <u># of FT and PT guards employed 5 years ago</u> | 2.26 (mean) | 5.78 (Std. Dev.) | 4 (3.6%) |

Place Manager Activities-Training

| | | | |
|--|--|------------------------|----------|
| <u>SS training in identification of suspicious objects</u> | | | 0 (0.0%) |
| Yes | | 21.6% | |
| | | (24 museums/galleries) | |
| No | | 78.4% | |
| | | (87 museums/galleries) | |
| <u>SS training in intruder detection systems</u> | | | 0 (0.0%) |
| Yes | | 24.3% | |
| | | (27 museums/galleries) | |
| No | | 75.7% | |

| | | |
|--|------------------------|----------|
| | (84 museums/galleries) | |
| <u>SS training in safety of artworks</u> | | 0 (0.0%) |
| Yes | 31.5% | |
| | (35 museums/galleries) | |
| No | 68.5% | |
| | (76 museums/galleries) | |
| <u>SS training in greeting & visitor reception</u> | | 0 (0.0%) |
| Yes | 32.4% | |
| | (36 museums/galleries) | |
| No | 67.6% | |
| | (75 museums/galleries) | |
| <u>SS training in CCTV management</u> | | 0 (0.0%) |
| Yes | 24.3% | |
| | (27 museums/galleries) | |
| No | 75.7% | |
| | (84 museums/galleries) | |
| <u>MS training in identification of suspicious objects</u> | | 0 (0.0%) |
| Yes | 23.4% | |
| | (26 museums/galleries) | |
| No | 76.6% | |
| | (85 museums/galleries) | |
| <u>MS training in intruder detection systems</u> | | 0 (0.0%) |
| Yes | 39.6% | |
| | (44 museums/galleries) | |
| No | 60.4% | |
| | (67 museums/galleries) | |
| <u>MS training in safety of artworks</u> | | 0 (0.0%) |
| Yes | 85.6% | |

| | | | |
|--|-------|-------------------------|----------|
| | | (95 museums/galleries) | |
| No | 14.4% | | |
| | | (16 museum/gallery) | |
| <u>MS training in greeting & visitor reception</u> | | | 0 (0.0%) |
| Yes | 80.2% | | |
| | | (89 museums/galleries) | |
| No | 19.8% | | |
| | | (22 museums/galleries) | |
| <u>MS training in CCTV management</u> | | | 0 (0.0%) |
| Yes | 26.1% | | |
| | | (29 museums/galleries) | |
| No | 73.9% | | |
| | | (82 museums/galleries) | |
| <u>VS training in identification of suspicious objects</u> | | | 0 (0.0%) |
| Yes | 8.1% | | |
| | | (9 museums/galleries) | |
| No | 91.9% | | |
| | | (102 museums/galleries) | |
| <u>VS training in intruder detection systems</u> | | | 0 (0.0%) |
| Yes | 15.3% | | |
| | | (17 museums/galleries) | |
| No | 84.7% | | |
| | | (94 museums/galleries) | |
| <u>VS training in safety of artworks</u> | | | 0 (0.0%) |
| Yes | 65.8% | | |
| | | (73 museums/galleries) | |
| No | 34.2% | | |

| | | |
|--|------------------------|------------|
| | (38 museums/galleries) | |
| <u>VS training in greeting & visitor reception</u> | | 0 (0.0%) |
| Yes | 65.8% | |
| | (73 museums/galleries) | |
| No | 34.2% | |
| | (38 museums/galleries) | |
| <i>Place Manager Activities-Due Diligence</i> | | |
| <u>Consult stolen art databases</u> | | 30 (27.0%) |
| Never | 48.6% | |
| | (54 museums/galleries) | |
| Sometimes | 7.2% | |
| | (8 museums/galleries) | |
| Most of the time | 3.6% | |
| | (4 museums/galleries) | |
| Always | 13.5% | |
| | (15 museums/galleries) | |
| N/A | 27.0% | |
| | (30 museums/galleries) | |
| <u>Outside risk analysis performed</u> | | 25 (22.5%) |
| Never | 54.1% | |
| | (60 museums/galleries) | |
| Yes | 23.4% | |
| | (26 museums/galleries) | |
| Don't know | 21.6% | |
| | (24 museums/galleries) | |

| | | |
|---|------------------------|------------|
| Missing | 0.9% | |
| | (1 museum/gallery) | |
| <u>Time elapsed since last risk analysis</u> | | 25 (22.5%) |
| Never had a risk analysis | 54.1% | |
| | (60 museums/galleries) | |
| Had risk analysis conducted 15-19 years ago | 0.9% | |
| | (1 museum/gallery) | |
| Had risk analysis conducted 11-14 years ago | 0.9% | |
| | (1 museum/gallery) | |
| Had risk analysis conducted 6-10 years ago | 2.7% | |
| | (3 museums/galleries) | |
| Had risk analysis conducted 2-5 years ago | 11.7% | |
| | (13 museums/galleries) | |
| Had risk analysis conducted last within last year | 7.2% | |
| | (8 museums/galleries) | |
| <u>Inventory works on view</u> | | 10 (9.0%) |
| Less than once a year | 0.9% | |
| | (1 museum/gallery) | |
| Once a year | 22.5% | |
| | (25 museums/galleries) | |
| Every 6 months | 3.6% | |
| | (4 museums/galleries) | |
| Every 3 months | 6.3% | |
| | (7 museums/galleries) | |
| Monthly | 11.7% | |
| | (13 museums/galleries) | |
| Weekly/More frequent | 15.3% | |
| | (17 museums/galleries) | |
| Daily | 30.6% | |
| | (34 museums/galleries) | |
| Missing | 9.0% | |
| | (10 museums/galleries) | |
| <u>Inventory works in storage</u> | | 22 (19.8%) |
| N/A | 9.0% | |
| | (0museums/galleries) | |

| | | |
|--|------------------------|-----------|
| Every 10 years | 8.1% | |
| | (9 museums/galleries) | |
| Every 5-10 years | 14.4% | |
| | (16 museums/galleries) | |
| Every 2-4 | 20.7% | |
| | (23 museums/galleries) | |
| Annually | 27.9% | |
| | (31 museums/galleries) | |
| More than once a year | 9.0 % | |
| | (10 museums/galleries) | |
| Missing | 10.8% | |
| | (12 museums/galleries) | |
| <u>Pre-hiring Background checks on</u> | | 7 (6.3%) |
| <u>potential employees</u> | | |
| Never | 18.9% | |
| | (21 museums/galleries) | |
| Sometimes | 9.0% | |
| | (10 museums/galleries) | |
| Most of the time | 8.1% | |
| | (9 museums/galleries) | |
| Always | 57.7% | |
| | (64 museums/galleries) | |
| N/A | 6.3% | |
| | (7 museums/galleries) | |
| <u>Pre-hiring Background checks on</u> | | 11 (9.9%) |
| <u>potential volunteers</u> | | |

| | | |
|------------------|-------|------------------------|
| Never | 54.1% | (60 museums/galleries) |
| Sometimes | 15.3% | (17 museums/galleries) |
| Most of the time | 7.2% | (8 museums/galleries) |
| Always | 13.5% | (15 museums/galleries) |
| N/A | 9.9% | (11 museums/galleries) |

Security Guard Specific Duties

| | | | |
|---|---------------------------------|--------------------------------------|------------------------|
| <u>Square footage of roving</u> | 3,429.46 sq.ft.(mean) | 10,359.41 sq.ft.(Std. Dev.) | 17 (15.3%) |
| <u># of designated security posts</u> | 1.64 (mean) | 6.65 (Std. Dev.) | 1 (0.9%) |
| <u>Where surveillance rounds are made</u> | | | 69 (62.2%) |
| Internally | | 18.9% | (21 museums/galleries) |
| Internally & Externally | | 18.9% | (21 museums/galleries) |
| Missing | | 62.2% | (69 museums/galleries) |
| <u>How often surveillance rounds are Made</u> | 2.91/half hour intervals (mean) | 6.79/half hour intervals (Std. Dev.) | 3 (2.7%) |

| | | |
|--|------------------------|------------|
| <u>Length of time security on duty</u> | | 71 (64.0%) |
| Missing | 64.0% | |
| | (71 museums/galleries) | |
| Public hours only | 9.9% | |
| | (11 museums/galleries) | |
| Extended hours (for special events/normally extended hours | 19.8% | |
| | (22 museums/galleries) | |
| 24 hours | 5.4% | |
| | (6 museums/galleries) | |
| Special events only | 0.9% | |
| | (1 museum/gallery) | |

Place Manager Perceived Improvements

Would a larger budget improve level of security? 0 (0.0%)

| | | |
|-----|------------------------|--|
| Yes | 76.6% | |
| | (85 museums/galleries) | |
| No | 23.4% | |
| | (26 museums/galleries) | |

Would more security personnel improve level of security? 0 (0.0%)

| | | |
|-----|------------------------|--|
| Yes | 58.6% | |
| | (65 museums/galleries) | |
| No | 41.4% | |
| | (46 museums/galleries) | |

Would improved staff training improve level of security? 0 (0.0%)

| | | |
|-----|--------|--|
| Yes | 58.6 % | |
|-----|--------|--|

| | | |
|---|-------------------------|------------|
| | (65 museums/galleries) | |
| No | 41.4% | |
| | (46 museums/galleries) | |
| <u>Would modern security equipment improve level of security?</u> | | 0 (0.0%) |
| Yes | 54.1% | |
| | (60 museums/galleries) | |
| No | 45.9% | |
| | (51 museums/galleries) | |
| <u>Other improvements?</u> | | 0 (0.0%) |
| Yes | 7.2% | |
| | (8 museums/galleries) | |
| No | 92.8% | |
| | (103 museums/galleries) | |
| <i>Guardianship In Action-Vandalism</i> | | |
| <u>Employee fired if committed vandalism</u> | | 70 (63.1%) |
| Yes | 32.4% | |
| | (36 museums/galleries) | |
| No | 4.5% | |
| | (5 museums/galleries) | |
| Missing | 63.1% | |
| | (70 museums/galleries) | |
| <u>Employee reported to police if committed vandalism</u> | | 72 (64.9%) |
| Yes | 24.3% | |
| | (27 museums/galleries) | |
| No | 10.8 % | |
| | (12 museums/galleries) | |
| Missing | 64.9% | |
| | (72 museums/galleries) | |
| <u>Other actions with employee if committed vandalism</u> | | 75 (67.6%) |
| Yes | 3.6% | |
| | (4 museums/galleries) | |
| No | 28.8% | |
| | (museums/galleries) | |

| | | |
|--|--|----------|
| Missing | 67.6% | |
| | (75 museums/galleries) | |
| <u>Contact national law enforcement if vandalism</u> | *Note the reporting measures only apply to the institutions who experienced vandalism victimization (n=25) | 0 (0.0%) |
| Yes | 4.0% | 0 (0.0%) |
| | (1 museum/gallery) | |
| No | 96% | |
| | (24 museums/galleries) | |
| <u>Inform the local police if vandalism</u> | | 0 (0.0%) |
| Yes | 44.0% | |
| | (11 museums/galleries) | |
| No | 56.0% | |
| | (14 museums/galleries) | |
| <u>Contact the local media if vandalism</u> | | 0 (0.0%) |
| Yes | 4.0% | |
| | (1 museum/gallery) | |
| No | 96.0% | |
| | (24 museums/galleries) | |
| <u>Report to insurance agency if vandalism</u> | | 0 (0.0%) |
| Yes | 28.0% | |
| | (7 museums/galleries) | |
| No | 72.0% | |
| | (18 museums/galleries) | |
| <u>Inform your board if vandalism</u> | | 0 (0.0%) |
| Yes | 40.0% | |
| | (10 museums/galleries) | |
| No | 60.0% | |
| | (15 museums/galleries) | |
| <u>Fill out an incident report if vandalism</u> | | 0 (0.0%) |
| Yes | 20.0% | |
| | (5 museums/galleries) | |
| No | 80.0% | |
| | (20 museums/galleries) | |
| <u>Other action if vandalism</u> | | 0 (0.0%) |
| Yes | 24.0% | |
| | (6 museums/galleries) | |
| No | 76.0% | |
| | (19 museums/galleries) | |

Guardianship In Action-Theft

| | | |
|---|---|------------|
| <u>Employee fired if committed theft</u> | | 83 (74.8%) |
| Yes | 24.3% (27 museums/galleries) | |
| No | 0.9% (1 museum/gallery) | |
| Missing | 74.8% (83 museums/galleries) | |
| <u>Employee reported to police if committed theft</u> | | 85 (76.6%) |
| Yes | 22.5% (25 museums/galleries) | |
| No | 0.9% (1 museum/gallery) | |
| Missing | 76.6% (85 museums/galleries) | |
| <u>Other actions with employee if committed theft</u> | | 87 (78.4%) |
| Yes | 1.8% (2 museums/galleries) | |
| No | 19.8% (22 museums/galleries) | |
| Missing | 78.4% (87 museums/galleries) | |
| <u>Contact national law enforcement if theft</u> | *Note the reporting measures only apply to the institutions that experienced theft victimization (n=17) | 0 (0.0%) |
| Yes | 5.9% (1 museum/gallery) | |
| No | 94.1% (16 museums/galleries) | |
| N/A | 0.0% (0 museums/galleries) | |
| <u>Inform the local police if theft</u> | | 0 (0.0%) |
| Yes | 64.7% (11 museums/galleries) | |
| No | 35.3% (6 museums/galleries) | |
| <u>Contact the local media if theft</u> | | 0 (0.0%) |
| Yes | 17.6% (3 museums/galleries) | |
| No | 82.4% (14 museums/galleries) | |

| | | |
|---|----------------------------------|----------|
| <u>Report to insurance agency if theft</u> | | 0 (0.0%) |
| Yes | 35.3% (6 museums/galleries) | |
| No | 64.7% (11 museums/galleries) | |
| <u>Inform your board if theft</u> | | 0 (0.0%) |
| Yes | 70.6% (12 museums/galleries) | |
| No | 29.4% (5 museums/galleries) | |
| <u>Fill out an incident report if theft</u> | | 0 (0.0%) |
| Yes | 70.6% (12 museums/galleries) | |
| No | 29.4% (5 museums/galleries) | |
| <u>Other action if theft</u> | | 0 (0.0%) |
| Yes | 5.9% (1 museum/gallery) | |
| No | 94.1% (16 museums/galleries) | |
| <u>Didn't report theft due to fear of bad publicity</u> | | 0 (0.0%) |
| Yes | 0.0% (0 museums/galleries) | |
| No | 100.0% (17 museums/galleries) | |
| <u>Didn't report theft due to fear of future thefts</u> | | 0 (0.0%) |
| Yes | 0.0% (0 museums/galleries) | |
| No | 100.0% (17 museums/galleries) | |
| <u>Didn't report theft due to fear of public embarrassment</u> | | 0 (0.0%) |
| Yes | 0.0% (0 museums/galleries) | |
| No | 100.0% (17 museums/galleries) | |
| <u>Didn't report theft due to fear of increased insurance rates</u> | | 0 (0.0%) |
| Yes | 0.0% (0 museums/galleries) | |
| No | 100.0% (17 museums/galleries) | |
| <u>Didn't report theft due to fear of extortion</u> | | 0 (0.0%) |

| | | |
|---|------------------------|----------|
| Yes | 0.0% | |
| | (0 museums/galleries) | |
| No | 100.0% | |
| | (17 museums/galleries) | |
| <u>Didn't report theft due to fear of other reason</u> | | 0 (0.0%) |
| Yes | 23.5% | |
| | (4 museums/galleries) | |
| No | 76.5% | |
| | (13 museums/galleries) | |
| Theoretical Measures-Physical Guardianship | | |
| <i>Target Hardening Devices & Mechanisms</i> | | |
| <u>Door alarms</u> | | 0 (0.0%) |
| Yes | 84.7% | |
| | (94 museums/galleries) | |
| No | 15.3% | |
| | (17 museums/galleries) | |
| <u>Window alarms</u> | | 0 (0.0%) |
| Yes | 43.2% | |
| | (48 museums/galleries) | |
| No | 56.8% | |
| | (63 museums/galleries) | |
| <u>Motion detectors</u> | | 0 (0.0%) |
| Yes | 71.2% | |
| | (79 museums/galleries) | |
| No | 28.8% | |
| | (32 museums/galleries) | |
| <u>CCTV</u> | | 0 (0.0%) |
| Yes | 49.5% | |
| | (55 museums/galleries) | |
| No | 50.5% | |
| | (56 museums/galleries) | |
| <u>Individual object alarms</u> | | |
| Yes | 16.2% | |
| | (18 museums/galleries) | |
| No | 83.8% | |
| | (93 museums/galleries) | |
| <u>Glazing on some pictures</u> | | 0 (0.0%) |
| Yes | 52.3% | |
| | (58 museums/galleries) | |
| No | 47.7% | |

| | | |
|--|----------------------------------|----------|
| | (53 museums/galleries) | |
| <u>Glazing on all pictures</u> | | 0 (0.0%) |
| Yes | 5.4% (6 museums/galleries) | |
| No | 94.6% (105 museums/galleries) | |
| <u>Vitrines</u> | | 0 (0.0%) |
| Yes | 71.2% (79 museums/galleries) | |
| No | 28.8% (32 museums/galleries) | |
| <u>Low-lying barriers in front of artworks</u> | | 1 (0.9%) |
| Yes | 36.9% (41 museums/galleries) | |
| No | 62.2% (69 museums/galleries) | |
| <u>Ropes and stanchions</u> | | 0 (0.0%) |
| Yes | 42.3% (47 museums/galleries) | |
| No | 57.7% (64 museums/galleries) | |
| <u>Other type of security systems</u> | | 0 (0.0%) |
| Yes | 8.1% (9 museums/galleries) | |
| No | 91.9% (102 museums/galleries) | |
| <u>Other type of physical barriers</u> | | 0 (0.0%) |
| Yes | 9.9% (11 museums/galleries) | |
| No | 90.1% (100 museums/galleries) | |
| <i>Preventive Physical Guardianship Actions</i> | | |
| <u>Bag/package inspections</u> | | 3 (2.7%) |
| Missing | 2.7% (3 museums/galleries) | |
| No inspections required | 86.5% (96 museums/galleries) | |
| Only on visitors entering the museum/gallery | 3.6% (4 museums/galleries) | |
| Only on employees & volunteers | 0.9% | |

| | | |
|--|---------------------------------|----------|
| entering the museum/gallery | (1 museum/gallery) | |
| Only on employees & volunteers entering and exiting the museum/gallery | 1.8% (2 museums/galleries) | |
| On all persons entering the museum/gallery | 0.0% (0 museums/galleries) | |
| On all persons entering and exiting the museum/gallery | 1.8% (2 museums/galleries) | |
| On all packages & bags except purses | 2.7% (3 museums/galleries) | |
| <u>Oversized bag storage</u> | | 1 (0.9%) |
| Yes | 58.6% (65 museums/galleries) | |
| No | 40.5% (45 museums/galleries) | |
| Missing | 0.9% (1 museum/gallery) | |
| <u>ID badges required for staff and volunteers</u> | | 0 (0.0%) |
| No one is required | 56.8% (63 museums/galleries) | |
| Staff only | 9.0% (10 museums/galleries) | |
| Volunteers only | 5.4% (6 museums/galleries) | |
| Staff & Volunteers | 28.8% (32 museums/galleries) | |

After examination of the above results, an abundance of missing data was revealed that required immediate attention before any further exploration of the data could be conducted. Missing data is a common issue with survey research. According to Horton and Kleinman (2007), “missing data are a frequent complication of any real-world study. The causes of missingness are often numerous, some due to design, and some due to chance. Some variables may not be collected from all subjects, some subjects may decline to provide values, and some information may be purposely excised,

for example to protect confidentiality” (p. 545). As mentioned earlier in chapter 1, due to the reticent culture of the art world, attaining any form of disclosure regarding victimization has proven to be extremely difficult. Therefore, it is not surprising that the researchers received incomplete survey responses. Of the 85 theoretical and demographic variables, 32 measures contained at least one missing case (37.6%). Nineteen variables (22.4%) contained more than four missing cases. A decision was made to remove all variables that contained missing cases that reached the threshold of 20.0% (22) or more of the sample size. Eleven variables were removed at this point, as well as the variable “inventory works in storage”, since this measure did not apply to the entire sample set. Additionally, the 20 GIA variables that were only applicable to the museums and galleries that experienced victimization were also removed since the smaller sample sizes greatly reduced the overall power of the full sample. Furthermore, to ensure that the remaining variables were coded in the most parsimonious manner for analysis, all variables with answer choices of unknown, don’t know, N/A, or missing were transformed into the “missing” column of SPSS. Lastly, any remaining ordinal or categorical variables that could logically be transformed into dichotomous variables were recoded into a binary variable. Two variables, bag/package inspection and ID badges required for staff and volunteers were subjected to recoding into dichotomous variables. Bag/package inspection was transformed into 0=no bags inspected and 1=bags inspected. ID badges required for staff and volunteers was transformed into 0=no ID badges required and 1= ID badges required for staff and volunteers. Additionally, the variable, oversized bag storage, was transformed into 0=no and 1=other than yes, meaning that

there was no consistent frequency of requiring that oversized bags be stored in a separate location. The final grouping of 53 variables was used from this point on.

Stage 2: Descriptive Statistics of Victimized Versus Non-victimized Museums and Galleries (Subgroup Comparisons)

The second stage of analysis is the bivariate descriptive statistical examination of the victimized museums and galleries compared to the non-victimized museums and galleries within each dependent variable. These variables were divided into two separate forms of variables for recording purposes. Consequently, the continuous variables were maintained in their own table for each dependent variable and a separate table for each dependent variable was created for categorical variables. An attempt was made to maintain the theoretical categories within one table. However, a few of the measures were recorded separately due to the differing typology of variable. The findings of this phase of analysis are based on examining the differences between proportions and means.

Phase 1. Vandalism Versus No Vandalism

Twenty-five museums/galleries (22.5%) experienced at least one incidence of art vandalism and eighty-six museums/galleries (77.5%) did not experience any incidences of art vandalism. The results of the analysis of the continuous theoretical variables are reported in **Table 7.2**.

Beginning with the demographic/control variables, the following results were obtained. Population of the museum/gallery's city was the only variable within this

category where the non-victimized sample had a higher mean than the victimized sample. Specifically, the mean of non-victimized museums/galleries' respective city's population (365,771.70) was higher than the victimized museums/galleries' respective city's population (221,836.65). The examination of the remaining variables within this category produced the following results. The victimized museums and galleries all had a higher average number of volunteer hours ($M=3,592.17$), operating budgets ($\$2,383,568.09$), and square footage of their respective institutions (234,564.33 sq. ft.) compared to the average number of volunteer hours ($M=1,831.26$), operating budgets ($\$970,183.09$), and square footage of their respective institutions (22,786.09 sq. ft.) of the non-victimized museums and galleries.

The remaining variables in this phase of analysis are measures of social and physical guardianship that have been grouped into theoretical categories. Theoretical constructs representing social guardianship will be examined first. Interestingly, the examination of the first social guardianship category (general place managers-non-security) produced results that indicated that the victimized museums/galleries had higher means than the non-victimized museums/galleries. The means for victimized museums/galleries were 21.39 non-security employees, 78.63 volunteers, and 98,806.21 visitors. The means for non-victimized museums/galleries were 14.31 non-security employees, 53.42 volunteers, and 39,471.83 visitors.

Within the theoretical category of place managers-security guards, the victimized museums/galleries employed a higher average of full-time security guards ($M=3.52$), part-time security guards ($M=2.74$), full-time or part-time roving security guards ($M=2.52$), full-time or part-time guards stationary at entrance ($M=0.78$), full-time or part-

time security guards who man a security station (M=0.64), and full-time and part-time guards employed for at least 5 years (M=4.78). This is compared to the number of full-time security guards (M=2.53), part-time security guards (M=2.17), full-time or part-time roving security guards (M=1.15), full-time or part-time guards stationary at entrance (M=0.64), full-time or part-time security guards who man a security station (M=0.44), and full-time and part-time guards employed for at least 5 years (M=1.57) employed by non-victimized museums. In sum, all forms of place managers are present at higher averages at the victimized museums/galleries than at the non-victimized museums galleries.

Security related practices are a form of place manager activity and the average amount of square footage of roving covered by security guards (M=3,672,18 sq. ft.) at the non-victimized museums/galleries was higher than the average amount of square footage of roving covered by security guards (2,585.71) at the victimized museums/galleries. The remaining variables in this category, the number of designated security posts (M=2.88) and the frequency that the surveillance rounds are made (M=5.05 per half hour) at the victimized museums/galleries had higher averages compared to the number of designated security posts (M=1.29) and the frequency that the surveillance rounds are made (M=2.37 per half hour) at the non-victimized museums/galleries.

Table 7.2. Descriptive Statistics of Museums/Galleries that were Victimized by Art Vandalism Compared with Museums/Galleries that were not Victimized by Art Vandalism, Continuous Variables

| | <i>Vandalized (25 museums/galleries)</i> | | | <i>Not vandalized (86 museums/galleries)</i> | | |
|---|--|----------------------|----------------------|--|----------------------|----------------------|
| | <i>N</i> | <i>M</i> | <i>SD</i> | <i>N</i> | <i>M</i> | <i>SD</i> |
| Demographic/Control Variables | | | | | | |
| Population of institution's city | 23 | 221,836.65 residents | 364,513.55 residents | 84 | 365,771.70 residents | 908,632.23 residents |
| Number of volunteer hours | 18 | 3,592.17 hours | 5,481.95 hours | 78 | 1,831.26 hours | 2,996.53 hours |
| Operating budget | 22 | \$2,383,568.09 | \$4,796,672.68 | 76 | \$970,183.09 | \$2,918,894.47 |
| Square feet of museum/gallery | 24 | 234,604.33 sq.ft. | 930,900.63 sq.ft. | 75 | 22,786.09 sq.ft. | 48,241.48 sq.ft. |
| Social Guardianship Measures | | | | | | |
| <i>Place Managers-Non-Security</i> | | | | | | |
| # of non-security employees | 23 | 21.39 | 35.98 | 86 | 14.31 | 44.38 |
| # of volunteers | 24 | 78.63 | 94.73 | 85 | 53.42 | 86.44 |
| # of visitors | 24 | 98,806.21 | 249,904.91 | 83 | 39,471.83 | 141,286.04 |
| <i>Place Managers- Security Guards</i> | | | | | | |
| # of full time security guards | 25 | 3.52 | 9.47 | 86 | 2.53 | 18.34 |
| # of part- time security guards | 23 | 2.74 | 4.19 | 86 | 2.17 | 5.69 |
| # of FT or PT roving security guards | 25 | 2.52 | 3.51 | 86 | 1.15 | 2.46 |
| # of FT or PT guards stationary at entrance | 23 | 0.78 | 1.31 | 86 | 0.64 | 1.81 |
| # of FT or PT guards who man a security station | 23 | 0.64 | 1.01 | 86 | 0.44 | 1.34 |

| | | | | | | |
|---|----|------|------|----|------|------|
| # of FT and PT guards employed for at least 5 years | 23 | 4.78 | 9.30 | 84 | 1.57 | 4.17 |
|---|----|------|------|----|------|------|

Security Guard Related Practices

| | | | | | | |
|--|----|---------------------------|--------------------------|----|---------------------------|---------------------------|
| Square footage of roving | 21 | 2,585.71 sq.ft. | 5,566.80 sq.ft. | 73 | 3,672.18 sqft | 113,990.47 sq.ft. |
| Number of designated security Posts | 24 | 2.88 | 7.02 | 86 | 1.29 | 6.55 |
| How often surveillance rounds are made | 22 | 5.05 /half hour intervals | 8.45/half hour intervals | 86 | 2.37 /half hour intervals | 6.23 /half hour intervals |

Note: N= the number of museums/galleries

The categorical variables within the dataset will be examined next. The results are reported in **Table 7.3**. The first theoretical group of place manager activities (place manager training) is composed of forms of training for security staff, museum/gallery staff, and volunteer staff. The security staff training in identification of suspicious objects (32.0%), training in intruder detection systems (40.0%), training in safety of artworks (56.0%), training in greeting and visitor reception (52.0%), and training in CCTV management (40.0%) was conducted by a higher percentage of the victimized sample compared to the security staff training in identification of suspicious objects (18.6%), training in intruder detection systems (19.8%), training in safety of artworks (24.4%), training in greeting and visitor reception (26.7%), and training in CCTV management (19.8%) conducted by the non-victimized sample. In sum, these theoretical measures are present at higher percentages by the victimized museums/galleries than at the non-victimized museums/galleries.

The results of the museum/gallery non-security staff training was not as consistent as the results of the examination of differences between proportions of the security staff training in the victimized and non-victimized museums/galleries. Museum/gallery non-security staff training in identification of suspicious objects (24.0%) and museum/gallery staff training in safety of artworks (92.0%) was conducted by a higher percentage of the victimized sample compared to the museum/gallery staff training in identification of suspicious objects (23.3%) and museum/gallery staff training in safety of artworks (83.7%) conducted by the non-victimized sample. However, museum/gallery staff training in intruder detection systems (41.9%), training in greeting and visitor reception (82.6%), and training in CCTV management (29.1%) was conducted at a higher

percentage of the non-victimized sample compared to the museum/gallery staff training in intruder detection systems (32.0%), training in greeting and visitor reception (72.0%), and training in CCTV management (16.0%) conducted by the victimized sample.

The volunteer staff training in identification of suspicious objects (16.0%) was only conducted at a higher percentage of the victimized sample compared to the volunteer staff training in identification of suspicious objects (5.8%) conducted by the non-victimized sample. However, volunteer staff training in intruder detection systems (18.6%), training in safety of artworks (69.8%), and training in greeting and visitor reception (73.0%) was conducted at a higher percentage of the non-victimized sample compared to the volunteer staff training in intruder detection systems (4.0%), training in safety of artworks (52.0%), and training in greeting and visitor reception (40.0%) conducted by the non-victimized sample.

The second theoretical category of museum/gallery place manager activities is place manager due diligence. The first act of due diligence measured, inventorying works on view, was conducted less than once a year (4.5%), once a year (40.9%), and every 6 months (9.1%) by a higher percentage of the victimized sample compared to the inventorying works on view less than once a year (0.0%), once a year (20.3%), and every 6 months (2.5%), conducted by the non-victimized sample. However, inventorying works on view was conducted every three months (7.6%), monthly (16.5%), weekly/more frequently (17.7%), and daily (35.4%) by a higher percentage of the non-victimized sample compared to the non-victimized sample. However, inventorying works on view every three months (4.5%), monthly (0.0%), weekly/more frequently (13.6%), and daily (27.3%) by the victimized sample. In sum, it appears that the sample of victimized museums/galleries

inventoried their works on view with less frequency than the non-victimized sample of museums/galleries.

The second and third acts of due diligence measures were pre-hiring background checks on potential employees and pre-hiring background checks on potential volunteers. The pre-hiring background checks on potential employees were never conducted (21.7%) and always conducted (65.2%) by a higher percentage of the victimized sample compared to the conduction of pre-hiring background checks on potential employees never (19.8%) and always (60.5%) by the non-victimized sample. However, the pre-hiring background checks on potential employees were conducted sometimes (9.9%) and conducted most of the time (9.9%) by a higher percentage of the non-victimized sample compared to the conduction of pre-hiring background checks on potential employees sometimes (8.7%) and most of the time (4.3%) by the victimized sample.

The pre-hiring background checks on potential volunteers was always conducted (26.3%) by a higher percentage of the victimized sample compared to (12.3%) always conducted by the non-victimized sample. However, the pre-hiring background checks on potential volunteers was conducted never (60.5%), sometimes conducted (18.5%), and conducted most of the time (8.6%) at a higher percentage by the non-victimized sample compared to conducted never (57.9%), sometimes conducted (10.5%) and conducted most of the time (5.3%) by the victimized sample.

Responsible place managers look for ways to improve their museum or gallery's security departments. This last category of social guardianship examines five perceived improvements that place managers might conceptualize as measures that improve the level of security of the artwork at their respective museum or gallery. A larger budget,

more security personnel, improved staff training, modern security equipment, and other improvements were the variables examined. A higher percentage of the victimized sample only believed that “other improvements” (12.0%) would improve the level of security of the artwork at their museum/gallery compared to the non-victimized sample who believed that “other improvements” (5.8%) would improve the level of security of the artwork at their museum/gallery. Conversely, a higher percentage of the non-victimized sample believed that a larger budget (76.7%), more security personnel (60.5%), improved staff training (60.5%), and modern security equipment (57.0%) would improve the level of security of the artwork at their museum/gallery compared to the victimized sample who believed that a larger budget (76.0%), more security personnel (52.0%) improved staff training (52.0%), and modern security equipment (44.0%) would improve the level of security of the artwork at their museum/gallery.

Physical guardianship is the other form of guardianship examined in this study. Several theoretical categories relate to physical guardianship. Art museums and galleries use many forms of target hardening to prevent vandalism and theft. Within this study, six forms of security devices (door alarms, window alarms, motion detectors, CCTV, individual objects alarms, and other types of security systems) and six forms of physical barriers (glazing on some pictures, glazing on all pictures, vitrines, low lying barriers in front of artworks, ropes and stanchions, and other types of physical barriers) were utilized as measurements of this specific category of physical guardianship. Window alarms (56.0%), motion detectors (72.0%), CCTV (56.0%), glazing on some pictures (68.0%), vitrines (76.0%), low lying barriers in front of artworks (37.5%), and ropes and stanchions (56.0%) were utilized by a higher percentage of the victimized sample

compared to the utilization of window alarms (39.5%), motion detectors (70.9%), CCTV (47.7%), glazing on some pictures (47.7%), vitrines (69.8%), low lying barriers in front of artworks (37.2%), and ropes and stanchions (38.4%) by the non-victimized sample. Conversely, door alarms (84.9%), individual object alarms (16.3%), glazing on all pictures (5.8%), other types of security systems (8.1%), and other types of physical barriers (10.5%) were utilized by a higher percentage of the non-victimized sample compared to the utilization of door alarms (84.0%), individual object alarms (16.0%), glazing on all pictures (4.0%), other types of security systems (8.0%), and other types of physical barriers (8.0%) by victimized sample.

The last three theoretical measures of physical guardianship are categorized as preventative physical guardianship measures (bag/package inspections, oversized bag storage, and ID badges required for staff and volunteers). The findings from the examination of these variables reveal that the conduction of bag and package inspections (16.0%) and the existence of some sort of policy requiring oversized bag storage (60.0%) was present at a higher percentage of the victimized sample compared to the conduction of bag and package inspections (9.3%) and the existence of some sort of policy requiring oversized bag storage (58.1%) present at the non-victimized sample. However, ID badges were required for staff and volunteers (44.2%) by a higher percentage of the non-victimized sample compared to ID badges required for staff and volunteers (40.0%) by the victimized sample. In sum, a higher percentage of the victimized sample utilized measures to detect and/or inhibit objects used in the commission of an act of vandalism from entering the premises of a museum/gallery.

Table 7.3. Descriptive Statistics of Museums/Galleries that were Victimized by Art Vandalism Compared with Museums/Galleries that were not Victimized by Art Vandalism, Categorical Variables

| | <i>Vandalized</i> (25 museums/galleries) | | <i>Not vandalized</i> (86 museums/galleries) | |
|---|---|----------|---|----------|
| | <i>N</i> | <i>%</i> | <i>N</i> | <i>%</i> |
| Social Guardianship Measures | | | | |
| <i>Place Manager Activities-Training</i> | | | | |
| SS training in identification of suspicious objects | | | | |
| Yes | 8 | 32.0% | 16 | 18.6% |
| No | 17 | 68.0% | 70 | 81.4% |
| SS training in intruder detection systems | | | | |
| Yes | 10 | 40.0% | 17 | 19.8% |
| No | 15 | 60.0% | 69 | 80.2% |
| SS training in safety of artworks | | | | |
| Yes | 14 | 56.0% | 21 | 24.4% |
| No | 11 | 44.0% | 65 | 75.6% |
| SS training in greeting & visitor reception | | | | |
| Yes | 13 | 52.0% | 23 | 26.7% |
| No | 12 | 48.0% | 63 | 73.3% |
| SS training in CCTV management | | | | |

| | | | | |
|---|----|--------|----|-------|
| Yes | 10 | 40.0% | 17 | 19.8% |
| No | 15 | 60.0% | 69 | 80.2% |
| MS training in suspicious objects | | | | |
| Yes | 6 | 24.0% | 20 | 23.3% |
| No | 19 | 76.0% | 66 | 76.7% |
| MS training in intruder detection systems | | | | |
| Yes | 8 | 32.0% | 36 | 41.9% |
| No | 17 | 68.0% | 50 | 58.1% |
| MS training in safety of artworks | | | | |
| Yes | 23 | 92.0% | 72 | 83.7% |
| No | 2 | 8.0% | 14 | 16.3% |
| MS training in greeting & visitor reception | | | | |
| Yes | 18 | 72.0% | 71 | 82.6% |
| No | 7 | 28.0% | 15 | 17.4% |
| MS training in CCTV management | | | | |
| Yes | 4 | 16.0% | 25 | 29.1% |
| No | 21 | 84.0% | 61 | 70.9% |
| VS training in suspicious objects | | | | |
| Yes | 4 | 16.00% | 5 | 5.8% |
| No | 21 | 84.0% | 81 | 94.2% |
| VS training in intruder detection systems | | | | |
| Yes | 1 | 4.0% | 16 | 18.6% |
| No | 24 | 96.0% | 70 | 81.4% |
| VS training in safety of artworks | | | | |
| Yes | 13 | 52.0% | 60 | 69.8% |
| No | 12 | 48.0% | 26 | 30.2% |

VS training in greeting & visitor reception

| | | | | |
|-----|----|-------|----|-------|
| Yes | 10 | 40.0% | 63 | 73.3% |
| No | 15 | 60.0% | 23 | 26.7% |

Place Manager Activities-Due Diligence

Inventory works on view

| | | | | |
|------------------------|---|-------|----|-------|
| Less than once a year | 1 | 4.5% | 0 | 0.0% |
| Once a year | 9 | 40.9% | 16 | 20.3% |
| Every 6 months | 2 | 9.1% | 2 | 2.5% |
| Every 3 months | 1 | 4.5% | 6 | 7.6% |
| Monthly | 0 | 0.0% | 13 | 16.5% |
| Weekly/More frequently | 3 | 13.6% | 14 | 17.7% |
| Daily | 6 | 27.3% | 28 | 35.4% |

Pre-hiring Background checks on potential employees

| | | | | |
|------------------|----|-------|----|-------|
| Never | 5 | 21.7% | 16 | 19.8% |
| Sometimes | 2 | 8.7% | 8 | 9.9% |
| Most of the time | 1 | 4.3% | 8 | 9.9% |
| Always | 15 | 65.2% | 49 | 60.5% |

Pre-hiring Background checks on potential volunteers

| | | | | |
|------------------|----|-------|----|-------|
| Never | 11 | 57.9% | 49 | 60.5% |
| Sometimes | 2 | 10.5% | 15 | 18.5% |
| Most of the time | 1 | 5.3% | 7 | 8.6% |
| Always | 5 | 26.3% | 10 | 12.3% |

Place Manager Perceived Improvements

Would a larger budget improve level of security?

| | | | | |
|-----|----|-------|----|-------|
| Yes | 19 | 76.0% | 66 | 76.7% |
| No | 6 | 24.0% | 20 | 23.3% |

Would more security personnel improve level of security?

| | | | | |
|-----|----|-------|----|-------|
| Yes | 13 | 52.0% | 52 | 60.5% |
| No | 12 | 48.0% | 34 | 39.5% |

Would improve staff training improve level of security?

| | | | | |
|-----|----|-------|----|-------|
| Yes | 13 | 52.0% | 52 | 60.5% |
| No | 12 | 48.0% | 34 | 39.5% |

Would modern security equipment improve level of security?

| | | | | |
|-----|----|-------|----|-------|
| Yes | 11 | 44.0% | 49 | 57.0% |
| No | 14 | 56.0% | 37 | 43.0% |

Other improvements?

| | | | | |
|-----|----|-------|----|-------|
| Yes | 3 | 12.0% | 5 | 5.8% |
| No | 22 | 88.0% | 81 | 94.2% |

Physical Guardianship

Target Hardening Devices & Mechanisms

Door alarms

| | | | | |
|-----|----|-------|----|-------|
| Yes | 21 | 84.0% | 73 | 84.9% |
| No | 4 | 16.0% | 13 | 15.1% |

Window alarms

| | | | | |
|-----|----|-------|----|-------|
| Yes | 14 | 56.0% | 34 | 39.5% |
| No | 11 | 44.0% | 52 | 60.5% |

| | | | | |
|---------------------------------|----|--------|----|--------|
| Motion detectors | | | | |
| Yes | 18 | 72.0% | 61 | 70.9% |
| No | 7 | 28.00% | 25 | 29.1% |
| CCTV | | | | |
| Yes | 14 | 56.0% | 41 | 47.70% |
| No | 11 | 44.0% | 45 | 52.3% |
| Individual object alarms | | | | |
| Yes | 4 | 16.0% | 14 | 16.3% |
| No | 21 | 84.0% | 72 | 83.7% |
| Glazing on some pictures | | | | |
| Yes | 17 | 68.0% | 41 | 47.7% |
| No | 8 | 32.00% | 45 | 52.3% |
| Glazing on all pictures | | | | |
| Yes | 1 | 4.0% | 5 | 5.80% |
| No | 24 | 96.0% | 81 | 94.2% |
| Vitrines | | | | |
| Yes | 19 | 76.0% | 60 | 69.8% |
| No | 6 | 24.0% | 26 | 30.2% |
| Barriers in front of artworks | | | | |
| Yes | 9 | 37.5% | 32 | 37.2% |
| No | 15 | 62.5% | 54 | 62.8% |
| Ropes and stanchions | | | | |
| Yes | 14 | 56.0% | 33 | 38.4% |
| No | 11 | 44.0% | 53 | 61.6% |
| Other type of security systems | | | | |
| Yes | 2 | 8.0% | 7 | 8.1% |
| No | 23 | 92.0% | 79 | 91.9% |
| Other type of physical barriers | | | | |
| Yes | 2 | 8.0% | 9 | 10.5% |

| | | | | |
|----|----|-------|----|-------|
| No | 23 | 92.0% | 77 | 89.5% |
|----|----|-------|----|-------|

***Preventative Physical Guardianship
Actions***

Bag/package inspections

| | | | | |
|-----------|---|-------|---|------|
| Conducted | 4 | 16.0% | 8 | 9.3% |
|-----------|---|-------|---|------|

| | | | | |
|---------------|----|-------|----|-------|
| Not conducted | 21 | 84.0% | 78 | 90.7% |
|---------------|----|-------|----|-------|

Oversized bag storage

| | | | | |
|----------------|----|-------|----|-------|
| Other than yes | 15 | 60.0% | 50 | 58.1% |
|----------------|----|-------|----|-------|

| | | | | |
|----|----|-------|----|-------|
| No | 10 | 40.0% | 36 | 41.9% |
|----|----|-------|----|-------|

ID badges required for staff and
volunteers

| | | | | |
|--------------------|----|-------|----|-------|
| ID Badges required | 10 | 40.0% | 38 | 44.2% |
|--------------------|----|-------|----|-------|

| | | | | |
|-----------------------|----|-------|----|-------|
| No ID badges required | 15 | 60.0% | 48 | 55.8% |
|-----------------------|----|-------|----|-------|

Phase 2. Theft Versus No Theft

Seventeen (15.3%) museums/galleries experienced at least one incidence of art theft and ninety-four (84.7%) museums/galleries did not experience any incidences of art theft. The results of the analysis of the continuous theoretical variables are reported in **Table 7.4.**

Beginning with the demographic/control variables, the following results were obtained. The non-victimized museums and galleries all had a higher average of the population of the museum/gallery's respective city (333,398.03), number of volunteer hours (M=2,236.32), operating budgets (\$1,411,426.66), and square footage of their respective institutions (85,471.54 sq.ft.) compared to the average number of the population of the museum/gallery's respective city (308,829.80), volunteer hours (M=1,757.00), operating budgets (\$601,600.00), and square footage of their respective institutions (15,332.69 sq.ft.) of the victimized museums and galleries. In sum, all the non-victimized museums/galleries contained higher averages of the entire category of demographic measures than the victimized museums/galleries.

The analysis of the variables representing social and physical guardianship produced the same trend in the difference of means as the demographic measures. Specifically, the examination of the first social guardianship category (place managers-non-security) produced results that indicated that all the general place managers (non-security employees (M=16.96), volunteers (M=59.03), visitors (M=57,925.23)) for the non-victimized museums/galleries had higher means than the general place managers (non-security employees (M=9.53), volunteers (M=58.65), and visitors (M=23,519.69)) for the victimized museums/galleries.

Furthermore, within the theoretical category of place managers-security guards, the non-victimized museums/galleries employed a higher average number of full-time security guard (M=3.20), part-time security guards (M=2.59), full-time or part-time roving security guards (M=1.65), full-time or part-time guards stationary at entrance (M=0.76), full-time or part-time security guards who man a security station (M=0.52), and full-time and part-time guards employed for at least 5 years (M=2.57) compared to the victimized museums/gallery's averages for full-time security guards (M=0.29), part-time security guards (M=0.71), full-time or part-time roving security guards (M=0.41), full-time or part-time guards stationary at entrance (M=0.18), full-time or part-time security guards who man a security station (M=0.29), and full-time and part-time guards employed for at least 5 years (M=0.65). In sum, all forms of place managers are present at higher averages at the non-victimized museums/galleries than at the victimized museums/galleries.

Lastly, security related practices produced the following results. The non-victimized museums/galleries had a higher average amount of square footage of roving covered by security guards, (M= 3,974.92 sq.ft.), number of designated security posts (M=1.88), and frequency in that surveillance rounds are made (M=3.10 per half hour) compared to the average amount of square footage of roving covered by security guards (M=770.13 sq.ft.), the number of designated security posts (M=0.29) and frequency in that surveillance rounds are made (M=1.88 per half hour) at the victimized museums/galleries.

Interestingly, all but two (population of an institution's city and square footage of roving covered by security guards) of the continuous variables in the art theft bivariate

descriptive statistical examination were found to be opposite to the results produced in the art vandalism bivariate descriptive statistical examination of continuous variables.

Table 7.4. Descriptive Statistics of Museums/Galleries that were Victimized by Art Theft Compared with Museums/Galleries that were not Victimized by Art Theft, Continuous Variables

| | <i>Stolen from (17 museums/galleries)</i> | | | <i>Not stolen from (94 museums/galleries)</i> | | |
|--|---|----------------------|----------------------|---|----------------------|----------------------|
| | <i>N</i> | <i>M</i> | <i>SD</i> | <i>N</i> | <i>M</i> | <i>SD</i> |
| Demographic/Control Variables | | | | | | |
| Population of institution's city | 15 | 308,829.80 residents | 473,418.87 residents | 92 | 339,398.03 residents | 868,696.26 residents |
| Number of volunteer hours | 15 | 1,757.00 hours | 2,307.40 hours | 81 | 2,236.32 hours | 3,824.56 hours |
| Operating budget | 15 | \$601,600.00 | \$1,112,853.78 | 83 | \$1,411,426.66 | \$3,713,157.22 |
| Square feet of museum/gallery | 16 | 15,332.6 | 36,724.03 sq.ft. | 83 | 85,471.54 sq.ft. | 504,044.70 sq.ft. |
| Social Guardianship Measures | | | | | | |
| <i>Place Managers-Non-Security</i> | | | | | | |
| # of non-security employees | 17 | 9.53 | 15.43 | 92 | 16.96 | 45.96 |
| # of volunteers | 17 | 58.65 | 116.02 | 92 | 59.03 | 83.24 |
| # of visitors | 16 | 23,519.69 | 48,450.92 | 91 | 57,925.23 | 192,278.75 |
| <i>Place Managers-Security Guards</i> | | | | | | |
| # of full-time security guards | 17 | 0.29 | 0.85 | 94 | 3.20 | 18.15 |
| # of part-time security guards | 17 | 0.71 | 2.20 | 92 | 2.59 | 5.75 |

| | | | | | | |
|---|----|------|-------|----|------|------|
| # of FT or PT roving security guards | 17 | 0.41 | 1.06 | 94 | 1.65 | 2.95 |
| # of FT or PT guards stationary at entrance | 17 | 0.18 | 0.53 | 92 | 0.76 | 1.84 |
| # of FT or PT guards who man a security station | 17 | 0.29 | 0.771 | 92 | 0.52 | 1.35 |
| # of FT and PT guards employed 5 years ago | 17 | 0.65 | 2.67 | 90 | 2.57 | 6.15 |

Security Guard Related Practices

| | | | | | | |
|--|----|---------------------------|---------------------------|----|---------------------------|---------------------------|
| Square footage of roving | 16 | 770.31 sq.ft. | 2,209.25 sq.ft. | 78 | 3,974.92 sq.ft. | 11,264.79 sq.ft. |
| Number of designated security posts | 17 | 0.29 | 0.99 | 93 | 1.88 | 7.20 |
| How often surveillance rounds are made | 17 | 1.88 /half hour intervals | 6.27 /half hour intervals | 91 | 3.10 /half hour intervals | 6.89 /half hour intervals |

Note: N= the number of museums/galleries

The categorical variables within the dataset will be examined next. The results are reported in **Table 7.5**. The place manager training results for security staff indicated that the security staff training in identification of suspicious objects (23.4%), training in intruder detection systems (26.6%), training in safety of artworks (34.0%), training in greeting and visitor reception (34.0%), and training in CCTV management (26.6%) was conducted by a higher percentage of the non-victimized sample compared to the security staff training in identification of suspicious objects (11.8%), training in intruder detection systems (11.8%), training in safety of artworks (17.6%), training in greeting and visitor reception (23.5%), and training in CCTV management (11.8%) conducted by victimized sample. In sum, these theoretical measures are present at higher percentages by the non-victimized museums/galleries than at the victimized museums/galleries. Additionally, these findings are also counter to the findings in the art vandalism examination of these variables.

The results of the museum/gallery non-security staff training, for the most part, was polar to the results of the examination of differences between proportions of the security staff training in the victimized and non-victimized museums/galleries. Museum/gallery non-security staff training in identification of suspicious objects (23.5%), training in safety of artworks (88.2%), training in greeting and visitor reception (82.4%), and training in CCTV management (29.4%) was conducted by a higher percentage of the victimized sample compared to the museum/gallery non-security staff training in identification of suspicious objects (23.4%), training in safety of artworks (85.1%), training in greeting and visitor reception (79.8%), and training in CCTV management (25.5%) conducted by the non-victimized sample. However, similar to the

security staff training, museum/gallery non-security staff training in intruder detection systems (40.0%), was conducted at a higher percentage of the non-victimized sample compared to the museum/gallery non-security staff training in intruder detection systems (35.3%) conducted by the victimized sample.

The volunteer staff training in identification of suspicious objects (11.8%) and volunteer staff training in safety of artworks (76.5%) was conducted at a higher percentage of the victimized sample than volunteer staff training in identification of suspicious objects (7.4%) and volunteer staff training in safety of artworks (63.8%) by the non-victimized sample. However, the volunteer staff training in intruder detection systems (16.0%) and volunteer staff training in greeting and visitor reception (66.0%) was conducted at a higher percentage of the non-victimized sample compared to the volunteer staff training in intruder detection systems (11.8%) and volunteer staff training in greeting and visitor reception (64.7%) conducted by the victimized sample.

The first measure of place manager activities within the due diligence theoretical category (inventorying works on view) was conducted less than once a year (6.30%), once a year (31.3%), every 6 months (6.3%), and weekly/more frequently (18.8%) by a higher percentage of the victimized sample compared to the inventorying works on view less than once a year (0.00%), once a year (23.5%), every 6 months (3.5%), and weekly/more frequently (16.5%) conducted by the non-victimized sample.

However, inventorying works on view was conducted every 3 months (7.1%), monthly (12.9%), and daily (36.5%) by a higher percentage of the non-victimized sample compared to the conduction of inventorying works on view every 3 months (6.3%), monthly (12.4%), and daily (18.8%) by the victimized sample.

The examination of the second and third acts of due diligence measures produced the following results. The pre-hiring background checks on potential employees was never conducted (25.0%) and conducted most of the time (12.5%) by a higher percentage of the victimized sample compared to the conduction of pre-hiring background checks on potential employees never (19.3%) and most of the time (8.0%) by the non-victimized sample. However, the pre-hiring background checks on potential employees was conducted sometimes (10.2%) and always conducted (62.5%) by a higher percentage of the non-victimized sample compared to the conduction of pre-hiring background checks on potential employees sometimes (6.3%) and always (56.3%) by the victimized sample.

The pre-hiring background checks on potential volunteers was conducted never (69.2%) and always conducted (15.4%) by a higher percentage of the victimized sample compared to never conducted (58.6%) and always conducted (14.9%) conducted by the non-victimized sample. However, the pre-hiring background checks on potential volunteers was conducted sometimes (18.4%) and most of the time (8.0%) at a higher percentage by the non-victimized sample compared to the conducted sometimes (7.7%) and conducted most of the time (7.7%) by the victimized sample.

The last category of social guardianship produced the following findings that provide an insight into how place managers might conceptualize specific improvements to the level of security of the artwork at their respective museum or gallery. First, a higher percentage of the non-victimized sample only believed that modern security equipment (54.3%) would improve the level of security of the artwork at their museum/gallery compared to the victimized sample who only believed that modern security equipment (52.9%) would improve the level of security of the artwork at their

museum/gallery. Conversely, a higher percentage of the victimized sample believed that a larger budget (82.4%), more security personnel (64.7%), improved staff training (58.8%), and other improvements (17.6%) would improve the level of security of the artwork at their museum/gallery compared to the non-victimized sample who believed that a larger budget (75.5%), more security personnel (57.4%) improved staff training (58.5%), and other improvements (5.3%) would improve the level of security of the artwork at their museum/gallery. Interestingly, a higher percentage of the victimized sample did not believe that modern security equipment was necessary to improve the level of the security of the artwork at their separate museums or galleries when this security measure is noted by many museums and galleries as a desired upgrade within their security departments.

Physical guardianship measures categorized as target hardening variables were examined next. Door alarms (86.2%), window alarms (44.7%), motion detectors (73.4%), CCTV (52.1%), individual object alarms (18.1%), vitrines (72.3%), low lying barriers in front of artworks (40.9%), and ropes and stanchions (42.6%) were utilized by a higher percentage of the non-victimized sample compared to the utilization of door alarms (76.5%), window alarms (35.3%), motion detectors (58.8%), CCTV (35.3%), individual object alarms (5.9%), vitrines (64.7%), low lying barriers in front of artworks (17.6%), and ropes and stanchions (41.2%) by the victimized sample. Conversely, glazing on some pictures (58.8%), glazing on all pictures (5.9%), other types of security systems (11.8%), and other types of physical barriers (11.8%) were utilized by a higher percentage of the victimized sample compared to the utilization of glazing on some pictures (51.1%),

glazing on all pictures (5.3%), other types of security systems (7.4%), and other types of physical barriers (9.6%) by the non-victimized sample.

The findings from the examination of the last group of physical guardianship variables reveal that bag and package inspections (11.8%) were conducted by the victimized sample at a higher percentage compared to the conduction of bag and package inspection (10.6%) by the non-victimized sample. However, the existence of some sort of policy requiring oversized bag storage (61.7%) and the requirement of ID badges for staff and volunteers (44.7%) was present at a higher percentage of the non-victimized sample compared to the existence of some sort of policy requiring oversized bag storage (41.2%) and the requirement of ID badges for staff and volunteers (35.3%) present at the victimized sample.

Table 7.5. Descriptive Statistics of Museums/Galleries that were Victimized by Art Theft Compared with Museums/Galleries that were not Victimized by Art Theft, Categorical Variables

| | <i>Stolen from (17 museums/galleries)</i> | | <i>Not stolen from (94 museums/galleries)</i> | |
|---|---|----------|---|----------|
| | <i>N</i> | <i>%</i> | <i>N</i> | <i>%</i> |
| Social Guardianship Measures | | | | |
| <i>Place Manager Activities-Training</i> | | | | |
| SS training in identification of suspicious objects | | | | |
| Yes | 2 | 11.8% | 22 | 23.4% |
| No | 15 | 88.2% | 72 | 76.6% |
| SS training in intruder detection systems | | | | |
| Yes | 2 | 11.8% | 25 | 26.6% |
| No | 15 | 88.2% | 69 | 73.4% |
| SS training in safety of artworks | | | | |
| Yes | 3 | 17.6% | 32 | 34.0% |
| No | 14 | 82.4% | 62 | 66.0% |
| SS training in greeting & visitor reception | | | | |
| Yes | 4 | 23.5% | 32 | 34.0% |
| No | 13 | 76.5% | 62 | 66.0% |

| | | | | |
|---|----|--------|----|--------|
| SS training in CCTV management | | | | |
| Yes | 2 | 11.8% | 25 | 26.6% |
| No | 15 | 88.2% | 69 | 73.4% |
| MS training in suspicious objects | | | | |
| Yes | 4 | 23.5% | 22 | 23.4% |
| No | 13 | 76.5% | 72 | 76.6% |
| MS training in intruder detection systems | | | | |
| Yes | 6 | 35.3% | 38 | 40.4% |
| No | 11 | 64.7% | 56 | 59.6% |
| MS training in safety of artworks | | | | |
| Yes | 15 | 88.2% | 80 | 85.1% |
| No | 2 | 11.8% | 14 | 14.9% |
| MS training in greeting & visitor reception | | | | |
| Yes | 14 | 82.4% | 75 | 79.8% |
| No | 3 | 17.60% | 19 | 20.2% |
| MS training in CCTV management | | | | |
| Yes | 5 | 29.4% | 24 | 25.50% |
| No | 12 | 70.6% | 70 | 74.5% |
| VS training in suspicious objects | | | | |
| Yes | 2 | 11.8% | 7 | 7.4% |
| No | 15 | 88.2% | 87 | 92.6% |
| VS training in intruder detection systems | | | | |
| Yes | 2 | 11.8% | 15 | 16.0% |
| No | 15 | 88.2% | 79 | 84.0% |
| VS training in safety of artworks | | | | |
| Yes | 13 | 76.5% | 60 | 63.8% |

| | | | | |
|---|----|-------|----|-------|
| No | 4 | 23.5% | 34 | 36.2% |
| VS training in greeting & visitor reception | | | | |
| Yes | 11 | 64.7% | 62 | 66.0% |
| No | 6 | 35.3% | 32 | 34.0% |

Place Manager Activities-Due Diligence

Inventory works on view

| | | | | |
|------------------------|---|-------|----|-------|
| Less than once a year | 1 | 6.3% | 0 | 0.0% |
| Once a year | 5 | 31.3% | 20 | 23.5% |
| Every 6 months | 1 | 6.3% | 3 | 3.5% |
| Every 3 months | 1 | 6.3% | 6 | 7.1% |
| Monthly | 2 | 12.5% | 11 | 12.9% |
| Weekly/More frequently | 3 | 18.8% | 14 | 16.5% |
| Daily | 3 | 18.8% | 31 | 36.5% |

Pre-hiring Background checks on potential employees

| | | | | |
|------------------|---|-------|----|-------|
| Never | 4 | 25.0% | 17 | 19.3% |
| Sometimes | 1 | 6.3% | 9 | 10.2% |
| Most of the time | 2 | 12.5% | 7 | 8.0% |
| Always | 9 | 56.3% | 56 | 62.5% |

Pre-hiring Background checks on potential volunteers

| | | | | |
|------------------|---|-------|----|-------|
| Never | 9 | 69.2% | 51 | 58.6% |
| Sometimes | 1 | 7.7% | 16 | 18.4% |
| Most of the time | 1 | 7.7% | 7 | 8.0% |
| Always | 2 | 15.4% | 13 | 14.9% |

Place Manager Perceived Improvements

Would a larger budget improve level of security?

| | | | | |
|-----|----|-------|----|-------|
| Yes | 14 | 82.4% | 71 | 75.5% |
| No | 3 | 17.6% | 23 | 24.5% |

Would more security personnel improve level of security?

| | | | | |
|-----|----|-------|----|-------|
| Yes | 11 | 64.7% | 54 | 57.4% |
| No | 6 | 35.3% | 40 | 42.6% |

Would improved staff training improve level of security?

| | | | | |
|-----|----|-------|----|-------|
| Yes | 10 | 58.8% | 55 | 58.5% |
| No | 7 | 41.2% | 39 | 41.5% |

Would modern security equipment improve level of security?

| | | | | |
|-----|---|-------|----|-------|
| Yes | 9 | 52.9% | 51 | 54.3% |
| No | 8 | 47.1% | 43 | 45.7% |

Other improvements?

| | | | | |
|-----|----|-------|----|-------|
| Yes | 3 | 17.6% | 5 | 5.3% |
| No | 14 | 82.4% | 89 | 94.7% |

Physical Guardianship

Target Hardening Devices & Mechanisms

Door alarms

| | | | | |
|-----|----|-------|----|-------|
| Yes | 13 | 76.5% | 81 | 86.2% |
| No | 4 | 23.5% | 13 | 13.8% |

Window alarms

| | | | | |
|-----|----|-------|----|-------|
| Yes | 6 | 35.3% | 42 | 44.7% |
| No | 11 | 64.7% | 52 | 55.3% |

Motion detectors

| | | | | |
|--|----|-------|----|-------|
| Yes | 10 | 58.8% | 69 | 73.4% |
| No | 7 | 41.2% | 25 | 26.6% |
| CCTV | | | | |
| Yes | 6 | 35.3% | 49 | 52.1% |
| No | 11 | 64.7% | 45 | 47.9% |
| Individual object alarms | | | | |
| Yes | 1 | 5.9% | 17 | 18.1% |
| No | 16 | 94.1% | 77 | 81.9% |
| Glazing on some pictures | | | | |
| Yes | 10 | 58.8% | 48 | 51.1% |
| No | 7 | 41.2% | 46 | 48.9% |
| Glazing on all pictures | | | | |
| Yes | 1 | 5.9% | 5 | 5.3% |
| No | 16 | 94.1% | 89 | 94.7% |
| Vitrines | | | | |
| Yes | 11 | 64.7% | 68 | 72.3% |
| No | 6 | 35.3% | 26 | 27.7% |
| Barriers in front of artworks | | | | |
| Yes | 3 | 17.6% | 38 | 40.9% |
| No | 14 | 82.4% | 55 | 59.1% |
| Ropes and stanchions | | | | |
| Yes | 7 | 41.2% | 40 | 42.6% |
| No | 10 | 58.8% | 54 | 57.4% |
| Other type of security systems | | | | |
| Yes | 2 | 11.8% | 7 | 7.4% |
| No | 15 | 88.2% | 87 | 92.6% |
| Other type of physical barriers | | | | |
| Yes | 2 | 11.8% | 9 | 9.6% |
| No | 15 | 88.2% | 85 | 90.4% |

***Preventative Physical Guardianship
Actions***

| | | | | |
|--|----|-------|----|-------|
| Bag/package inspections | | | | |
| Conducted | 2 | 11.8% | 10 | 10.6% |
| Not conducted | 15 | 88.2% | 84 | 89.4% |
| Oversized bag storage | | | | |
| Other than yes | 7 | 41.2% | 58 | 61.7% |
| No | 10 | 58.8% | 36 | 38.3% |
| ID badges required for staff and volunteers | | | | |
| ID Badges required | 6 | 35.3% | 42 | 44.7% |
| No ID badges required | 11 | 64.7% | 52 | 55.3% |

Bivariate Binary Logistic Regression

Due to the abundance of variables in this study, the most efficient analytical approach chosen to utilize all the measures from the preceding analyses as well as to indicate the strongest relationship and the direction of the relationship between each continuous or categorical independent variable and dichotomous dependent variable, was bivariate binary logistic regression.

First, it should be noted that even though social scientists traditionally set alpha at 0.05, given the small sample size, a decision was made to relax alpha to 0.10 to produce a viable number of variables for inclusion in the multivariate analysis. Admittedly, declaring alpha at 0.10 increases the likelihood of a type I error. Although, this approach may be regarded as somewhat risky due to the above-mentioned reason (Chapman & Hartley, 2010; Walker & Madden, 2013), the researchers chose to analytically venture in this direction for a variety of reasons. First, this study was handicapped at its onset by the inherent culture of non-disclosure within the art world. Secondly, this is primarily an exploratory study and is the first study in the United States to examine concurrently incidences of art theft, art vandalism, and security practices at art galleries and museums. As such, extending the parameter of the alpha value in order to create a baseline of knowledge for other researchers to expand upon who are fortunate to acquire a larger sample size and more statistical power that might indeed show that theoretically measures are associated with art theft and art vandalism seemed reasonable. In fact, Cohen (1992) acknowledges that it is acceptable in exploratory studies to relax alpha to 0.10 due to the “less rigorous standard for rejection that is desired” (p. 156). Last, even though a scant number of previous researchers have collected empirical data on either art theft, art

vandalism, or museum security (Burnham, 1978; Cordess & Turcan, 1993; Ho, 1992; Scott, 2009; Wilemse & Etman, 1995) with a more substantial response rate than the current study, this dissertation offers a rare glimpse into the reticent art industry. So much so that after disclosing to several industry professionals the existence of this study, the standard expectation was that no art museum or gallery would respond to the survey form.

Additionally, as noted in chapter six, the four demographic variables were transformed for ease of interpretation at this phase of analysis. Specifically, “population of institution’s city” was divided by 10,000, “volunteer hours” was divided by 100, “operating budget” was divided by 10,000, and square feet of museum/gallery” was divided by 1,000.

Art Vandalism

The results from the bivariate logistic regression analysis of the “yes art vandalism incidence(s)” dependent variable with the myriad of independent variables is reported in **Table 7.6**.

The variables that were not significant predictors of art vandalism included the population of an institution’s city, annual operating budget, square feet of museum/gallery, number of non-security employees, number of volunteers, number of visitors, number of full-time security guards, number of part-time security guards, number of full-time or part-time security guards stationary at a museum/gallery’s entrance, number of full-time or part-time security guards who man a security station, security staff training in identification of suspicious objects, museum/gallery staff

training in identification of suspicious objects, museum/gallery staff training in intruder detection systems, museum/gallery staff training in safety of artworks, museum/gallery staff training in greeting and visitor reception, museum/gallery staff training in CCTV management, volunteer staff training in identification of suspicious objects, volunteer staff training in intruder detection systems, volunteer staff training in safety of artworks, pre-hiring background checks on potential employees. pre-hiring background checks on potential volunteers, square footage of roving, number of designated security posts, how often surveillance rounds are made, would a larger budget improve level of security, would more security personnel improve level of security, would improve staff training improve level of security, would modern security equipment improve level of security, other improvements to improve level of security, door alarms, window alarms, motion detectors, CCTV, individual objects alarms, other types of security systems, glazing on all pictures, vitrines, low lying barriers in front of artworks, ropes and stanchions, other types of physical barriers, bag/package inspections, oversized bag storage, and ID badges required for staff and volunteers.

The variables that were significant predictors of art vandalism included full-time and part-time roving security guards, full-time and part-time guards employed by a museum or gallery for at least five years, security staff training in intruder detection systems, security staff training in safety of artworks, security staff training in visitor reception and greeting, security staff training in CCTV maintenance, volunteer staff training in visitor reception and greeting, and inventory of works on view. The variables that were marginally significant predictors of art vandalism included glazing on some pictures and the number of volunteer hours.

Specifically, each one unit increase in the number of full-time or part-time roving security guards was associated with a 16.0% increase in the odds of art vandalism victimization. Each additional security guard employed by a museum or gallery for at least 5 years was associated with an 8.1% increase in the odds of art vandalism victimization. Compared to museums and galleries that do not train their security staff in intruder and detection systems, the odds of art vandalism victimization was 170.0% higher for museums and galleries that train their security staff in intruder detection systems. Compared to museums and galleries that do not train their security staff in safety of artworks, the odds of art vandalism victimization was 294.0% higher for museums and galleries that train their security staff in safety of artworks. Compared to museums and galleries that do not train their security staff in greeting and visitor reception protocols, the odds of art vandalism victimization was 197.0% higher for museums and galleries that train their security staff in greeting and visitor reception protocols. Compared to museums and galleries that do not train their security staff in CCTV management, the odds of art vandalism victimization was 171.0% higher for museums and galleries that train their security staff in CCTV management. Compared to museums and galleries that do not train their volunteers in greeting and visitor reception protocols, the odds of art vandalism victimization was 75.7% lower for museums and galleries that train their volunteers in visitor greeting and reception protocols. Each one unit increase in the frequency of inventorying works on view by a museum or gallery was associated with a 23.2% decrease in the odds of art vandalism victimization. Compared to museums and galleries that do not utilize glazing on some of their pictures, the odds of art vandalism victimization was 133.0% higher for museums and galleries that utilize

glazing on some of their pictures. Lastly, each 100 hour increase in the number of volunteer hours was associated with a 0.10% increase in the odds of art vandalism victimization.

Table 7.6. Bivariate Binary Logistic Regression Comparison of Museums/Galleries that were Victimized by Art Vandalism Compared with Museums/Galleries that were not Victimized by Art Vandalism

| <i>Measures</i> | <i>B</i> | <i>Exp(B)</i> | <i>p-value</i> |
|---|----------|---------------|----------------|
| Demographic/Control Variables | | | |
| Population of institution's city | -0.003 | 0.997 | 0.474 |
| Number of volunteer hours | 0.011 | 1.001 | 0.082† |
| Operating budget | 0.001 | 1.001 | 0.132 |
| Square feet of museum/gallery | 0.005 | 1.005 | 0.164 |
| Social Guardianship Measures | | | |
| <i>Place Managers-Non-Security</i> | | | |
| # of non-security employees | 0.003 | 1.003 | 0.498 |
| # of volunteers | 0.003 | 1.003 | 0.228 |
| # of visitors | 0.000 | 1.000 | 0.200 |
| <i>Place Managers-Security Guards</i> | | | |
| # of full time security guards | 0.003 | 1.000 | 0.797 |
| # of part- time security guards | 0.018 | 1.018 | 0.656 |
| # of FT or PT roving security guards | 0.152 | 1.160 | 0.038* |
| # of FT or PT guards stationary at entrance | 0.045 | 1.046 | 0.722 |
| # of FT or PT guards who man a security station | 0.104 | 1.110 | 0.521 |
| # of FT and PT guards employed 5 years ago | 0.078 | 1.081 | 0.038* |
| <i>Place Manager Activities-Training</i> | | | |
| SS training in identification of suspicious objects | 0.722 | 0.206 | 0.157 |

| | | | |
|---|--------|-------|--------|
| SS training in intruder detection systems | 0.995 | 2.700 | 0.042* |
| SS training in safety of artworks | 1.370 | 3.940 | 0.004* |
| SS training in greeting & visitor reception | 1.090 | 2.970 | 0.020* |
| SS training in CCTV management | 0.995 | 2.710 | 0.042* |
| MS training in suspicious objects | 0.041 | 1.040 | 0.938 |
| MS training in intruder detection systems | -4.250 | 0.654 | 0.377 |
| MS training in safety of artworks | 0.805 | 2.240 | 0.310 |
| MS training in greeting & visitor reception | -0.610 | 0.543 | 0.248 |
| MS training in CCTV management | -0.766 | 0.465 | 0.198 |
| VS training in suspicious objects | 1.130 | 3.090 | 0.115 |
| VS training in intruder detection systems | -0.170 | 0.182 | 0.108 |
| VS training in safety of artworks | -0.756 | 0.469 | 0.103 |
| VS training in greeting & visitor reception | -1.410 | 0.243 | 0.003* |

Place Manager Activities-Due Diligence

| | | | |
|--|--------|-------|--------|
| Inventory works on view | -0.264 | 0.768 | 0.027* |
| Pre-hiring Background checks on potential employees | 0.013 | 1.010 | 0.947 |
| Pre-hiring Background checks on potential volunteers | 0.206 | 1.229 | 0.340 |

Security Guard Related Practices

| | | | |
|--|-------|-------|-------|
| Square footage of roving | 0.000 | 1.000 | 0.673 |
| Number of designated security posts | 0.028 | 1.029 | 0.341 |
| How often surveillance rounds are made | 0.049 | 1.050 | 0.111 |

Place Manager Perceived Improvements

| | | | |
|--|--------|-------|-------|
| Would a larger budget improve level of security? | -0.041 | 0.960 | 0.938 |
| Would more security personnel improve level of security? | -0.345 | 0.708 | 0.451 |

| | | | |
|--|--------|-------|-------|
| Would improved staff training improve level of security? | -0.345 | 0.708 | 0.451 |
| Would modern security equipment improve level of security? | -0.522 | 0.593 | 0.254 |
| Other improvements? | 0.793 | 2.210 | 0.303 |

Physical Guardianship

Target Hardening Devices & Mechanisms

| | | | |
|---|--------|-------|--------|
| Door alarms | -0.067 | 0.935 | 0.914 |
| Window alarms | 0.666 | 1.950 | 0.147 |
| Motion detectors | 0.052 | 1.050 | 0.917 |
| CCTV | 0.334 | 1.397 | 0.465 |
| Individual object alarms | -0.021 | 0.980 | 0.973 |
| Glazing on some pictures | 0.847 | 2.330 | 0.078† |
| Glazing on all pictures | -0.393 | 0.675 | 0.726 |
| Vitrines | 0.316 | 1.372 | 0.546 |
| Low lying barriers in front of artworks | 0.012 | 1.012 | 0.979 |
| Ropes and stanchions | 0.715 | 2.040 | 0.120 |
| Other type of security systems | -0.019 | 0.981 | 0.982 |
| Other type of physical barriers | -0.296 | 0.744 | 0.717 |

Preventative Physical Guardianship Actions

| | | | |
|---|--------|-------|-------|
| Bag/package inspections | 0.619 | 1.860 | 0.348 |
| Oversized bag storage | 0.077 | 1.080 | 0.868 |
| ID badges required for Staff and volunteers | -0.172 | 0.842 | 0.710 |

*significant at the 0.05 level (2-tailed)

†marginally significant at the 0.100 level (2-tailed)

Art Theft

The results from the bivariate analysis of the “yes art theft incidence(s)” dependent variable with the myriad of independent variables are reported in **Table 7**.

The variables that were not significant predictors of art theft included the population of an institution’s city, number of volunteers hours, annual operating budget, square feet of museum/gallery, number of non-security employees, number of volunteers, number of visitors, number of full-time security guards, number of part-time security guards, number of full-time and part-time roving security guards, number of full-time or part-time security guards stationary at a museum/gallery’s entrance, number of full-time or part-time security guards who man a security station, number of full-time and part time guards employed by a museum or gallery for at least five years, security staff training in identification of suspicious objects, security staff training in intruder detection systems, security staff training in safety of artworks, security staff training in greeting and visitor reception, security staff training in CCTV management, museum/gallery staff training in identification of suspicious objects, museum/gallery staff training in intruder detection systems, museum/gallery staff training in safety of artworks, museum/gallery staff training in greeting and visitor reception, museum/gallery staff training in CCTV management, volunteer staff training in identification of suspicious objects, volunteer staff training in intruder detection systems, volunteer staff training in safety of artworks, volunteer staff training in visitor reception and greeting, inventory of works on view, pre-hiring background checks on potential employees. pre-hiring background checks on potential volunteers, square footage of roving, number of designated security posts, how often surveillance rounds are made, would a larger budget improve level of security,

would more security personnel improve level of security, would improved staff training improve level of security, would modern security equipment improve level of security, door alarms, window alarms, motion detectors, CCTV, individual objects alarms, other types of security systems, glazing on some pictures, glazing on all pictures, vitrines, ropes and stanchions, other types of physical barriers, bag/package inspections, oversized bag storage, and ID badges required for staff and volunteers.

There were no variables that were significant predictors of art theft. However, the variables that were marginally significant predictors of art theft included “other improvements” that would improve the level of security of works of art and low-lying barriers in front of artworks.

Specifically, compared to museums and galleries that do not report that “other improvements” would improve the level of security of their artworks, the odds of art theft victimization was 281.0% higher for museums and galleries that do report that “other improvements” would improve the level of security of their artworks. Conversely, compared to museums and galleries that do not utilize low lying barriers in front of their art works, the odds of art theft victimization was 69.0% lower for museums and galleries that utilize low lying barriers in front of their artworks.

Table 7.7. Bivariate Binary Logistic Regression Comparison of Museums/Galleries that were Victimized by Art Theft Compared with Museums/Galleries that were not Victimized by Art Theft

| <i>Measures</i> | <i>B</i> | <i>Exp(B)</i> | <i>p-value</i> |
|--------------------------------------|----------|---------------|----------------|
| Demographic/Control Variables | | | |
| Population of institution’s city | -0.001 | 0.999 | 0.887 |
| Number of volunteer hours | -0.004 | 0.996 | 0.639 |
| Operating budget | -0.002 | 0.998 | 0.456 |

| | | | |
|---|--------|-------|-------|
| Square feet of museum/gallery | -0.008 | 0.992 | 0.392 |
| Social Guardianship Measures | | | |
| <i>Place Managers-Non-Security</i> | | | |
| # of non-security employees | -0.010 | 0.990 | 0.523 |
| # of volunteers | 0.000 | 1.000 | 0.987 |
| # of visitors | 0.000 | 1.000 | 0.550 |
| <i>Place Managers-Security Guards</i> | | | |
| # of full time security guards | -0.212 | 0.809 | 0.382 |
| # of part- time security guards | -0.141 | 0.868 | 0.215 |
| # of FT or PT roving security guards | -0.332 | 0.717 | 0.130 |
| # of FT or PT guards stationary at entrance | -0.538 | 0.584 | 0.227 |
| # of FT or PT guards who man a security station | -0.211 | 0.810 | 0.514 |
| # of FT and PT guards employed 5 years ago | -0.137 | 0.872 | 0.244 |
| <i>Place Manager Activities-Training</i> | | | |
| SS training in identification of suspicious objects | -0.829 | 0.436 | 0.295 |
| SS training in intruder detection systems | -1.000 | 0.368 | 0.205 |
| SS training in safety of artworks | -0.879 | 0.415 | 0.191 |
| SS training in greeting & visitor reception | -0.517 | 0.596 | 0.398 |
| SS training in CCTV management | -1.000 | 0.368 | 0.205 |
| MS training in suspicious objects | 0.007 | 1.010 | 0.991 |
| MS training in intruder detection systems | -0.218 | 0.804 | 0.691 |
| MS training in safety of artworks | 0.272 | 1.310 | 0.736 |
| MS training in greeting & visitor reception | 0.167 | 1.180 | 0.807 |
| MS training in CCTV management | 0.195 | 1.220 | 0.738 |
| VS training in suspicious objects | 0.505 | 1.660 | 0.552 |
| VS training in intruder detection systems | -0.354 | 0.702 | 0.660 |
| VS training in safety of artworks | 0.611 | 1.840 | 0.317 |

| | | | |
|--|--------|-------|--------|
| VS training in greeting & visitor reception | -0.055 | 0.946 | 0.920 |
| <i>Place Manager Activities-Due Diligence</i> | | | |
| Inventory works on view | -0.202 | 0.817 | 0.126 |
| Pre-hiring Background checks on potential employees | -0.088 | 0.916 | 0.683 |
| Pre-hiring Background checks on potential volunteers | -0.085 | 0.918 | 0.760 |
| <i>Security Guard Related Practices</i> | | | |
| Square footage of roving | 0.000 | 1.000 | 0.358 |
| Number of designated security posts | -0.362 | 0.696 | 0.228 |
| How often surveillance rounds are made | -0.033 | 0.968 | 0.500 |
| <i>Place Manager Perceived Improvements</i> | | | |
| Would a larger budget improve level of security? | 0.413 | 1.510 | 0.543 |
| Would more security personnel improve level of security? | 0.306 | 1.360 | 0.577 |
| Would improved staff training improve level of security? | 0.013 | 1.010 | 0.981 |
| Would modern security equipment improve level of security? | -0.053 | 0.949 | 0.920 |
| Other improvements? | 1.340 | 3.810 | 0.088† |
| Physical Guardianship | | | |
| <i>Target Hardening Devices & Mechanisms</i> | | | |
| Door alarms | -0.651 | 0.522 | 0.313 |
| Window alarms | -0.393 | 0.675 | 0.474 |
| Motion detectors | -0.659 | 0.518 | 0.227 |
| CCTV | -0.691 | 0.501 | 0.207 |
| Individual object alarms | -1.262 | 0.283 | 0.236 |
| Glazing on some pictures | 0.314 | 1.370 | 0.557 |
| Glazing on all pictures | 0.107 | 1.110 | 0.925 |

| | | | |
|--|--------|-------|--------|
| Vitrines | -0.355 | 0.701 | 0.524 |
| Low lying barriers in front of artworks | -1.171 | 0.310 | 0.081† |
| Ropes and stanchions | 0.057 | 0.945 | 0.916 |
| Other type of security systems | 0.505 | 1.657 | 0.552 |
| Other type of physical barriers | 0.231 | 1.259 | 0.781 |
| <i>Preventative Physical Guardianship Actions</i> | | | |
| Bag/package inspections | 0.113 | 1.120 | 0.891 |
| Oversized bag storage | -0.834 | 0.434 | 0.120 |
| ID badges required for staff and volunteers | -0.393 | 0.675 | 0.474 |

†marginally significant at the 0.100 level (2-tailed)

Multivariate Logistic Regression

Multivariate binary logistic regression was the last form of analysis conducted. At this phase of analysis, it was noted that missing values existed for four of the twelve variables (number of volunteer hours, number of part-time and full-time guards employed for at least five years, inventorying works on view, and low-lying barriers in front of artworks) that were determined to be significant or marginally significant after the bivariate logistic regression analysis was completed. The number of missing cases ranged from 1 to 15. The remedy to the problem of missing values without sacrificing the number of cases originally selected for analysis was to utilize single mean/mode imputation. Mean/mode imputation or substitution is to replace each missing value within a given variable with the mean or mode of the reported values within the dataset (Allison, 2002; Little & Rubin, 2002; Pigott, 2000). Admittedly, according to Allison (2002), “this method is well known to produce biased estimates of variances and covariances” (p. 11). However, when the bivariate logistic regression analysis was conducted with and without the mean imputed variables, there were no meaningful differences, showing

that the mean imputation did not influence the results in a harmful way. The variables that were significant without mean imputation were also significant with the mean imputation. This finding also applied to the entire set of 18 variables that contained missing cases during the bivariate analysis phase. Within the multivariate phase of analysis, two separate binary logistic regression models were produced; one for art vandalism and another for art theft.

Art Vandalism Model

In order to investigate whether the ten variables that were either significant or marginally significant from the bivariate logistic regression analysis were viable for utilization within a full multivariate logistic regression model, VIF tests were first conducted to detect any multicollinearity issues. After this step was completed, only one variable (security staff training in safety of artwork) had a VIF coefficient higher than 5. This variable was consequently discarded from any further analysis due to potential issues with correlations with other predictor variables. A Standardized Pearson Residual test for outliers was conducted next. The initial results indicated that three cases were identified as outliers due to their Standardized Pearson Residual values exceeding 2.565. Two variables revealed significant p-values, inventory of works on view ($p=.029$) and volunteer training in greeting and visitor reception ($p=.033$). The log odds coefficients (B) of each variable was -0.325 and -1.170 respectively when a baseline analysis for outliers was conducted.

In order to determine how much these outlier cases exerted any influence on the regression model, the outliers were removed. The removal of the outliers produced an

additional significant variable, glazing on some pictures ($p=.031$), with a log odds coefficient of 1.554. The p-values of the two variables that were significant prior to removal of the outliers retained their significance. However, the p-value of inventory works of view was reduced by 0.023 to 0.006 and the p-value of volunteer training in greeting and visitor reception was reduced by 0.021 to 0.012. The reduction of the p-value of both of these variables were subjectively considered a substantial change in significance value. The log odds coefficients of the two variables that were significant before and after the outliers were removed also both decreased. The log odds coefficient of inventory of works on view was reduced by 0.166 to -0.491 and this was considered a substantial change. Additionally, the log odds coefficient of volunteer training in greeting and visitor reception was also subjectively considered a substantial change since it decreased by 0.387 to -1.557. In conclusion, the outlier cases were determined to have a substantial influence on the regression model. However, due to the small sample size, the decision was made not to remove or transform any of the three outlier cases. This decision was further supported when the standardized deviance residuals were examined, and no outliers were detected.

A full logistic regression model was then produced with the nine significant and/or marginally significant variables. It should be noted that the number of volunteer hours, that had been designated as a control variable, served as a proxy for size of the museums. The results are reported in **Table 7.8**.

The full model contained nine independent variables: full time and part-time roving security guards, full-time and part-time guards employed by a museum or gallery for at least five years, security staff training in intruder detection systems, security staff

training in visitor reception and greeting, security staff training in CCTV maintenance, volunteer staff training in visitor reception and greeting, inventory of works on view, glazing on some paintings, and number of volunteer hours.

The model as a whole explained 27.5% (Nagelkerke R squared) of the variance in art vandalism victimization. As shown in Table 8, only two of the independent variables made a unique statistically significant contribution to the model (volunteer staff training in visitor greeting and reception and inventory of works on view). Specifically, compared to museums and galleries that do not train their volunteers in greeting and visitor reception protocol, the odds of vandalism victimization was 69.0% lower for museums and galleries that train their volunteers in greeting and visitor reception protocols. Lastly, each one unit increase in the frequency of inventorying works on view by a museum or gallery was associated with a 27.8% decrease in the odds of art vandalism victimization.

Table 7.8. Logistic Regression Analysis for Art Vandalism-Full Model (N=111)

| <i>Measures</i> | <i>B</i> | <i>SE</i> | <i>Sig.</i> | <i>Exp(b)</i> | <i>VIF</i> |
|--|----------|-----------|-------------|---------------|------------|
| 1. Number of PT or FT Roving Security Guards | -.022 | .133 | .871 | .979 | 2.80 |
| 2. Security Guards Employed For At Least 5 Years | .041 | .063 | .519 | 1.042 | 2.64 |
| 3. SS Training In Intruder Detection Systems | -.104 | .967 | .914 | .901 | 3.71 |
| 4. SS Training In Greeting & Visitor Reception | .488 | .955 | .610 | 1.629 | 3.68 |
| 5. SS Training in CCTV Management | .165 | 1.059 | .876 | 1.180 | 4.11 |
| 6. VS Training in Greeting & Visitor Reception | -1.170 | .550 | .033* | .310 | 1.17 |
| 7. Inventory Works On View | -.325 | .149 | .029* | .722 | 1.17 |
| 8. Glazing On Some Pictures | .952 | .597 | .111 | 2.590 | 1.19 |
| 9. Number of Volunteer Hours | .008 | .008 | .335 | 1.008 | 1.44 |
| Model chi-square | 22.081* | | | | |

In order to develop a parsimonious model that presents the best fit of the data, the variables with the highest p-values were systematically removed one at a time until a parsimonious model was achieved. The results are reported in **Table 7.9**.

The parsimonious model contained three significant theoretical independent variables: volunteer staff training in greeting and visitor reception, inventory of works on view, glazing on some pictures, and one significant control variable, number of volunteer hours. The model as a whole explained 25.4% (Nagelkerke R squared) of the variance in vandalism victimization. As shown in Table 9, the two variables that predicted the reduction in the odds of art vandalism victimization were once again volunteer staff training in greeting and visitor reception and inventory works on view. Specifically, compared to museums and galleries that do not train their volunteers in visitor greeting and reception protocol, the odds of art vandalism victimization was 72.8% lower for museums and galleries that train their volunteers in visitor greeting and reception protocols. Additionally, each one unit increase in the frequency of inventorying works on view by a museum or gallery was associated with a 25.5% decrease in the odds of art vandalism victimization.

The remaining theoretical independent variable, the utilization of glazing on some pictures predicted an increase in the odds of art vandalism victimization. Specifically, compared to museums and galleries that do not utilize glazing on some of their pictures, the odds of art vandalism victimization was 204.1% higher for museums and galleries

that utilize glazing on some of their pictures. Lastly, the significant control variable, number of volunteer hours, enhanced the precision of the regression model.

Table 7.9. Logistic Regression Analysis for Art Vandalism-Parsimonious Model (N=111)

| <i>Measures</i> | <i>B</i> | <i>SE</i> | <i>Sig.</i> | <i>Exp(b)</i> | <i>VIF</i> |
|--|----------|-----------|-------------|---------------|------------|
| 1. VS Training in Greeting & Visitor Reception | -1.302 | .528 | .014* | .272 | 1.101 |
| 2. Inventory Works On View | -.294 | .142 | .038* | .745 | 1.143 |
| 3. Glazing On Some Pictures | 1.112 | .566 | .046* | 3.041 | 1.079 |
| 4. Number of Volunteer Hours | .013 | .006 | .042* | 1.013 | 1.029 |
| Model chi-square | 20.273** | | | | |
| Nagelkerke R^2 | .254 | | | | |

* $p > .05$, ** $p > .000$

Art Theft Model

The results of the analysis of the art theft model are reported in **Table 7.10**. Similar to the preparation of the full art vandalism model, a VIF test was conducted in order to determine whether there were any issues with multicollinearity with the two variables (low lying barriers in front of artworks and “other improvements” that would improve the level of security of works of art) that were determined to be marginally significant after the bivariate binary logistic regression analysis was conducted. No VIF coefficient exceeded 5. In fact, no coefficient was larger than 1.006.

The Standardized Pearson Residual test for outliers was conducted next. The results indicated that five cases had outliers with Standardized Pearson Residual values that exceeded 2.565. Once again, both variables that were found to be marginally significant at the bivariate level of binary logistic regression analysis revealed marginally

significant p-values: low lying barriers in front of artworks ($p=.062$) and “other improvements” that would improve the level of security of works of art ($p=.056$). The log odds coefficients (B) of each variable was -1.304 and 1.60 respectively when a baseline analysis of outliers for the theft model was conducted.

In order to determine how much these outlier cases exerted influence on the regression model, the outliers were removed. After the removal of the outliers only one variable, “other improvements” that would improve the level of security of works of art, retained any form of significance. Furthermore, this variable’s p-value was reduced by 0.011 to 0.045 , which is subjectively considered a small difference. However, this variable became significant rather than merely marginally significant. The variable’s log odds ratio was increased by 0.81 to 1.681 ; which is subjectively considered a small increase in value. The p-value of low-lying barriers in front of artworks was increased by $.039$ to $.101$. This difference is a substantial increase and consequently the variable lost its marginally significant classification. The log odds coefficient of this variable decreased by 0.138 to -1.168 which is a substantial decrease in value. In conclusion, the outlier cases were determined to have a substantial influence on the regression model. However, due to the small sample size, the decision was made not to remove or transform any of the five outlier cases. This decision was further supported when the standardized deviance residuals were examined and no outliers were detected.

Pursuant to the production of only two variables with marginal significance during the bivariate logistic regression analysis stage, the full model at the multivariate level only contained marginally significant independent variables: low-lying barriers in front of artworks and “other improvements” that would improve the level of security of

works of art. The model, as a whole, explained 10.4% (Nagelkerke R squared) of the variance in reducing art theft.

As shown in table 10, the variable low-lying barriers in front of art works predicted a reduction in the odds art theft while “other improvements” that would improve the level of security of works of art predicted an increase in the odds of art theft. Specifically, compared to museums and galleries that do not utilize low-lying barriers in front of their art works, the odds of art theft victimization was 72.9% lower for museums and galleries that utilize low-lying barriers in front of their artworks. Conversely, compared to museums and galleries that do not report that “other improvements” would improve the level of security of their artworks, the odds of art theft victimization was 395.1% higher for museums and galleries that do report that “other improvements” would improve the level of security of their artworks. No further analysis on this model was necessary since the full model was also representative of the parsimonious model.

Table 7.10. Logistic Regression Analysis for Art Theft Model (N=111)

| <i>Measures</i> | <i>B</i> | <i>SE</i> | <i>Sig.</i> | <i>Exp(b)</i> | <i>VIF</i> |
|--|----------|-----------|-------------|---------------|------------|
| 1. Other Improvements In Level Of Security | 1.600 | .838 | .056† | 4.951 | 1.006 |
| 2. Low Lying Barriers In Front Of Artworks | -1.034 | .698 | .062† | .271 | 1.006 |
| Model chi-square | 6.833* | | | | |
| Nagelkerke <i>R</i> ² | .104 | | | | |

†*p*>.10, **p*>.05

In conclusion, the analysis of the data yielded findings that did not support any of the three hypotheses that were formulated in chapter four. Specifically, the hypothesis that both social and physical guardianship measures will reduce the odds of both art theft

and art vandalism victimization, the hypothesis that the social guardianship measures will reduce the odds of art theft at higher rates than physical guardianship measures, or the hypothesis that the social guardianship measures will reduce the odds of art vandalism at higher rates than physical guardianship measures were not proven to be valid within the current scholarly exploration. Additionally, the wide disparity of results of this analysis at the bivariate descriptive stage, much like the art world, lead to further questions due to lack of consistency and transparency and the general lack of significant variables within the bivariate and multivariate statistical analyses makes it difficult to arrive at definitive and cohesive conclusions.

However, the lack of significant findings, despite the rigorous analysis, is just as insightful within the context of the murky, elusive art world as the dearth of definitive outcomes in the scholarly literature. Furthermore, despite the numerous limitations within this study, these results provide a baseline for future researchers from museology, criminology, sociology, art history, archeology, and the legal arena to build upon. The next chapter will discuss the conclusions in detail and how the results could influence cohesion, transparency of information, and regulation within the art world in order to reduce crime; as well as what forms of guardianship would be effective measures in which to achieve this goal. The limitations of this study and potential next steps for scholars and practitioners will also be presented.

CHAPTER VIII

DISCUSSION, CONCLUSIONS, LIMITATIONS, AND NEXT STEPS

Discussion

The purpose of this study was to explore the prevalence of art vandalism and art theft, as well as the guardianship measures utilized within American art museums and art galleries. Various social and physical guardianship measures of Cohen and Felson's (1979) Routine Activities Theory's guardianship component that represented the culture and functioning of art institutions were analyzed on a univariate, bivariate, and multivariate quantitative statistical level. In general, none of the three hypotheses asserting that both social guardianship and physical guardianship measures would reduce the odds of art vandalism and art theft victimization were supported by the data analysis. However, in rare empirical instances, both types of the above mentioned theoretical constructs of guardianship produced findings of reduction of each form of victimization, but not simultaneously.

Univariate Descriptive Statistics

The discussion of the entire body of analysis will commence with the interpretation of the results of the univariate examination of demographic variables. These measures present a picture of the sample of institutions which, for the most part,

are located within modest geographical areas, within structures composed of a finite amount of square footage, function with challenging annual operating budgets, employ a limited number of staff (measured by part-time and full-time security staff combined with non-security staff), maintain a moderate number of volunteers, but benefit from an average of less than ideal annual volunteer hours. Specifically, approximately 80% of the sample is located within a town or city with 300,000 or fewer residents, receive no more than 3,000 donated volunteer hours and have 83 or fewer volunteers, run their institutions with an operating budget of \$1,000,000.00 or less and have no more than 17 employees, and occupy a facility that is 36,000-square feet or less.

Non-theoretical Measures

Additionally, within the univariate descriptive statistical analysis, the characteristics of the sample that warrant further discussion are first the findings depicting the non-theoretical measures of the exact number of theft/vandalism incidences, the types of objects stolen/vandalized, the perpetrator, the location of perpetration, and the recovery of any stolen objects. Furthermore, the variables relating to the reporting and non-reporting of victimization (excluding employee theft and vandalism) will be elaborated upon.

First, even though the dependent variables in this study were whether or not a museum or gallery had experienced at least one incidence of art vandalism or art theft victimization, the precise number of incidences were also documented. The total number of incidences of art vandalism within the sample was 56 compared to 39 incidences of art theft, which yields a total of 95 incidences of victimization. Interestingly, the total

number of objects vandalized and/or stolen was exactly 58 each, which yields a total of 116 objects which were subjected to one of the two forms of art crimes under investigation in the current study. In terms of vandalism, the types of objects most frequently intentionally harmed were large sculptures (25.9%), outdoor sculptures (22.4%), and decorative art objects (17.2%). Similar to Scott's (2009) vandalism study, the categories of objects most frequently harmed were also paintings and sculptures which comprised 66% of the works vandalized. In terms of objects that were stolen in the current study, the top three categories of objects were large sculptures (19.0%), decorative art objects (17.2%), and other objects (15.5%). Surprisingly, compared to other studies (Aarons, 2001; Barelli, 1986; Benson, 2013; Burmon, 2017; Burnham, 1978; Ho, 1994) and data collected from professional agencies such as the Art Loss Register (ALR) and the FBI's National Stolen Art File (NSAF), paintings were not one of the top three forms of objects stolen in this study. Sculptures were the only top category of art object stolen in the current work, which aligned consistently with prior data collected. As noted in chapter two, the FBI's NSAF only collects data for objects with a minimum value of \$2,000.00, have historical value, or are uniquely identifiable. Therefore, the data compiled in the NSAF may have more select criteria compared to reported theft of art by the respondents in the current study and comparable studies.

The recovery rate for the sample that was victimized by art theft was 23.7%, which is higher than the standard 2% to 10% recovery rates cited by art theft professionals such as Bonnie Magness-Gardner and prior scholarly works (Burmon, 2017; Conklin, 1994; Durney, 2010; Naylor, 2010). A factor that may have influenced the disparity in the recovery rate may be the small number of respondents victimized

within this study as opposed to the thousands of victims of art theft documented by the above-mentioned professionals and scholars. Additionally, if more of the respondents who experienced art theft victimization, but did not disclose any victimization to the researchers, had their stolen works recovered they may have reported art theft victimization in the current study.

In the current study, the four respondents who were fortunate to reclaim their stolen works did so within 2 years or less of the theft incident. Respondent #69 shares, “we’ve experienced two thefts during the previous ten years: one theft was a small glass object in our permanent collection; which was subsequently replaced by the artist (of the work stolen, added for clarification). The second theft was a painting which was part of an art auction. This painting was returned to the museum 2 years later in a mysterious manner: it was wrapped in a few grocery store plastic bags and left outside the front door of the museum. The package was found at opening time.”

The location of both forms of victimization occurred primarily in the gallery/exhibition space and this trend is consistent when compared to other studies which captured data on the location of art theft victimization within museums and galleries (Aarons, 2001; Barelli, 1986; Benson, 2013; Ho, 1992; Wilemse & Etman, 1995). However, no other scholarly works examined the categorical identifier of the perpetrator of art theft or art vandalism. Conversely, many journalistic and art industry professional sources maintain that most theft is committed by insiders. There are no comparable statistics for art vandalism.

The current study did not align with the multitude of claims that art theft is committed by an employee. In fact, in only one art theft victimization was an employee

identified as the culprit. One possible explanation for this disparity is that the respondent sample is primarily located in small communities with a limited number of staff and volunteers. In smaller communities, “everybody knows everybody” and as a result of possible close social bonds within the respondent sample, an insider would not attempt to steal or intentionally harm a work of art at their place of employment. Conversely, a victimized institution might not wish to report an employee perpetration without risking the information quickly being leaked to the general community. Thus, the institution would be taking a chance of suffering negative public consequences.

Another feasible explanation for the lack of reported employee theft or vandalism could be illustrated by a scenario that occurred at the 2007 annual American Alliance of Museums’ (AAM) annual conference in which one of the speakers, a top Special Agent of the FBI’s Art Crime Team, asked the audience, “By a show of hands, how many attendees in the audience had experienced internal theft?” Reportedly, a large portion of the audience raised their hands. In response to the agent’s follow up question, “How many of the incidents were reported or investigated”, the majority of the same hands were retracted (<http://www.imua.org/Files/reports/Insider%20Theft.html>, electronically retrieved December 6, 2017). This illustrates that despite repeated assertions that insider theft is highly problematic in our cultural institutions, the victims are reluctant to report it. Consequently, the respondents to the current survey may have experienced many incidences of employee malfeasance, but chose not to disclose victimization. The primary category of perpetrator of both art vandalism and art theft in the current study was visitor(s) and this category of perpetrator was most commonly identified only “a few

times” as opposed to “most of the time” or “always” in both instances of art vandalism and art theft victimization.

Theoretical Measures

Next, during the univariate examination of the theoretical measures of social and physical guardianship utilized within this study several patterns emerged that do not indicate an overwhelming commitment to the protection and care of artworks entrusted to the respondents. For example, the respondent sample only had an average of 2.76 full-time security guards and an average of 2.29 part-time security guards. Additionally, the findings related to due diligence measures revealed that 75.6% of the respondents either did not consult stolen databases or had answered “N/A”. Lastly, within the physical guardianship category, only approximately half (49.5%) utilized CCTV and 86.5% of the sample does not conduct baggage checks on either visitors or staff. However, many factors may have contributed to the under-incorporated theoretical measures. First, as mentioned earlier, the respondent sample is restrained financially, and as a result, might not have chosen to implement many of the measures in lieu of delegating a higher percentage of their budget to the acquisition of works and presenting temporary exhibits. Secondly, the art world is notorious for its secrecy and as a result the sample might not have fully disclosed their breadth of guardianship measures.

Third, as mentioned in chapter two, the fine art insurance industry is a stakeholder within the art world in which those institutions that have works insured are subject to compliance of some modicum of guardianship measures. However, given that a large percentage of the respondents have a small operating budget, it is feasible that a large

portion of the respondents do not have insurance. In fact, Straus (2009) notes that “theft is much more prevalent in noninsured institutions and collections and that many institutions and private collections in the United States and abroad remain uninsured for a variety of reasons” (p. 98). Consequently, these respondents are not held accountable by any entity with powers of indemnification, to adopt any guardianship measures or simply cannot afford them. Admittedly, Kerr (2016) maintains that those institutions that own fine art that are not insured still benefit from the art insurance industry’s influence regarding guardianship. For example, Kerr (2016) contends that due to the insurance industry constantly improving their methods of assessments and improving security technology, art collectors, dealers, etc. benefit from due diligence/security methods and security/new technological product availability by acquiring these risk reduction measures without the assistance of an insurance representative.

However, given the dearth of both social and guardianship measures reported by the respondents, it is unlikely that any transference of general knowledge of preventative guardianship measures disseminated throughout the art world by the art insurance industry was adopted. Furthermore, according to Charney (2009b), a myriad of museums around the world adhere to the art industry practice of maintaining substandard security measures due to a lack of victimization, thereby utilizing only reactive guardianship measures as opposed to proactive guardianship measures. According to a museum director of a prestigious Italian museum, “We have very few security measures in place, because nothing has ever been stolen from our museum. Why would we spend money to fix what’s never been broken?” (Charney, 2009b, p. 59). Moreover, Steven Layne, CPP, CIPM (2009) adds, “Museums take surprisingly few preventive measures until after the

fact. That is closing the barn after the horses are gone-throwing up a few cameras, changing the locks, and adding a few alarms are all Band-Aids on a gaping wound” (p. 139). Lastly, Mustaine and Tewksbury (1999) maintained in their study on college female stalking victims that the presence of the protective measures were responses of victimization rather than precursory guardianship actions.

Additionally, Dick Drent (2009), former Security Director of the Van Gogh Museum in Amsterdam, remarked that in 2005 he reversed this culturally ingrained guardianship practice within the Van Gogh Museum by implementing many new security procedures and installing state-of-the-art technologies. However, in many cases, it takes significant funding to fully prepare a facility to enact proactive tactics, which the majority of the respondent sample does not have. Furthermore, according to *Suggested Practices for Museum Security As Adopted by The Museum, Library, and Cultural Properties council SIS International AND The Museum Association Security Committee of the American Association of Museums (2008)*, there is a “tendency of museums to avoid sound security procedures because of their lack of popularity with staff or their impact on the operational status quo, as a serious problem to be avoided (http://www.architectssecuritygroup.com/Consulting/WelcomeContractor_files/SuggestedPracticesforMuseumSecurity.pdf, electronically retrieved January 15, 2018).

Interestingly, according to the American Alliance of Museums’ Standards regarding Collections Stewardship, “There are different ways to manage, house, secure, document and conserve collections, depending on their media and use, and the museum’s own discipline, size, physical facilities, geographic location and financial and human resources. Therefore, one must consider many facets of an institution’s operations that,

taken together, demonstrate the effectiveness of its collections stewardship policies, procedures and practices, and assess them in light of varying factors” (<http://www.aam-us.org/resources/ethics-standards-and-best-practices/collections-stewardship>, electronically retrieved January 15, 2018). This standard exemplifies the diversity of factors present in each institution which might account for the lack of consistent reported measures by this study’s respondents.

Social Guardianship

The results of the Place manager activities-training and Place manager activities-Due Diligence analyses present disappointing frequencies of place manager vigilance, some of which were briefly mentioned above. As a result of the limited measures of security training for the security, non-security, and volunteer staff, observed lackadaisical due diligence, regarding consulting stolen art databases, participating in outside risk analysis/audits, and volunteer background checks, the perpetuation of art crime will not decrease. In fact, it could possibly create a dynamic in which art crime will flourish.

Place Manager Activities-Training

Specifically, with regards to place manager training, all three measures of place managers utilized in this category (security guards, non-security (museum staff), and volunteer staff) received training in safety of artworks and greeting and visitor reception in the highest proportions compared to the other forms of training within each theoretical training category. Museum and gallery non-security staff were trained with the highest percentages of the afore-mentioned security measures, followed by the security staff, and

then volunteer staff. Ideally, all the training measures (training in the identification of suspicious objects, training in intruder detection systems, and training in CCTV management) should have been offered to an institution's security, non-security, and volunteer staff in equal proportions to maintain the most effective standards of place manager understanding of guardianship practices and policies. These results may be explained by the limited amount of annual budget earmarked for training of staff and/or the overwhelming view among the respondents that interacting with visitors and the ability to manage the safety of artworks takes priority over the other training measures listed.

Place Manager Activities-Due Diligence

With regards to place manager activities-due diligence, only 24.3% of the sample consulted a stolen art database to ensure that their works were not stolen or illegally acquired. Kerr (2013) notes that the most useful tool for creating a barrier for the sale of stolen art is the stolen art databases. Additionally, according to Marinello & Hassler (2016), "What is most important than any single resource for due diligence in the art market is the awareness of how useful databases can be in the due diligence responsibilities of auction houses, galleries, and dealers alike" (p. 318). However, there are currently limitations with regards the databases that exist. Kerr's (2013) respondents advocated for a unified database, for more existing databases to be publicly funded, for the databases to be easily accessible rather than having to pay a fee for usage, and the information contained in each database to be connected in some form.

Also, only 24.3% of the sample had an outside annual risk analysis conducted. Stevan Layne, CPP, CIPM, an expert in museum security, remarks in an interview in Charney's (2009) book *Art & Crime* that institutions should "audit and self-evaluate often" (p. 141) and the IMUA (2007), Drent (2009), and Layne (2009) all advocate for an outside auditor. These low proactive percentages may be a matter of funding, time constraints, specific institutional views that audits are not relevant to their functioning, lack of insured works in which the insurance policy would require an annual audit, or these results may be due to a portion of the respondent institutions preserving the opaqueness of their operations that the art industry is notorious for.

Interestingly, the highest percentage of frequency of the conduction of inventorying works on view was the daily inventorying of works on view (30.6%), which is the ideal practice among the answer choices. However, the second highest frequency was inventorying works on an annual basis (22.5%). This disparity could account for the value of a respondent's collection, number of employees, or whether the respondent's institution's works were insured. Since not all respondents had a permanent collection, the inventory of works in storage measure was not a true representation of the entire respondent sample. Therefore, the responses cannot be subjected to the same level of scrutiny as the inventory of works on view measure. However, the institutions that did exercise the practice of inventorying works in storage did so only annually, which represented the highest proportion of the sample (27.9%).

The conducting of pre-hiring background checks on employees and volunteers is a measure of a place manager exercising preemptive measures when considering candidates for employment and volunteer work. Stevan Layne, CPP, CIPM, remarks in

an interview in Charney's book *Art & Crime* that frequently an insider thief steals more than one object from their employer and commits their crime more than once.

Admittedly, conducting background checks can be costly and time consuming. However, given the high rate of insider malfeasance in the art industry, conducting background checks is a standard or should be a standard preventative measure (Benney, 2013; ICOM, 1993; IMUA, 2007; Layne, 2014; Straus, 2009, 2016). Layne (2009) recommends "thorough preemployment screening of staff, volunteers, interns, contractors, and vendors" (p. 138). A substantial percentage of the sample (74.8%) conducted pre-employment background checks on future employees with some sort of frequency while a smaller percentage of the sample (36.9%) conducted pre-employment background checks on future volunteers. The difference in the percentages may be accounted for by the fact that volunteers are not considered "actual employees" of an art museum or gallery since they receive no monetary compensation. Also, volunteers tend to be students, individuals already known to institutional staff, and/or may not be granted the same level of access to collections as paid employees. Therefore, there may not be an institutional perceived need for volunteers to undergo any pre-employment screening.

Security Guard Activities

Security guard activities vary among institution to institution depending on the size of the guard staff, size of the facility, and the operating budget. However, these factors are all inter-related. Consequently, the average square footage of roving and the average number of designated security posts was considered low due the fact that within the sample there was a small average number of full-time and part-time security guards,

as well as the average size of the institutions contained in the sample had a limited amount of square footage. Lastly, the variable measuring where surveillance rounds are conducted, and the length of time security guards are on duty were variables with such an extremely high number of missing cases that an accurate assessment of the veracity of the results would be futile.

Place Manager Perceived Improvements

The next category within the social guardianship construct is place manager perceived improvements. Overwhelmingly, the highest percentage of the sample (76.6%) perceived the need for a larger budget as a measure of increasing the safety of the artworks at their respective institutions. This result is not surprising since the other answer choices in this category rely on financial resources in order to be implemented.

Guardianship in Action

Lastly, within the construct of social guardianship are the theoretical categorizations of Guardianship In Action. In terms of the measures relating to the reporting of victimization, the data revealed that the respondent sample was a minimally capable guardian due to the lack of reported implementation of guardianship measures. Moreover, according to the data analysis, a pattern of a lack of willingness to advance to the intervening/active guardian stage of Reynald's Guardianship In Action Model by consistently not reporting employee perpetrated victimization emerged. In fact, the findings indicate that the respondent sample prefers to handle employee art crime malfeasance internally, if at all. Specifically, the sample's highest frequency of readiness

to take action against an employee art vandal or art thief was to fire the employee rather than report the crime or another form of action. Interestingly, institutions were slightly more apt to fire an employee vandal (32.4%) than an employee thief (24.3%). A plausible reason for the contrast may be that there exists a perception that the underlying cause of vandalism is some sort of psychological disorder rather than felonious motives. Hence, an employee who vandalizes may be viewed as more unpredictable than one who simply steals work(s) for seemingly logical reasons. However, these percentages are low in comparison to the high rates of missing responses within these categories. Furthermore, only less than 25.0% of the sample within each category measuring employee perpetration would involve law enforcement. Interestingly, a slightly higher percentage of respondents (24.3%) would contact law enforcement for insider acts of vandalism compared to insider theft (22.5%). These results are opposite to the respondents' responses to the proportion of percentages that would fire their insider art vandals and art thieves. An explanation may be that the respondents would prefer to engage law enforcement when an incident of vandalism occurs. This is evidenced by the higher percentage of respondents who answered this question possibly having an art insurance policy and therefore being obligated to file a police report as part of the conditions of their insurance policy. This may also be because respondents had more faith in law enforcement to handle an art property destruction case with more aptitude than an art property theft cases. The inclusion of law enforcement in preventing art theft and art vandalism and post-crime reporting could possibly reduce the incidence of these forms of art crime. The art criminals could possibly be deterred if there was an institutional cultural shift to report art crimes to law enforcement. However, law enforcement would

have to take art crime more seriously and investigate these cases with more rigor than has been suggested (Benson, 2013; Conklin, 1994; Dobovšek & Slak, 2011; Gerlis & Pes, 2013; Houpt, 2006; Kennedy, 2010; Kerr, 2013). In sum, though, these overall findings regarding the reporting of insider art crime misconduct attest to the notion that art institutions, including university museums and galleries, are reluctant to involve law enforcement in their criminal matters (Benson, 2013; Chappell & Hufnagel, 2014; Clarke & Szydlo, 2017; Conklin, 1994; Dolnick, 2005; Houpt, 2006; Kerr, 2013; Kleberg, 2009).

In terms of actions taken after an act of art vandalism or art theft that occurred at a respondents' respective museum or gallery perpetrated by a non-employee, the results were mixed between the two forms of victimization. The respondents who were victimized by art theft were most likely to inform their boards and fill out an internal incident report in equal frequencies (70.6%) and inform the local police of victimization (64.7%) than the respondents victimized by art vandalism who informed the local police of victimization (44.0%) and reported the vandalism to their board (40.0%). First, it is interesting that the respondents are more likely to report non-employee art crime perpetrators than insider art crime perpetrators. Furthermore, within the sample of respondents victimized by art vandalism 28.0% or less reported an incident of vandalism to their insurance agency, filled out an incident report, reported the incident to the media, reported the incident to national law enforcement, and took "other action". Within the sample of respondents victimized by art theft, 35.3% or less reported an incident of vandalism to their insurance agency, reported the incident to the media, filled out an incident report, reported the incident to national law enforcement, and took "other

action”. Secondly, the findings are in contrast to the results of reporting employee malfeasance; the respondents were more likely to report non-employee art thieves than non-employee art vandals to local law enforcement. An explanation for the disparity may be that due to the overall budget and size of the respondent sample, they may not have art insurance for their works, some of the respondents do not have a permanent collection and therefore may not have art insurance for the temporary or rotating exhibitions they host, or if an act of vandalism occurred, the damage perpetrated did not require any conservation restoration or the damage was so severe that conservation could not salvage the work. For example, according to an interview conducted with an anonymous former gallery director of a medium size university, a student’s work of glass art that contained live red ants was vandalized by another student releasing the ants. The cost to replace the ants was only \$25.00. The gallery made the decision not to take any action against the vandal. When asked if the artwork had been damaged beyond repair or stolen, would the police have been called or any other action taken, the gallery director’s answer was “yes, the incident would have been reported to the police” (anonymous personal communication, December 14, 2017).

However, these percentages are low given that a large portion of art institutions receive some form of public funding and are therefore explicitly required to provide transparency when victimized (Charney, 2009; Wilemse & Etman, 1995). Conversely, the respondents who were victimized by art theft may have been less opaque in reporting victimization than the portion of the sample victimized by art vandalism. The differences between the two types of crimes and the additional aspects of art vandalism and art theft that separates them from their normative counterparts may have contributed to the

disparate findings. Additionally, art theft may be handled more thoroughly than art vandalism by art institutions, which would account for the higher reporting percentages of art theft victimization.

Moreover, according to Steven Keller (2011), as well as Herb Lottier, former Director of Protective Services at the Philadelphia Art Museum, and Mike Seaman, head of installations at the Storm King Art Center in New York via an interview with Alexandra MacNamara (2013), acknowledge that that children are often the perpetrators of art vandalism. Furthermore, the extent of the damage to the works by juveniles is minimal. Consequently, crimes perpetrated by minors may not be reported with as much frequency as vandalism perpetrated by adults. In sum, these results confirm that art institutions operate within a culture of non-disclosure that is an appealing feature of art crime to motivated offenders; especially because of the fact that law enforcement is not notified on a consistent basis.

Last, these particular findings are in contrast to Colin Quin's, the Vice President and Director of Claims Manager at AXA Art Insurance Corporations, directive that in the event of vandalism an art institution should first notify their insurance broker in order to file a claim. This action will begin the process necessary to repair the damaged work(s).

Despite the findings that art theft victims within the sample reported victimization with appreciable frequencies, not one respondent would reveal why they would not report an instance of art theft except for four respondents who answered yes to the measure of "other reasons". This finding is interesting given that the literature is replete with reasons as to why art institutions and private collectors do not report art theft victimization. Therefore, either the forced answer choices did not apply to the small sample that had

been victimized or the sample chose not to reveal their reasons for non-reporting. In sum, overall the findings reveal that respondents who were victims of art theft were more inclined to progress from the level of a capable guardian to the level of an active guardian with respect to reporting victimization than the respondents who were victims of art vandalism. Explanations for the difference may be that the damage due to vandalistic acts did not warrant reporting, the respondents did not want to publicize victimization to promote opaqueness or fear of reasons which were not revealed, or their institutions did not consider vandalism as serious as art theft in terms of an act of criminality. The survey did not ask the respondents what form of vandalism was perpetrated or the period of work in which the work was classified. Consequently, there is no data available to draw any conclusions regarding the seriousness of intentional damage inflicted upon the artworks within the victimized sample's collections.

Physical Guardianship

Within the categories of physical guardianship, a lack of target hardening resources and industry related physical guardianship proactive measures became evident.

Target Hardening

Of the ten target hardening measures contained within the survey's forced answer choices list, only three target hardening mechanisms/devices were utilized by more than 70% of the sample. The highest percentage of the sample (84.7%) utilized door alarms and 71.2% of the sample utilized both motion detectors and vitrines. Steven Keller noted in an interview with Alexandra MacNamara (2013), "it is ideal to flood the room with

motion detection” (p. 42). According to MacNamara (2013), Keller also posits that this proactive use of target hardening devices “leaves little potential for thieves and vandals to go undetected should they lag behind once a large group has left a museum gallery” p. 42). He also “admits closed-circuit TV cameras can cause a strain on a museum’s security budget, he firmly believes that cameras should be installed, at the very least, at museums entry points” (p. 42). Respondent #60 notes that “Security cameras are located at the first-floor reception/security desk”. However, respondent #49 reports “Cameras are mounted in each room, but they are not functional.” The remaining seven measures were utilized by 52.3% of the sample or less. The lack of usage of target hardening devices may be a function of funding, a perceived lack of need of physical deterrents and devices, the sample’s perception that the devices are not effective in preventing victimization, lack of an insurance policy that might require certain target hardening devices, the respondent’s notion that staff vigilance is a better deterrent to victimization, or a large portion of the sample was reluctant to disclose their security arsenal.

Preventative Physical Guardianship

Perhaps even more discouraging than the lack of target hardening devices utilized by the respondent sample was the lack of preventative physical guardianship activities conducted by the sample; especially the minimal usage of bag and package inspection. Bag and package inspection is a common practice in airports, sports stadiums, and even small concert venues. Despite the fact that museums such as the Museum of Fine Arts, Boston, the Smithsonian’s Hirschhorn Museum, and the Museum of Modern Art, have adopted bag inspection as part of their standard guardianship procedures, this study found

that these inspections are not performed on a consistent basis at institutions that have implemented bag inspection policies. For example, respondent #90 reported that their “guards are authorized to check any bag they believe is suspicious and not every bag is searched every hour” and respondent #103 only conducts baggage checks on bags larger than purses. This respondent also added that “there is a posted size for bags that will be examined”. An alarmingly large percentage of the sample did not require any package or bag inspections of visitors or staff (86.5%) and 56.8% of the sample did not require anyone to wear an ID badge. The only measure in this category, oversized bag storage, presented a somewhat positive finding in that 58.6% of the sample required their visitors to store oversized bags prior to entering the exhibition space. Respondent #28 reported that they require that backpacks stay in their reception area and respondent #108 reported that their visitors “must secure belongings in lockers”.

In sum, the univariate descriptive statistics reveals that this study’s sample may be handicapped by limited resources, a lack of adequate security policies, or chose not to reveal the true scope of their security policies and procedures or incidences of victimization. Next, the results of the bivariate descriptive analysis of the demographic and theoretical measures will be discussed.

Bivariate Descriptive Statistics (Subgroup Comparisons)

The two forms of victimization will be presented together within the discussion of the results of the bivariate descriptive statistical analysis that compared first the means and proportions of the institutions victimized by art vandalism and those which were not victimized by art vandalism and secondly compared the means and proportions of the

institutions that were victimized by art theft with those that were not victimized by art theft. Within the bivariate descriptive analysis, an initial picture comparing and contrasting our sample as guardians within the contexts of art theft and art vandalism victimization is presented. Although the results present comparisons of each demographic and theoretical measure, it should be noted that results cannot be considered statistically significant since no quantitative tests were conducted. This analysis was performed for exploratory purposes only to examine any potential theoretical trends that may or may not indicate the success of quantitative tests of the guardianship component of Routine Activities Theory for the current researchers and future scholars. Additionally, this analytical format allows the art industry professionals to examine the sample within simple comparative configurations that allows for more insightful results than a purely non-comparative descriptive statistical report provides.

Social Guardianship

Demographic, Place Managers, Security Guards

As mentioned in chapter five, the results of the comparisons of the four demographic and the twelve place manager measures within the victimization versus no victimization contexts of both art vandalism and art theft were diametrically opposed, except for the variable “population of institution’s city”. Specifically, the portion of the sample that was a victim of art vandalism all had higher average means of the demographic and place manager measures except for the variable “population of institution’s city” compared to the portion of the sample that was not a victim of art vandalism. Conversely, all sixteen measures (demographic, place manger, and security

guard measures) all had higher averages for the non-victimized sample of art theft compared to the victimized sample. This disparity could be interpreted in several ways. First according to one of the respondents in Scott's (2009) study on vandalism, "Instances of vandalism are more common in larger/national institutions than in smaller/local institutions" (p. unknown). Similarly, Peter Morrin, former Director of the J.B. Speed Art Museum and President of the American Art Museum Directors (AAMD), vandalism occurs at greater frequencies at larger institutions and theft occurs at greater frequencies at smaller institutions. Morrin expounded upon this statement by noting that larger institutions have greater square footage, a greater numbers of works including those exhibited in a sculpture garden. Consequently, there is a greater chance of vandalism due to the above-mentioned factors. Additionally, the larger museums may have security guards, however, there is no guarantee that they are stationed within each gallery or are manning a CCTV monitor twenty-four hours a day. Furthermore, larger institutions are more visible in the community, represent the establishment of power. The larger museums also attract not only the "art lovers" as visitors, but the novice viewers. Morrin insightfully shares that the art world has created their own problem due to their prominence in the community.

According to Anthony Amore, during his interview with Noah Charney (2009), "Because museum visitors are so often vested with a love for the art that they have paid to look at, they are very likely to speak up if they think a person means to do harm to the collection. They therefore, become an unwitting security measure and a vital layer of security lending hundreds of sets of eyes and ears to what is going on in the museum" (p. 131). This statement could also be seen as a hindrance. The larger institutions have the

resources to organize exhibits that appeal to more than the “art lovers”. A person not familiar with museum etiquette could feel that is perfectly fine to vandalize a work or these larger shows contain works with more intrinsic and extrinsic value. Thus, the exhibit is desirable as a venue for a vandal to express his discontent for political reasons, religious consternation, anger with the “elitist” establishment, or sexual imagery protest.

It is also feasible that novice viewers may not be cognizant of the inappropriateness of adding to the art work by writing on the work with a pencil or pen. More children also are brought to the larger institutions and since they have been determined to contribute to the pool of art vandals there is greater chance that a child can intentionally harm a work.

Secondly, the institutions that were victimized by art vandalism may have been more forthcoming in their disclosure during the survey process. Having artworks damaged as opposed to stolen may be a crime that the sample was more comfortable reporting on an anonymous questionnaire. Third, the institutions victimized by vandalism reportedly operated with a larger budget and within larger spaces than the non-victimized institutions, which either contributed to the larger institutions possessing more works that were desirable targets of victimization or the larger space may have been more difficult to monitor by place managers despite the finding that the victimized institutions had more place managers. A fourth interpretation of the results regarding art vandalism victimization is consistent with research on guardianship relating to place managers. The institutions that were not victimized by art vandalism compared to those that were victimized by art vandalism may work in art institutions in which place managers work within a strong structure of employee cohesion to prevent art crime victimization.

Consequently, the number of place managers may not impact victimization, rather the effectiveness in which they work together. This may be especially evident in smaller institutions in which staff work more closely with each other.

Conversely, although a smaller staff may be a more unified group of guardians, they generally take on many roles that facilitates the need to multi-task, which would create an overstretched staff and impair the effectiveness of guardianship capability of the entire smaller institution (Scott, 2009). In fact, one of the respondents in Scott's (2009) vandalism study, states, "Lack of resources can lead to staffing shortages, meaning that staff become over-stretched and artworks are not adequately invigilated" (p. unknown). For example, in 2011, three galleries in Chelsea, New York were victims of theft within a ten-day period. The shortage of staff was one reason cited for the wave of criminal activity. A Chelsea gallery owner told *Art In America* magazine, "It is a problem because we get engrossed in something or have to turn out backs to go to another area of the gallery, and everything is vulnerable, from artwork to tools to office equipment" (<http://www.artinamericamagazine.com/news-features/news/marc-jancou-steven-parino-theft/print/>, electronically retrieved March 20, 2017).

Alternatively, given that the reported number of vandalism incidences was greater than the number of reported number of theft incidences, and the institutions victimized by vandalism have more security guards and place managers in general, it may be that Wilmes and Etman's (1995) proposal that "museums with a lot of attention to security care may, for instance, register incidences more carefully, as a result of which it will notice and report more incidences" (p. 59). Hence, the sample victimized by vandalism was more proactive in their vigilance of security care within the human surveillance

realm, as well as more transparent with their reporting of victimization compared the to the sample not victimized.

Lastly, the art vandalism victimized sample had greater financial resources to possibly designate a larger portion of their budgets to more non-security and security staff after an incidence of art theft. Thus, the results may be indicative of reactive actions post victimization by the institutions victimized by art vandalism as opposed to the respondents having instituted pre-crime preventative measures and these measures not effectively preventing victimization when compared to the institutions that were victimized by art theft.

Place Manager Activities and Vigilance

Place manager vigilance is an area which is examined on several levels in terms of victimization, employee retention, and the overall culture of an institution.

Place Manager Activities-Training

The first group of measures of place manager under investigation were the variables pertaining to place manager activities-training. Unfortunately, the comparison of the victimized versus non-victimized sample within the realms of art vandalism and art theft do not provide a clear delineation of the results for all the training categories. The training measures for security staff follow the same pattern as the place manager measures, as mentioned in chapter five. The portion of the sample that was victimized by art vandalism had a higher proportion of all the training measures for security staff than the portion of the sample victimized by art theft. Specifically, the non-victimized sample

of art theft had a higher proportion of all training measures offered for security staff compared to the victimized sample and the victimized sample of art vandalism had a higher proportion of all training measures offered for security staff compared to the non-victimized sample.

Several explanations may account for this disparity. First, vandalism and theft are very different crimes simply due to their separate motives, the various methods in which each form of crime is perpetrated, and a difference in many of the objects used to commit the two crimes. Therefore, the security guards, all staff, and volunteers may need training more precisely related to each form of crime, and if so, perhaps this is not occurring within the respondent population. However, specifically with regard to the security guard training, it may be that the security guards within the respondent sample that were victimized by art vandalism either needed the abovementioned specialized training for theft and vandalism, they were not trained as well in general compared to the sample victimized by art theft, the training was in response to an incidence of art vandalism that would account for the higher percentages, or the respondents who were victims of art vandalism were more open in their disclosure regarding training opportunities for security staff than the respondent sample victimized by art theft due to their increased vigilance of hiring more security guards and place managers thus far. Additionally, according to the *Suggested Practices for Museum Security As Adopted by The Museum, Library, and Cultural Properties council SIS International AND The Museum Association Security Committee of the American Association of Museums (2008)* guidelines, security guard training and security training for staff who perform security functions should undergo continual training throughout the year. This training policy may

not be implemented in the respondent sample and consequently the lack of continued training may have contributed to the higher percentage of museums/galleries that offered security staff training were not doing so on a frequent basis or may only offer training when an employee is hired or on an annual basis.

The results of the analysis of the non-security (museum and gallery) staff and volunteer staff training for the victimized and non-victimized institutions of art vandalism and art theft differ from the pattern of the bivariate descriptive results discussed thus far. The museum and gallery non-security staff training results revealed that all but one training measure (training in intruder detection systems) was offered in a higher proportion by the sample victimized by art theft compared to the sample that was not victimized by art theft. Conversely, all but three training measures (training in intruder detection systems, training in greeting and visitor reception, and training in CCTV management) were offered in higher proportions by the sample victimized by art vandalism compared to the sample not victimized by art vandalism. These findings may indicate that the museum and gallery non-security staff at the institutions victimized by art theft are not being trained as well in theft prevention as vandalism prevention or the museum and gallery non-security staff is relying on the security staff to deter any potential theft incidences.

Additionally, according to the univariate statistics results, the average number of museum and gallery non-security staff present at the institutions victimized by art vandalism (21.39) is more than twice the average number of museum and gallery non-security staff present at the institutions victimized by art theft (9.53). Consequently, there are simply more non-security staff members undergoing training at the institutions

victimized by vandalism either prior to or after an incidence of art vandalism. Additionally, potentially a higher average of non-security staff at the institutions victimized by vandalism are moving around the entire gallery or museum and interacting with visitors than the non-security staff at institutions victimized by art theft. Lastly, as mentioned earlier, increased training opportunities for non-security staff may have been implemented after an incidence of art theft or the respondents who were victims of art theft were more forthcoming with information than the respondents who were victims of art vandalism regarding their training opportunities for non-security staff.

The results of the analysis of the volunteer staff training for the victimized and non-victimized institutions of art vandalism and art theft indicate that (similar to the analysis of the museum staff training measures) all but one training measure was offered in a higher proportion by the sample victimized by art theft compared to the sample not victimized by art theft. However, within these findings, the specific measure found at a higher proportion within the victimized sample was training in suspicious objects. Conversely, three of the four training measures (training in intruder detection systems, training in greeting and visitor reception, and training in safety of artworks) were offered in higher proportions by the sample not-victimized by art vandalism compared to the sample victimized by art vandalism. Similar explanations for the findings within the museum staff training category can be applied to explain the findings within the volunteer staff training category except that the difference between the average number of volunteers was less than the average difference in the average number of non-security staff. A final note before proceeding to the place manager due diligence measures is that, similar to the results of the univariate descriptive statistics, the measures within each

training category that were offered by the highest proportions of either the victimized or non-victimized sample within each form of art crime was the training in safety of artworks and the training in greeting and visitor reception.

Place Manager Activities-Due Diligence

The place manager activities-due diligence category offered more complex insights into ways the institutions victimized and not victimized by vandalism and the institutions victimized and not victimized by theft differ in their varying levels of place manager vigilance compared to the place manager-training category. First, surprisingly, the sample that did not experience vandalism victimization inventoried their works on view with more consistent and increased frequency than the sample not victimized by art theft. Within both groups of respondents that were not victimized, the highest percentage of each sample inventoried their works on view on a daily basis. This finding is consistent with the univariate descriptive statistics in which the highest percentage of the entire sample inventoried their works on view on a daily basis. However, the greatest percentage of both groups that were victimized by either vandalism or theft inventoried their works on view once a year. Furthermore, the sample that was not victimized by art vandalism inventoried their works on view beginning every 3 months up to a daily basis in greater frequency than the sample not victimized by art theft, whereas the sample not victimized by art theft was slightly more sporadic compared to the sample not victimized by art theft in which the greater percentage of the sample that inventoried their works on view monthly were victimized by art theft. In sum, it appears that for the most part, inventorying works on view with greater frequency may be correlated with less

victimization of art vandalism and art theft. However, since no quantitative analysis was conducted, these findings cannot be taken as statistically significant or as a definitive relationship between the theoretical measure and the results.

The analysis of the second measure of due diligence, pre-hiring background checks on potential employees produced the following results. In both the art vandalism and art theft victimized respondent samples, overwhelmingly the highest percentage of the sample “always” conducted background checks on potential employees. However, the percentages were very close within the group of victimized and non-victimized respondents for both forms of victimization. However, the respondents victimized by art vandalism “always” conducted pre-employment background checks on future employees with a higher frequency compared to the respondents not victimized by art vandalism. Furthermore, the two percentages were close in value; 65.2% and 62.5% respectively. This finding is counter to the findings of the art theft sample in which a higher percentage of the non-victimized sample always conducted background checks on future employees compared to the sample victimized by art theft.

A portion of this finding is commensurate with the art industry standard operating procedures due to the repeated assertions that the majority of theft from art institutions is committed by or aided by an insider. However, the vandalism result could possibly be interpreted as the victimized sample increased their pre-employment background checks after instances of insider vandalism which were not reported to the researchers, many more insider vandalism occurs in general which is not reported in either the scholarly literature or news reports, or the art theft respondents did not fully disclose their frequency of pre-employment background checks. In addition, both a higher percentage

art vandalism and art theft victimization groups never conducted background checks on future employees, which was the second highest percentage of both samples; albeit much lower percentages than the above-mentioned frequency.

The only remaining forced answer choice frequency in which the comparison of art vandalism and art theft victimization and non-victimization were aligned was the conduction of background checks on future employees “sometimes”. Both the non-victimized art vandalism and non-victimized art theft sample was found in higher proportions of this frequency of pre-employment background check conduction. In sum, the results of this form of due diligence present mixed results. Obviously, doing nothing affects art crime victimization, which is what the art industry experts repeatedly contend. However, the different results within the frequency of pre-employment background checks conduction leads to more questions rather than plausible conclusions, especially within the context of art vandalism.

The last measure of due diligence is pre-hiring background checks on potential volunteers. As mentioned earlier, many institutions may not invest any time or resources to this measure. The results of the comparison of institutions victimized and not victimized by art vandalism and art theft align with the findings of the univariate statistics in which the highest frequency was “never”. However, within this measure, the lack of pre-hiring background checks was present within a higher percentage of the sample that was not victimized by art vandalism compared the sample that was victimized by art vandalism. It should be noted that the difference between the percentages of the two groups was only 2.6%. Conversely, within this measure, the lack of pre-hiring

background checks was present within a higher percentage of the sample that was victimized by art theft compared to the sample that was not victimized by art theft.

Several plausible explanations could account for these findings. Once again, the lack of background checks on anyone with special access to an institutions collection or borrowed works is risky. However, the larger percentage of the sample that was not victimized by art vandalism within this measure is surprising. It may be simply a matter of insider vandalism does not occur very often, the institutions do not report it, or the respondent sample victimized by art theft began conducting pre-employment background checks on potential volunteers after an incidence of art vandalism and/or theft perpetrated by a volunteer. Other results within this measure were also different than the previous measure of pre-employment background checks on potential employees. A higher percentage of the sample victimized by art theft always conducted pre-employment background checks on future volunteers compared to the sample which was not victimized by art theft. This percentage of the sample was ranked 2nd after the frequency of never. Similarly, a higher percentage of the sample victimized by art vandalism always conducted background checks on potential volunteers compared the sample which was not victimized by art vandalism and this frequency was also ranked 2nd after the frequency of never.

These results are diametric to the findings of the examination of the frequency of the pre-employment background checks of potential employees. Once again, the results within this measure do not align with art industry recommendations or expected findings. Possible reasons for the disparity may be the under-reporting of the sample, the implementation of this measure after an incidence of art vandalism or art theft, or simply

lack of resources or institutional policy not to conduct pre-employment background checks for potential volunteers. However, many galleries and museums have many more volunteers than paid staff with access to their works. Case in point, in this study the average number of security and non-security staff is 25.73 and the average number of volunteers is 58.97. Consequently, by sheer numerical odds, it is more likely that a volunteer would perpetrate an act of vandalism or theft which lends credence to the finding that a higher percentage of the victimized sample which never conducts pre-employment background checks on potential volunteers compared to the non-victimized sample. However, as mentioned earlier, volunteers may have already been vetted due to many volunteers being students and/or persons already personally known to institutional staff which would lead to an institution foregoing any background investigations on these persons. However, according to the data garnered in this study the lack of this form of due diligence may be detrimental to an art gallery or museum.

Place Manger Perceived Improvements

The last category is composed of measures that contribute to an assessment of an institution's degree of place manager vigilance is place manager perceived improvements. These measures assess how well a place manager is able to conceptualize what would improve the safety of their institutions' artworks. When the victimized versus non-victimized art vandalism and art theft samples were compared, a variety of findings were revealed. First, unexpectedly, all the measures were not found in greater proportions by both victimized samples. Specifically, if an institution had been victimized, it would warrant the conceptualization of improvements on all of the listed measures. However,

this was not the case. Within the sample of victims of art theft, all but one measure, modern security equipment, was found in a higher percentage compared to the sample that was not victimized by art theft. It may be that the sample did not perceive modern security equipment as effective at preventing art theft as the other measures due to the other measures addressing the human component of guardianship that many researchers have advocated is more effective at crime reduction. Conversely, within the sample of victims of art vandalism, only one measure, “other improvement”, was found in a higher percentage compared to the sample that was not victimized by art vandalism. It should be noted though, that the difference in the percentages when comparing the sample victimized by vandalism versus the sample not victimized was only 0.70 for the measure of larger budget as an improvement to the safety of artworks. Although the results relating to the art vandalism sample are unexpected, it may be that the art vandalism sample that was not victimized did not actually perceive the need for improvements in greater proportions since this percentage of respondents did not experience any victimization; rather these measures had already been implemented as a preventative measure and victimization did not occur. However, it is difficult to conceive that any place manager at an art institution that had been victimized would not answer yes to the forced answer choices with greater percentages than place managers at non-victimized institutions.

Due to these confounding results, the researchers were curious as to how the respondents within the separate samples assessed the overall level of security, the vulnerability of their artworks to vandalism, and the vulnerability of their artworks to theft at their own institutions. These questions were asked on the survey, but were not

utilized as either a demographic or theoretical measure. Each question was coded on a 5-point Likert scale with the overall security measure ranging from 0=very low level of security to 4=very high level of security and the two questions measuring the vulnerability of artworks to theft and vandalism ranged from 0=very vulnerable to 4=extremely safe. The majority of the sample victimized by art vandalism (44.0%) ranked their level of security at a “medium level of security” and the majority of the sample victimized by art theft (35.5%) ranked their level of security as “low level of security”. It is plausible that, the art vandalism victims may have overestimated the effectiveness of their guardianship capabilities. Furthermore, the majority of the sample victimized by vandalism (40.0%) ranked their vulnerability to vandalism as “safe” and the majority of the sample victimized by theft (41.2%) ranked their vulnerability to theft also as “safe”. Additionally, since 7 of the 35 institutions victimized by either theft or vandalism were victimized by both theft and vandalism, a quick comparison was conducted to examine the ranking of the sample of vandalism victims perceived vulnerability to theft and vice versa. The majority of the sample victimized by vandalism (48.0%) ranked their vulnerability to theft as “safe” and the majority of the sample victimized by theft (35.3%) ranked their vulnerability to vandalism as “safe” and “very safe” in equal percentages. It is interesting that the victims of crime still maintained that their vulnerability to each specific form of crime was at the mid-range level of the Likert scale (safe).

In sum, the respondent sample exhibited a minimal level of place manager vigilance for all three categories of measures. The areas of strength for both the art vandalism and art theft sample were the inventory of works on view and the pre-

employment checks on potential employees. The art vandalism sample's place manager vigilance surpassed the art theft's sample of place manager vigilance in the measures of museum staff security training, volunteer staff security training, and pre-hiring background checks on potential volunteers. The art theft sample surpassed the art vandalism sample in place manager vigilance in security staff training.

The measure of perceived place manager improvements can be interpreted in two ways. First, the art theft sample that was victimized may be better at understanding their needs to prevent another incidence than the art vandalism victimization sample. Or secondly, the art vandalism sample that was not victimized may have already implemented the forced answer choices as preventative measures in higher proportions (compared to the victimized sample) as deterrents to future victimization even though they have not experienced victimization. Lastly, even though this data is useful, the researchers are still uncertain whether the findings of this assessment are in response to victimization, a true picture of the respondents' art theft and/or art vandalism victimization, or under-reported results due to the issue of secrecy in the art world, particularly relating to security policies and practices.

Physical Guardianship

The next two sections will address the findings of the measures relating to the target hardening devices and preventative physical guardianship actions within the victimized versus non-victimized art vandalism and art theft samples.

Target Hardening

First, the findings of the target hardening measures revealed that the highest proportion of target hardening measure utilized by the victimized and non-victimized art vandalism and art theft samples was door alarms. This result is commensurate with the univariate descriptive statistics in which door alarms was the target hardening measure utilized by the largest percentage of the entire respondent sample. This was the only one of two target hardening measures that both the art vandalism and art theft samples were compared in which a larger percentage of the non-victimized sample of both forms of art crime utilized door alarms and individual object alarms compared to the victimized samples of the two types of crimes. In short, the analysis of the samples of victimized and non-victimized respondents within each of the two crime typologies revealed that within the forced answer choices (excluding the measures “other type of security systems” and “other type of physical barriers”) there was a blatant disparity between the victimized and non-victimized samples of the art vandalism and art theft groups’ usage of the remaining ten forms of target hardening. Specifically, within the art vandalism victimization group of respondents, only three of the twelve measures (door alarms, glazing on all pictures, and individual object alarms) were utilized by a larger percentage of the non-victimized sample compared to the victimized sample and within the art theft group of respondents eight of the twelve measures (door alarms, window alarms, motion detectors, CCTV, individual object alarms, vitrines, low lying barriers in front of artworks, and ropes and stanchions) were utilized by a larger percentage of non-victimized sample compared to the victimized sample.

Possible explanations for these results may be first that the vandalism results represent placement of the remaining seven measures in reaction to an incidence of vandalism rather than utilization of the devices and mechanisms as preventative measures. Within the demographic subgroup comparisons, it was found that the non-victimized theft sample had a larger budget and square footage than the victimized sample. These two factors may account for the non-victimized respondents spending more money on “hardening” their targets as preventative measures or possibly the theft sample in general was not as transparent in reporting their physical guardianship measures’ effectiveness as the vandalism group.

An additional possibility is that the non-victimized sample have an insurance policy which requires policy holder to utilize specific electronic devices and physical barriers. Lastly, it may be as simple as concluding that target hardening measures are a more effective method of preventing and/or reducing theft victimization than vandalism victimization given that these two crimes are conceptually different. In sum, the results of the target hardening bivariate statistical analysis mimic the mixed prior research findings related to target hardening utilized as a proxy measure of this theoretical construct. For example, in a robust number of studies, target hardening measures were not determined to be significant (Burrow & Apel, 2008; Hope, 2009; Schreck, Miller, & Gibson, 2003; Mustaine & Tewksbury, 2002; Tewksbury & Mustaine, 2001; Tewksbury & Mustaine, 2000; Zhang, Messner, & Liu, 2007). Furthermore, some scholars reported that measures of physical guardianship increase victimization, such as living in a gated community (Breetzke. & Cohn, 2013). Conversely, a portion of the research conducted on college

campuses and residential burglary has shown that target hardening (Meithe & Meier, 1990; Miethe & McDowall, 1993; Mustaine & Tewksbury, 1998a) reduces victimization.

Hence, there may or not be some statistical utility of target hardening devices as proxy measures of successful or unsuccessful physical guardianship within the contexts of art vandalism and art theft for future research on a quantitative level.

Preventative Physical Guardianship

The examination of the last category, preventative physical guardianship actions, revealed that the entire respondent sample's overall lack of usage of these measures (evident at the univariate descriptive statistical level of analysis) may have impacted art vandalism victimization to a greater degree than art theft victimization. Specifically, compared to the other two measures within this category, only a higher percentage of the sample that was victimized by art theft conducted bag/package inspections than the non-victimized sample. Furthermore, a higher percentage of the sample that required oversized bag storage and ID badges for staff and volunteers was not victimized by art theft compared to the victimized sample. Conversely, only a higher percentage of the sample that was not victimized by art vandalism required ID badges for staff and volunteers compared to the victimized sample. Furthermore, a higher percentage of the sample that conducted bag/package inspections and required oversized bag storage was victimized by art vandalism compared to the non-victimized sample. In sum, these physical guardianship measures designated in this study overall were not found to be present in higher percentages within the vandalism victimized samples than the art theft victimized sample.

These findings may indicate that either the entire sample was transparent in its disclosure and the results can be interpreted as either physical guardianship measures implemented after vandalism and theft victimization or the respondents utilized the physical guardianship measures prior to victimization and the measures are more appropriate for preventing art theft than art vandalism. Conversely, the results also may indicate that the vandalism sample may have been more transparent in their responses to the questionnaire than the theft sample which could also account for the vivid differences in the percentages between the victimized versus non-victimized institutions within the contexts of art theft and art vandalism. Lastly, according to a respondent in Scott's (2009) study on vandalism, "Lack of resources is irrelevant, if an attacker is determined, greater resources will not prevent them from striking. Hence, it doesn't matter what measures are implemented, victimization will occur regardless.

In conclusion, although, none of these bivariate descriptive statistical results indicate any statistical significance since no quantitative analysis was conducted, these findings are useful in comparing and contrasting the various demographic and theoretical measures within two forms of victimization among the respondent sample. The bivariate binary logistic regression was the next level analysis undertaken and some of the potential relationships found in the bivariate descriptive statistics were determined to be statistically significant within the bivariate binary logistic regression findings.

Bivariate Binary Logistic Regression

Art Vandalism

The discussion of the ten variables that were determined to be significant or moderately significant from the bivariate binary logistic regression of the art vandalism dependent variable will commence with the finding that the number of volunteer hours is marginally significant at the bivariate level of logistic regression analysis. This variable was designated as a demographic/control variable used as a proxy measure of size and as such its marginal significance lends some credence to the notion that larger institutions may increase the odds of vandalism victimization. The finding may also aid in the utility of the results of the bivariate descriptive statistics in which this variable was found in higher averages within the sample of institutions victimized by vandalism.

The majority of the remaining significant variables were measures of social guardianship. The only two place manager measures found to be significant were the number of part-time or full-time roving security guards and the number of full-time and part-time guards employed for at least five years. The finding that each one unit increase in the employment of the number of full-time or part-time roving security guards was associated with an increase in the odds of art vandalism victimization could be attributed to the fact that within the bivariate descriptive statistical analysis, the sample with a larger average amount of square footage and a larger average annual operating budget was victimized by art vandalism compared to the non-victimized sample with a smaller average amount of square footage. While larger institutions may be able to afford more roving security guards, these roving security guards have more space to cover within their

roving circuits and consequently may not be able to notice or prevent an art vandal from perpetrating their crime.

Moreover, art vandalism is an act of criminality which frequently occurs very quickly and requires a security guard or another place manager to be vigilant in their observation of visitors. Conversely, the respondents victimized by vandalism may have hired more roving security guards after an incidence of victimization, which would not indicate that this variable is a measure that increases the odds of vandalism victimization. Rather, this variable is found at institutions after an incidence of art vandalism.

The finding that each one unit increase in the employment of the number of full-time or part-time security guards employed for at least five years was associated with an increase in the odds of art vandalism victimization could be attributed to the fact that, while long term employees may be better guardians due to a knowledge of an institutions' policies, procedures, and collections, they also may become lackadaisical and not be quite as vigilant as an employee who is new. Similarly, Dobovšek, B., Charney & Škrbec (2010) found in their study on museum security guards that, "trends suggest a prevalent passivity" which indicates "ineffectuality on the part of the guards in general" (p. 91).

The scenario in which security guards' roles are most similar to those who work in a museum or gallery is the school resource officer (SRO) programs in K-12 schools nationwide. Previous research shows that the presence of security guards and sworn police officers as SROs either increased victimization within the K-12 school setting (Burrow & Apel, 2008; Na & Gottfredson, 2013; Swartz, Osborne, Dawson-Edwards, & Higgins, 2016; Tillyer, Fisher, & Wilcox, 2011) or were not found to be significant in

either increasing or decreasing victimization (Brown, 2006; Schreck, Miller, & Gibson, 2003). Therefore, security guards may not be the ideal form of place manager to decrease victimization and the results of the analysis of the remaining types of security guards did not yield any significant findings. Consequently, previous scholars' (Felson, 2006; Felson & Clarke, 1998; Felson & Eckert, 2016) contention that police officers and security guards are not a theoretical measure of guardians may in fact be accurate and applicable to the context of art vandalism. Lastly, similar to the analysis of the number of volunteer hours, this finding is consistent with the results of the bivariate descriptive statistics in which this variable was found in higher averages within the sample of institutions victimized by art vandalism.

Within the place manager activities training variables, four of the five measures of security guard training were found to be statistically significant: SS training in intruder detection systems, SS training in safety of artworks, SS training in greeting & visitor reception, and SS training in CCTV management. These measures all were found to increase the odds of vandalism victimization at museums and galleries that offered these forms of training to their security guards compared to those that did not. According to the findings of the descriptive subgroup comparisons, all four variables were found in higher percentages within the sample of institutions victimized by art vandalism.

First, the finding that the variable "SS training in intruder detection systems" increased the odds of art vandalism could be explained simply by the mere reality that larger institutions have more square footage and, despite being trained properly to react to the detections systems, once the detection device went off it was too late to stop the vandalism. Second, the victimized sample may have implemented this training measure

after the occurrence of a vandalism incident. Third, it may be that the training is not administered properly to teach the guards how to effectively deter vandalism victimization. The second significant security guard training variable “SS training in safety of artworks” could be explained in a similar manner as the security guard training in intruder detection systems. The finding that the security guard training in greeting and visitor reception significantly increases victimization could possibly be attributed latent consequences from training security staff to engage more with visitors by moving around and subtly letting patrons know that they are being acknowledged. For example, if a security guard is too busy navigating the gallery space, answering questions, shaking hands, or taking pictures for people, it would be easy for a vandal to make their move while the “guardian” is otherwise occupied. For example, perhaps Venus Over Manhattan Gallery’s Salvador Dali painting would not have been stolen by Phivos Istavrioglou when he slipping the work into his shopping bag if a security guard had not stepped away to take a picture (<http://www.nydailynews.com/new-york/salvador-dali-painting-stolen-east-side-gallery-returned-theif-arraigned-article-1.1268330>, electronically retrieved August 1, 2016). Other explanations may include that security guards are not truly interested in interacting with guests and therefore any training may be ineffective. A third explanation may once again that this measure was implemented after an incident of vandalism victimization.

The findings of the last security guard training variable “SS training in CCTV management” could be explained that the guards may have been trained in CCTV management, but the institution in which they work does not have their guards monitor the CCTV 24 hours a day or the CCTV is not located in ideal locations. Also, CCTV can

be considered a deterrent. However, that is not always the case and may have been a contributing factor to the finding that this measure increased rather than decreased the odds of victimization. Similar to the above explanations, it may be that this measure was employed only after victimization or that the training was subpar.

Surprisingly, the variable “VS training in greeting and visitor reception” was found to significantly reduce the odds of vandalism victimization. This finding was unanticipated because not only was the measure of volunteers not significant, but the measure “number of volunteer hours” was found to increase victimization. However, a possible explanation for the finding that volunteer training in greeting decreases victimization compared to the security guard training in the same category would be that the volunteers are volunteers and therefore more innately likely to assist visitors and therefore the training in this category may have been more effective. Additionally, volunteers perceive themselves as peers of the visitors and vice versa. Thus, they will engage more frequently and with better efficacy with visitors than a security guard may. Lastly, similar to the other measures, this variable may have been implemented after victimization.

The only variable within the Place Manager Activities-Due Diligence category which was found to be significant was inventory of works on view. This variable was found to decrease the odds of vandalism victimization. This finding is also consistent with Steven Keller’s (2011) recommendation to check each item every day at closing to see if something has been damaged. This variable is a categorical variable and with the subgroup comparisons, the frequency of daily inventory of works of art was found in a

much higher percentage of the non-victimized sample compared to the victimized sample.

The only variable within physical guardianship which had any form of significance was “glazing on some pictures” which was found to be marginally significant and to increase the odds of vandalism victimization. Interestingly, one would expect that putting a work behind glass would be a deterrent to a vandal. However, there are several explanations for this paradoxical finding. First, it was mentioned earlier that the larger institutions attract a more diverse audience who are not conversant with museum etiquette and the visitors may feel the need to touch the glass in which a work of art is protected by. Secondly, works that are protected by glass can have more intrinsic and extrinsic value than works that are not protected by glass, and therefore may be more desirable to vandals as a target due to the works’ prominence. Also, the glass may draw a viewer into the work because of the reflection and this may cause a vandalistic response from the viewer. Lastly, some vandals merely want to make a statement but not harm the work such as when Emnuel Leutz’s *1851 Washington Crossing the Delaware* was vandalized in January of 2003. The vandal used Elmer’s glue as his weapon “because it's water-soluble and he didn't want to ruin the painting”

<http://www.nydailynews.com/archives/news/painting-9-11-defacing-article-1.676218>, electronically retrieved December 19, 2018).

Art Theft

With the sample, no art theft variables were found to be statistically significant at this level of analysis. However, one social guardianship variable “other security

improvements” and one physical guardianship variable “low lying barriers” were both found to be marginally significant at a 90% confidence interval rather than statistically significant at a 95% confidence interval. The lack of statistical significance within this form of victimization may be attributed to the small percentage of the sample that was an art theft victim.

Low lying barriers in front of artworks can be any form of object from a low-lying metal wire to a thick, long, black piece of tape alerting visitors not to go past that point. Low lying metal wires attached by two metal stanchions are commonly found in art museums and galleries. Additionally, according to Peter Morrin, former Director of the J.B. Speed Art Museum, motion detectors are commonly used in conjunction with these low-lying barriers to alert staff when a patron has crossed over the barrier (P. Morrin, personal communication, August 15, 2016). Also, many times a gallery or museum will simply use a piece of black tape with the words “do not cross this line” near the tape. These simple additions to the barriers could contribute to the finding that this measure decreased the odds of vandalism. Another explanation is that the barrier was placed after an incident of victimization.

The variable “other security improvements” increased vandalism victimization. This measure was linked to an open-ended response section in which the respondents who answered yes to this question had an opportunity to write out their desired other security improvements. Interestingly, the following responses were given: “better relationship with local and campus police”, “cleaner delineation between museum building and art building”, dedicated, rather than borrowed space”, “facilities improvement: more secure doors and windows, security cameras with patch-through to

police and fire department”, “more staff”, and “support from the university administration for further security measures”. This variable was possibly found to increase victimization because it was a “wishful thinking” variable from a sample which had been victimized by art theft.

In addition to examining the statistically significant and marginally significant variables within the two forms of victimization, the researchers explored any trends within the entire group comparing the signs of the coefficients of the variables within each form of victimization. Beginning with the demographic/control variables, all measures of place managers-non-security, and place managers-security guards, the direction of the signs of the coefficients were, for the most part, diametrically opposed within the vandalism and theft analysis. Specifically, with the exception of the “population of the institution’s city” all the coefficients for the above-mentioned measures within the art vandalism analysis were positive and all coefficients for the above-mentioned measures, with the exception of “number of visitors” within the art theft analysis were negative. Interestingly, in both the art vandalism and art theft analysis, the “number of visitors” had a positive coefficient. Despite the lack of significance of this variable it might indicate that visitors may not be a place manager, but a motivated offender. The paradoxical role of visitors was mentioned above and, given the results within the bivariate logistic regression, the case could be made for including visitors within the motivated component of RAT as opposed to the guardianship component within the art world context. The diametrically opposing signs of each form of victimization may add credence to the claims that vandalism occurs more often in large institutions rather than small institutions (Morrin, 2018; Scott, 2009). Particularly, given

that the bivariate subgroup comparisons revealed that the institutions victimized by vandalism had larger financial resources, more staff, and a greater amount of space than the institutions not victimized by vandalism. Additionally, in the bivariate subgroup comparisons the institutions victimized by theft had fewer of the aforementioned features than the institutions not victimized by art theft.

Within the place manager-training category, the signs of the coefficients are also all positive with the analysis of the security guard measures of art vandalism and all negative for art theft. The signs of the coefficients are mixed for both the art vandalism and art theft training measures of non-security staff and visitors. However, in both analyses, the following measures had the same sign for both forms of victimization. Both non-security staff and visitor training in suspicious objects had coefficients with a positive sign, both non-security staff and visitor training in intruder detection systems had coefficients with a negative sign, and non-security staff training in safety of artwork had a coefficient with a positive sign. These patterns may indicate that either security training was implemented after vandalism victimization or the guards are not being trained as well in vandalism as in theft. There is no clear indication as to whether non-security staff and volunteer training in general has any consistent impact on both forms of victimization.

The place manager due diligence measures had opposite coefficient signs for theft and vandalism for all measures except for ‘inventory works on view’ in which the coefficient was negative for both forms of victimization. Hence, this may indicate that inventorying works on view is a strong measure to incorporate into one’s security practices, which is in accordance with pseudo-regulatory bodies’ suggested practices

such as those of the American Alliance of Museums (AAM) and the International Council of Museums (ICOM). The analysis of the signs of coefficients within the theoretical category of security guard related practices revealed that all the measures for vandalism victimization had coefficients with a positive sign. Additionally, the entire group of measures for theft victimization had coefficients with a negative sign except for the measure, “square footage of roving,” which aligned with the vandalism victimization measure of a positive coefficient sign. This result may indicate that roving guards are not effective in reducing either form of victimization. It may be that guards should stay within a more confined area when on duty in order to keep a closer eye on the activity within a fine art institution.

Within the category of place manager perceived improvements all the measures within the vandalism victimization analysis had coefficients with a negative sign except “other improvements,” and all the measures within the vandalism victimization analysis had coefficients with a positive sign except “would modern security equipment improve level of security”. It may be that the vandalism victims had already implemented the forced answer choices prior to victimization and theft victims had implemented the measures with the positive coefficients after victimization.

In terms of the proxy measures for target hardening measures for both forms of victimization, there are some interesting insights to be garnered from examining the signs of the coefficients. It appears that the measures of security devices such as the various forms of alarms and CCTV might be measures that reduce art theft victimization given that these measures all had coefficients with a negative sign. It was revealed that the physical barrier of any form of glazing had coefficients with a positive sign and the

barriers which are placed in front of art works (low lying barriers and ropes and stanchions) had mixed results. Specifically, low lying barriers had a coefficient with a negative sign and the measure of ropes and stanchions had a coefficient with a positive sign. The results of the art vandalism victimization regarding target hardening measures presented, for the most part, a converse picture. All the security devices, except for door alarms and individual object alarms, had a coefficient with a positive sign. Furthermore, measures of physical barriers all had coefficients with a positive sign except for glazing on all pictures. Intuitively, it would be most difficult to steal a picture encased in glass or plexiglass. However, the fact that variable “glazing on some pictures” had a coefficient with a positive sign and the variable “glazing on all pictures” had a negative sign is puzzling. Perhaps the institutions that protected all their pictures with a glass or plexiglass barrier may have a more valuable collection and thus more sophisticated security systems. However, glazed works usually have more intrinsic and extrinsic value and present a desirable target for a vandal who wishes to make a statement through the destruction of art. An explanation for the overall findings might be explained by a statement made by one of the respondents in Scott’s (2009) vandalism study. The respondent reported that, “intrusive security measures do not necessarily prevent determined attackers and can even encourage ‘casual’ vandals” (p. unknown).

The measures representing preventative physical guardianship actions were surprisingly similar for both forms of victimization. Specifically, the variable “bag/package inspections” had a coefficient with a positive sign for both forms of victimization and the variable “ID badges required for staff and volunteers” had a coefficient with a negative sign. The variable “oversized bag storage” had a coefficient

with a positive sign for vandalism victimization and the opposite for theft victimization. Consequently, it appears that the preventative variables might be measures that are more appropriate for reducing art theft victimization or the sample that had been victimized by art vandalism implemented them post-victimization.

In summary of the social guardianship measures, they were either were not effective in general, the respondents did not honestly report these measures, the social guardianship measures are more effective in reducing theft victimization than vandalism victimization, or the respondents implemented the measures post-victimization. The physical guardianship measures appeared to have a potential to be somewhat effective depending on the measure and the form of victimization. However, given the small sample of victimized institutions and lack of true statistically significant measures, it is unclear exactly which measures might be truly effective. It does appear overall within the bivariate logistic regression analysis that physical guardianship is also more effective in institutions which were victimized by art theft. However, it is unclear as to whether the respondents implemented the measure pre- or post-victimization. Once again, given the small sample of victimized institutions and lack of true statistically significant measures it is unclear which measures might be truly effective.

In conclusion, upon comparison of the significant and marginally significant variables within the contexts of art vandalism and art theft at the bivariate level, only one of the eight significant social guardianship measures decreased the odds of vandalism victimization and only one of the two physical guardianship measures decreased the odds of art theft victimization. Given the less than ideal sample size, the researchers can only utilize these results as an exploratory baseline for future quantitative research. However,

given that each variable was found to be either in a greater or lesser proportion or means within the subgroup comparisons of the sampled institutions might indicated that there is added reliability to the results. However, the question still remains as to whether the measures found to be significant are a result of the respondents preemptively utilizing the security measures or if the findings are a result of the implementation of the measures after an incidence or incidence(s) of victimization.

Multivariate Binary Logistic Regression

Art Vandalism

As mentioned in chapter five, in a parsimonious model that controlled for “number of volunteer hours,” only “training in greeting and visitor reception”, “inventory works on view”, and “glazing on some pictures” were statistically significant predictors of art vandalism. Interestingly, both “glazing on some pictures” and “number of volunteer hours” were only marginally significant within the bivariate analysis. The implications of these findings suggest, once again, that larger institutions are more likely to be victimized by art vandals (given that the control variable is a proxy for size and was statistically significant).

Regarding the two forms of guardianship examined in this study, the two social guardianship measures decreased the odds of vandalism victimization while the only physical guardianship measure increased the odds of vandalism victimization. However, the two hypotheses (H1 & H2) which address social guardianship, physical guardianship and vandalism victimization state that both measures will decrease vandalism and theft victimization and that social guardianship will decrease vandalism victimization at higher

rates than physical guardianship will. Only a portion of each of these hypotheses is supported.

Art Theft

The two variables which yielded any form of significance at the bivariate level of analysis, “low lying barriers in front of artworks” and “other improvements” for improving security remained marginally significant at the multivariate level.

Regarding the two forms of guardianship examined in this study, the physical guardianship measure decreased the odds of theft victimization while the social guardianship measure increased the odds of vandalism victimization. However, the two hypotheses (H1 & H3) which address social guardianship, physical guardianship, and theft victimization state that both measures will decrease vandalism and theft victimization and that social guardianship will decrease theft victimization at higher rates than physical guardianship will. Only a portion of H1 was supported.

Summary Of Quantitative findings

First, contrary to prior scholarly research in which findings were supportive of place management as a crime reducing measure (Clark & Bichler-Robertson ,1998; Eck, 1994; Eck, Clarke & Guerrette , 2007; Mazerolle, Kadleck and Roehl ,1998; Skogan, 1990), place managers were, for the most part, not significant in the current study. In fact, the two significant place manager measures, “non-security employees” and “security staff training in greeting and visitor reception,” both increased vandalism victimization in the binary logistic regression model. Additionally, Scott (2009)’s study revealed that

respondents ranked maintaining staff vigilance (82.3%) and the placement of attendants in each exhibition room (81.5%) as both very effective and effective measures to prevent further victimization. Albeit, as mentioned in chapter three, scholars have posited that security guards and police officers are not guardians or place managers (Felson & Clarke, 1998; Felson & Eckert, 2016). This measurement discrepancy may have diluted the results of this study in terms of categorical significance. No other social guardianship measures were significant at this level of analysis.

As mentioned earlier, research focused on physical guardianship has produced mixed results regarding the efficacy of this theoretical construct. The routine activities theory literature does not overwhelmingly find physical guardianship measures to be significant; especially target hardening measures.

The remaining measures were not significant. Since this study is largely exploratory and the first to quantitatively test any construct of RAT within the context of the art world, it is not inconceivable for the results to deviate from the trends of prior guardianship scholarly work.

The analysis of the theoretical categorical measures yielded non-definitive findings that present paradoxical conclusions. The social guardianship measures (the place manager groupings of non-security, security guards, volunteers, and visitors) were either under-reported or under-represented within the sample of institutions when compared to the findings in prior research on Routine Activities Theory that conclude that place managers are a valid measure in crime reduction (Clarke & Bichler-Robertson, 1998; Eck, 1994; Eck & Wartell, 1998; Felson, 1995; Madensen and Eck, 2008; Mazerolle, Kadleck and Roehl, 1998). This may be attributed to the inconsistent

museum culture in which some persons are allowed to deviate from art institution security policy and protocols. For example according to the *Suggested Practices for Museum Security As Adopted by The Museum, Library, and Cultural Properties council SIS International AND The Museum Association Security Committee of the American Association of Museums (2008)* ,“The Council has identified the tendency of museums to make exceptions to the security rules for trustees, volunteers, VIP's, donors, key staff, board members, members of affiliated groups, and others as a primary reason for the breakdown of security operational procedures and discipline” (http://www.architectssecuritygroup.com/Consulting/WelcomeContractor_files/SuggestedPracticesforMuseumSecurity.pdf, electronically retrieved January 15, 2018).

Additionally, scholarly contributions echoing the tenets of neoliberalism and security governance assert that when society and corporate entities self-police themselves effectively, successful risk management can be achieved (Ericson, Barry, & Doyle, 2000; Johnston & Shearing, 2003; Kerr, 2013). Within art institutions the above-mentioned findings and assertions are especially potent given the multitude of security challenges locations that exhibit art face daily. Place managers are an integral facet of art security because self-policing has evolved to the viewpoint that “security is everybody’s business” (Johnston & Shearing, 2003, p. 16), even for volunteers and visitors who are not permanently ensconced as an institution’s shareholder. Case in point: two of Kerr’s (2013) respondents, the Head of Security #3 and Gallery Employee #5, reported that volunteers act “as both a layer of security and a guide to enhance the visitor experience” (p. 107). Also, Head of Security #2, stated, “the risk of theft is lessened by the huge number of visitors who help the location self-police (p. 107)”.

However, in the course of Kerr's investigation Head of Security #3 also noted that "at his mid-sized, independent museum, they do not employ full-time room stewards because of the expense. Instead, there are 140 volunteers, and this can make it a struggle to convey security messages to them" (p. 107). Head of Security #3's two paradoxical statements could explain both the lack of statistical significance for volunteers within the place manager category, as well as the finding statistical significance of the volunteer training in visitor reception and greeting, which reduced the odds of vandalism victimization in both the bivariate and multi-variate analysis. Approximately seventy-five percent of the respondent sample only had a total of 60 volunteers; with a mean number of volunteers of 58.97. These numbers indicate a moderate amount of volunteers given that the average number of volunteers of the sample population is 48.51. Consequently, volunteers could either be of assistance or no assistance to impact of guardianship of an institution. However, if enough institutions within the respondent sample trained their small volunteer staff competently, that might account for the statistical significance of that measure.

Additionally, similar to volunteers, visitors can be a hinderance rather than a help to an institution's guardianship capabilities. According to Jackson (2016b), "the more visitors in a building, the higher the chance of criminal behavior occurring" (p. 99). Consequently, art gallery and museum guests may not necessarily be a place manager within Cohen and Felson's (1979) guardianship component of their routine activities theory, but rather a motivated offender. As stated in chapter two, Conklin (1994) asserts that, "art and antiquities theft results from the convergence of three factors: artworks that are suitable for stealing, the absence of effective security measures to protect those

works, and the presence of people who are motivated to steal” (p. 119). Accordingly, visitors, who generally compose the largest category of persons with access to artwork, could be present at art institutions with more nefarious reasons than merely engaging with art in a prosocial manner.

Furthermore, Clarke and Szydlo (2017) note that notorious art thief Stephane Breiweiser’s modus operandi was for his girlfriend to distract a visitor and/or a security guard while Breiweiser stole a work of art that was unattended (p. 94). Within the sample population there were approximately 20,000 more annual visitors compared to the respondent population, which might add to the disparity of previous reported statements regarding the efficacy of visitors as effective place managers. Hence, the finding that visitors were not significant at either level of analysis is not surprising given that this form of place manager can either prevent or inadvertently facilitate art theft or vandalism victimization.

Limitations of The Study

While this dissertation demonstrates innovative scholarly efforts as the first exploration of art theft, art vandalism and museum security (guardianship) in American art museums and art galleries, many limitations prevail. This section presents these limitations and discusses how these limitations can be addressed in future research.

First and foremost is the meager number of respondents. Hagan (2006) reports that for mail-in surveys nonresponse is a common issue and that a 20% response rate is “fortunate” for a “one-time-only survey” distributed without sponsorship (p. 162).

Additionally, Friedrichs (2007) notes that a profound challenge associated with

conducting research utilizing corporate entities as respondents is acquiring access and gaining the trust of the institution in order to garner information. Consequently, low response rates are normative for research associated with white collar perpetration or victimization. A solution to the small sample size is to approach ICOM and/or the AAM for funding and a letter of sponsorship for the study and use their members as the survey sample. This would ensure a larger original sample and the financial support and sponsorship would aid in adding trust and credibility to the research. Another option would have been to utilize the original sample population after the OMD database had been narrowed down by the categorical descriptors rather than resample from this first group of institutions.

The issue of non-disclosure appears to be an added barrier when delving into research surrounding security practices. For example, a Director of Security from a prominent American Museum respectfully informed the researchers that it was not their policy to answer surveys or any questions regarding their security practices. Other scholars have had similar reasoning presented to them by potential respondents. Scott (2009) was informed by some of her sample that it inappropriate to participate in her study “for reasons of security and confidentiality” (p. 230). Cordess and Turcan’s (1993) request to participate in their survey was rejected by five respondents due to institutional policies prohibiting the disclosure of information, a fear of negative publicity, or the fear that publicity would inspire copycat acts of vandalism. Also, due to these crimes being ones that involve works held in the public trust, disclosing victimization is an especially sensitive topic. Scott (2009) was told by one respondent that “it was institutional policy to not allow information on criminal damage into the public domain” (p. 230).

Additionally, during an interview with an anonymous representative of a large fine art insurance company, it was gently commented that it was unexpected that any art institution responded to the survey instrument (personal communication, November 15, 2017). Lastly and interestingly, the International Committee of Museums (ICOM) holds in their 2004 Code of Ethics for Museums, that “Information about the security of the museum or of private collections and locations visited during official duties must be held in strict confidence by museum personnel” (http://icom.museum/fileadmin/user_upload/pdf/Codes/ICOM-code-En-web.pdf, electronically retrieved January 14, 2018). This international directed standard of practice offers insights into the industry wide issue of opaqueness with regard to security measures implemented within art institutions.

Another issue associated with research relying on both survey instruments and white-collar respondents “is obtaining a sample that is representative of the population about which you want to generalize” (Friederichs, 20007, p. 37). Accordingly, not only is the current study’s sample size substandard, but after analyzing seven variables it was determined that the respondent sample is not representative of the larger sample pool from the Official Museum Directory (OMD). Several variables were compared between the two samples to substantiate this finding. It should be noted that not all variables were identified by the listings of institutions within the OMD sample. To ascertain whether or not the respondent sample was representative of the population sample, the zip codes from the OMD population were first transformed into population counts that were documented on the U.S. Census Bureau’s website Excel spreadsheet from 2013. The respondent sample had an average of 311,588.28 more residents than the OMD sample. A

possible reason for this discrepancy is that the respondents made an educated guess as to their respective city's population compared to the U.S. Census Bureau's actual population counts.

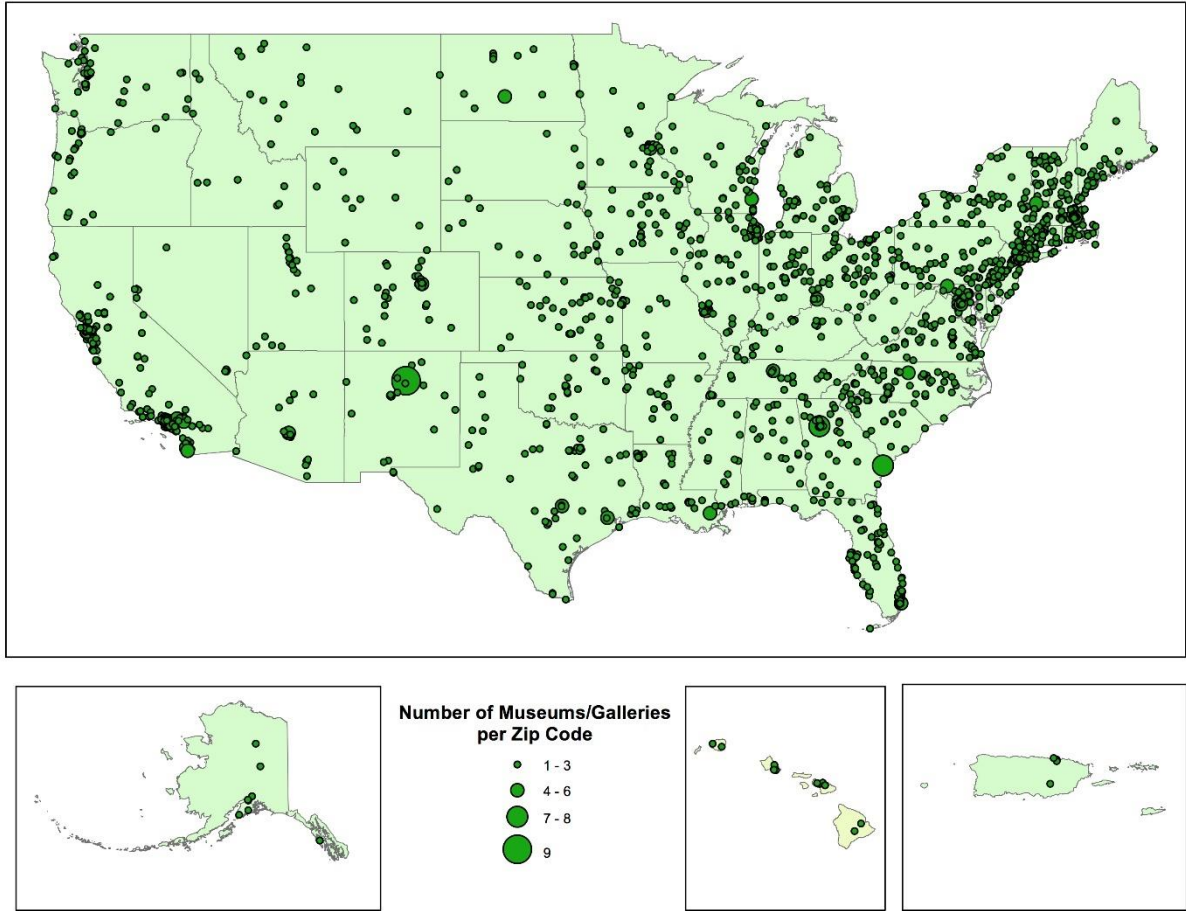


Figure 8.1 OMD sample population (cartography by Yi Ling Chan, 2017).

The variable that was most similar in average number between the two samples was the number of employees. The respondent sample had an average of 1.35 more employees than the OMD sample. The variable that was somewhat close in average

number between the two samples was the number of volunteers. The OMD sample had an average of 48.51 more volunteers than the respondent sample and the OMD sample had an average of 4,162.97 more annual donated volunteer hours than the respondent sample. The OMD sample had an average of 18,061.52 more annual visitors than the respondent sample. The average size of the respondent's museums/galleries were an average of 61,972.72 square feet larger than the OMD's sample's size. This discrepancy may be due to the fact that the OMD sample labeled their institutional size in terms of exhibition space and the survey form which was sent to the respondent sample did not limit the requested size of museum/gallery space in terms of exhibition space. Lastly, the OMD sample's average annual operating budget was \$1,237,181.32 larger than the respondent sample's average operating budget.

An additional limitation is that not all of the 111 respondents answered all of the questions. This is partially due to the fact that not all of the questions pertained to each respondent, such as the presence of security guards. However, throughout the survey instrument there were small typographical errors that could have affected the interpretation of the survey questions and/or led a respondent to believe that the survey instrument was not worth answering due to a perceived lack of questionnaire professionalism. In addition to the above mentioned typographical errors, the ordinal variables were not evenly spaced, and this created issues at the multivariate analysis level. A simple solution is to create answer choices which contain evenly spaced answer choices for ordinal level measures.

A prevailing concern was the overwhelming length of the questionnaire by outside readers and the number of questions may have discouraged some of the sample

from participating in this study. The researchers chose to maintain the length given the difficulty of obtaining any information from art institutions and the decision was made to take this rare opportunity to garner as much information as possible. If this study were to be replicated, a shorter survey would be considered, and additional proofers should be utilized.

A further limitation is that the survey instrument was perceived by some respondents as more appropriate for an art museum audience rather than for respondents from a commercial or non-profit art gallery. According to respondent #41, “This questionnaire is really designed for museums that are self-contained, physically and financially. University art galleries and museums are tied up carefully with academic bureaucracy and enmeshed with university safety and environmental systems and financial security.” Respondent #51 concurred by stating, “These questions do not relate to a privately-owned art gallery-more for large museums”. A solution for future researchers would be to create two separate survey instruments: one designed specifically for museums and another designed for commercial, university, and non-profit galleries. The category of institution was also not captured within this questionnaire even though the sampling was conducted by categorical descriptors (art museums and galleries, arts and crafts museums, china, glass, and silver museums, civic art and cultural centers, decorative arts museums, folk art museums, textile museums, and colleges and university museums) within the OMD’s database. Furthermore, commercial and non-profit art galleries should have been divided since these are two distinct forms of art enterprises.

Similar to the above-mentioned limitation is the language utilized within the survey form. Apparently, not all of the respondents were familiar with the vocabulary

contained within the questionnaire because some of the open-ended answer choices were answered with similar language to the forced answer choices. In addition, some of the words were not interpreted correctly by the respondents. A solution to this issue is to create a glossary of terms to be included at the end of the survey instrument.

Additionally, there was an issue with survey questions that were relegated only to victims of one of the two forms of crimes, which limited the number of respondents available for analysis for those answer choices such as the reporting of crimes. If these questions had been phrased in a hypothetical manner, then a larger number of respondents would have been able to respond to those questions.

Furthermore, the researchers neglected to ask the respondents whether or not they maintained a private collection of artworks and/or regularly held permanent exhibitions or if the respondents exclusively showed traveling exhibitions, rotating exhibits, and/or temporary exhibitions. Respondents #7 reported, “We do not have a permanent collection; rotating exhibits only”, and respondent #28 also does not have a permanent collection. Respondent #29 added, “We are a non-profit gallery and do not have a permanent collection or large inventory. Most of the art on display is not stored in the gallery before or after an exhibition” and respondent #32 is also a “non-profit exhibition gallery”. This respondent similarly notes, “We do not have a permanent collection or storage space to house one” and their “exhibits change monthly featuring local, regional, national artists”. Respondent #106 also has “rotating exhibits only”. Respondent #24 suggested that these researchers include in the survey instrument “How many permanent/temporary/traveling exhibitions do you have annually?” Due to this distinction

not articulated, the question regarding inspecting works in storage had to be eliminated from the analysis due to too many missing cases resulting in the final tally of results.

Despite the problematic length of the survey form, a host of additional survey items that were not included that might have aided in either yielding a viable theoretical model or provided useful information for museologists and gallerists are whether or not CCTV was monitored, and what portion of an institution's budget was relegated to security. First, prior studies find that the use of CCTV appears to demonstrate more effectiveness in reducing crime when it is actively monitored by security personnel or police (Gill & Sprigs, 2005; Welsh & Farrington, 2009b; Winge & Knutsson, 2003). Secondly, even though this questionnaire contained an item regarding the operating budget, it did not inquire as to what portion of the operating budget was delegated to security operations. As mentioned in chapter 4, large museums spend more on security than small museums (Wilemse & Etman, 1995) and according to the *Suggested Practices for Museum Security As Adopted by The Museum, Library, and Cultural Properties council SIS International AND The Museum Association Security Committee of the American Association of Museums (2008)*, small museums are victimized more frequently than large museums (<http://www.aam-us.org/docs/professional-resources/suggested-practices-for-museum-security.pdf>). An investigation of this stated correlation would have been interesting to pursue. Furthermore, similar to limitations mentioned above, two prior art vandalism studies, Cordes and Turcan (1993) and Scott (2009) both examined the type of weapon used in the commission of vandalistic acts. Due to the diversity of motives and forms of intentional destruction of art, it would have

been useful to possess comparative data to the two previous studies to contribute to the sparse body of knowledge on art vandalism.

Further questions should have been included in the survey instrument about art insurance, given that the art insurance industry appears to be one of the primary regulatory bodies which holds owners of art accountable in terms of due diligence measures of inventory checks and audits, acceptable security measures, employment screening, prescribed protocols utilized during the transport of works, transparency within acquisitions and/or sales, and reporting requirements in the event of victimization. A question should have been included as to whether or not the respondent's collection was insured and if so what percentage, as well as the value of an institution's collection and the value of the work that was stolen/vandalized. Kerr (2016) during an interview with a Loss Adjuster in 2009 it was revealed that "objects with a lower value of £10,000 - £50,000 could be most at risk from theft" (p. 336). This researcher was unable to acquire any updated similar data from the insurance industry.

Additionally, there were several questions contained in Benson's (2013) study on art theft in South Africa that should have been included in the current questionnaire, such as: how was the disappearance of the objects discovered (by an employee, by a visitor, by a security guard, when stock taking, etc.), is the provenance/background/authenticity of objects checked before they are purchased/acquired and if so how, what period was the stolen object from, date and time of incident, the number and gender of perpetrator(s) (if known), was the object stolen during visitor hours or after hours, the reasons the art object was stolen (size, recognizable work, etc.), and what factors contributed to the theft (lack/failure of mechanical security, guards overpowered, incompetent guardianship,

etc.). This researcher would also not only add a question asking what contributed to the vandalism of an object. The respondents were also not asked the subject of the work of art, which Scott (2009) included in her vandalism study. Specifically, this measure was coded as: no answer, abstract, figurative subject, landscape, portrait, still life, and other.

Also, a portion of the questionnaire or a separate questionnaire should have been devoted to which measures were implemented after an incidence of vandalism and/or theft. The researchers had no method to compare and ultimately determine whether or not the respondents who disclosed victimization had implemented their security measure pre- or post-victimization. Therefore, no tests that require a control group (such as t-tests) could not be conducted.

Furthermore, the process of the mailing of the survey instrument and supplemental materials did not follow prescribed research methodological guidelines specifically recommended for mail questionnaires. According to Dillman, Smyth, and Christian (2014), a pre-notice of the study should be mailed prior to the questionnaire, alerting potential participants of the study and that a questionnaire is forthcoming. Within a few days to a week after the pre-notice is mailed, the questionnaire should be mailed via first class mail and then a thank you reminder either in the form of a letter or postcard should be mailed to the sample a week after the questionnaire is mailed. Dillman, Smyth, and Christian (2014) also recommend sending a replacement questionnaire two to four weeks after the thank you reminder to the potential study participant. This is suggested in case any of the sample may have lost their questionnaires or if the document is simply forgotten. Last, a final reminder letter should be sent two to four weeks after the replacement questionnaire is mailed.

In addition to the mailing of the survey instrument and the reminder card, the OMD and/or the AAM could have been approached to possibly publish an announcement of this forthcoming study either through their email contacts, internet blogs, Facebook page, or industry print publications to encourage participation and create awareness of this study.

Lastly, due to the small sample, the researchers were unable to create an empirically viable predictive model to test guardianship theory. Any empirically indicative conclusions found by this study can only be interpreted as a possibility that a true test of the guardianship component of RAT could be quantitatively viable if a larger sample were obtained by future researchers.

Despite these limitations and the over-riding conclusion that this work did not fully answer the research questions hypothesized, which is normative with exploratory studies, this dissertation obtained the goal of an exploratory study which according to Babbie (2004) is to “hint at the answers and can suggest which research methods could provide definitive answers” (p. 89). Furthermore, these forms of investigation are “essential whenever a researcher is breaking new ground, and they almost always yield new insights into a topic for research” (Babbie, 2004, p. 89).

Accordingly, this exploration into art theft, art vandalism, and guardianship makes some important contributions to the scholarship of art crime. First, this study is the first attempt to collect data within the United States that has not been previously obtained. In fact, two respondents expressed their appreciation for this study. Respondent #86 wished us good luck and stated that they think “this is well needed”. Respondent #92 shared, “Your survey really made us (a micro-scale venue) think. Good Luck”. Second,

the variety of primary data and descriptive statistical analysis (both univariate and within the subgroup comparisons) can be used by the art world, museology and criminology scholars as a baseline for future research avenues and policy implementation. Third, this research proposes a viable empirical test of Routine Activities Theory; a theory which is frequently associated with art crime but has never been tested.

Overall Conclusions and Next Steps

Overall Conclusions

In summary, the limited number of significant variables at both the bivariate and multivariate levels of analysis can be attributed to several potential factors. First, the lack of overall statistical significance is a symptom of an underpowered study, which is either a testament to the reluctance of the art world to disclose their incidences of victimization given that every week industry-related publications (such as *Hyperallergic*) and non-industry related publications (such as the *New York Times*) regularly report art vandalism and/or art theft perpetration, or evidence that the theoretical measures were added after victimization rather than utilized initially as preventative measures. Secondly, as mentioned in chapter five, Lane, Bromley, Hicks, and Mahoney (2008) argued that RAT is not a suitable theory to explain the transnational nature of the art and antiquities theft market because RAT is primarily a micro-level theory. Furthermore, Burmon's (2017) study of fine art theft in the U.S. yielded findings within her bivariate analysis of guardianship variables that offered "very little conclusive information" (p. 115). Granted this study had a minimal sample size of 114 and a paltry percentage of the sample utilized some of the forms of security measures.

Additionally, as mentioned in chapter five, Hollis et. al (2013) posit that two measures formerly classified within the guardianship construct have been removed. First, these researchers claim that security guards and police officers are not guardians because they are not normally present when a crime occurs and secondly target hardening devices are measures that decrease the target suitability of an object rather than protect it. Lastly, given that art vandalism and art theft are demonstrably different from their standard counterparts it may be further substantiation that these specialized types of perpetration are not well suited for quantitative tests of the guardianship component of routine activities theory despite Balcells' (2016) assertion that "Routine Activities Theory has probably been the most used theoretical framework to devise prevention policies against art theft" (p. 41). In fact, Tewksbury and Mustaine (2000) found in their study on vandalism victimization of college students that guardianship was the only component of RAT which had no impact on victimization.

However, regardless of the numerous plausible reasons for the failure of this study to render any definitive theoretical applicability to the art theft and art vandalism, this work does lay the groundwork for the continuation for more precise and refined quantitative research. Additionally, despite the lack of analytical success, the insights garnered via the univariate and bivariate descriptive (subgroup comparisons) statistical level are useful to policy development and practices to decrease art theft and art vandalism victimization within U.S. art museums and galleries. Lastly, the review of the literature has stimulated several non-traditional approaches to combat victimization within our own visual art communities if the art world and all its players are willing to operate with increased transparency and cohesion. As Colonel Giovannie Pastore of the

Italian Carabinieri strongly vocalized, “I firmly believe that the battle against art crime will be either won or lost together” (Pastore, 2009, p. 120).

Next Steps

In 2013, Felson reaffirmed the utility of his and Cohen’s Routine Activities Theory since its inception in 1979, by asserting that, “the everyday macro-level organization of the community and society lead to micro convergences of conditions more or less favourable to crime” (p. 191). This statement is especially applicable to the art world due to the collective norm by industry members and stakeholders to remain shrouded in secrecy and opaqueness, despite the fact that art crime remains one of the highest grossing international criminal enterprises.

Recommendations for improvements in Art Crime Guardianship

Suggestions for improving the efficacy of guardianship within the art world are presented in several phases. A host of art crime scholars and art world practitioners from several countries have declared that the main barriers to successful engagement in combating art crime fall into several distinct areas. These categories are: the lack of regulation of the art and antiquities industry (Benson, 2013; Bogdanos, 2016; Charney, 2014; Kerr, 2013; Nelson, 2009)), either none or very limited art crime specific statutes with which to prosecute art criminals (Benson, 2013; Conklin 1994; Dobovsek and Slak, 2011; Kerr, 2013; Miller, 2009; Pastore, 2009), unqualified and/or disinterested law enforcement officials who are tasked to investigate art crimes (Benson, 2013; Chappell & Hufnagel, 2014; Clarke & Szydlo, 2017; Conklin, 1994; Dolnick, 2005; Houpt, 2006;

Kerr, 2013; Kleberg, 2009), and a pressing need to educate the general public about art/cultural property and art crime (Clarke & Szydlo, 2017; Gamboni, 2007; Gillespie, 2016; Kerr, 2013; Jackson, 2016a; Scott, 2009). As noted by Oliveri (2014), “the guardianship of cultural property should not be considered the sole responsibility of the cultural institution. It requires both interagency and interdisciplinary support and cooperation (p. 95)”.

Instituting institutional regulation

As mentioned in Chapter 2, it took archeologists’ advocacy, well-publicized scandals, and government-initiated advisory panels composed of government and art world professionals that issued policy recommendations to implement basic regulatory measures, to pressure both the US and the UK to comply with international agreements regarding the acquisitions of looted antiquities (Efrat, 2016). In November of 2017, the US pulled out of the UN, which does not bode well for art crime reduction in one of the largest art markets in the world. Theoretically, the US is longer subject to any international sanctions if they do not comply with any portions of the 1970 UNESCO Conference or the 1995 UNIDROIT Convention regarding illegally acquired art and antiquities acquisitions and sales. This action by the US government could create an increased lack of transparency due to removal of any international modes of accountability. It is recommended that scholars and art world professionals appeal to the US government in a similar manner that forced the US to become a signatory of the 1970 UNESCO Convention.

Today, the art industry is still functioning within its own elusive bubble. Art work continues to be sold with a gentleman's handshake, the ultra-rich and organized criminal enterprises can easily place finances they wish to bury in artwork worth millions, a documented bill of sale is not a necessity, and art dealers and auction houses are under no obligation to disclose their clients (Benson, 2013; Charney, 2014; Chappell & Hufnagel, 2014; Kerr; 2013). Case in point: there is still speculation as to the true identity of the buyer who purchased Leonardo da Vinci's "Salvator Mundi" (circa 1500) for \$450.3 million at Christie's November 15, 2017, Post-war and Contemporary Art sale in New York City, despite valid claims that a Saudi Prince is the proud owner of the most expensive painting ever sold at auction

(https://www.nytimes.com/2017/12/12/opinion/who-bought-that-450-million-leonardo-after-all.html?emc=edit_tnt_20171212&nid=66900047&tnemail0=y, electronically

retrieved December 13, 2017). Additionally, dealers do not require licensure and museums continue to aggressively litigate the return of Nazi looted art and illegally acquired antiquities. The super controllers monitoring the art world's activities must take a more proactive role in holding the dealers, museums, and collectors accountable for their acquisitions, exhibitions, and sales of cultural heritage items. For example, the American Alliance of Museums (AAM) advocates for best practices for its member institutions in several areas of collections stewardship such as proper documentation of works, ethical practices, periodic inventory of works, ensure staff has appropriate education, training, and experience for their positions, be cognizant of where works in the collection and borrowed work came from, and provide physical security for collections in storage, on exhibit, and in transport ([370](http://www.aam-us.org/resources/ethics-standards-</u></p></div><div data-bbox=)

[and-best-practices/collections-stewardship](#), electronically retrieved January 26, 2018). If this organization would hold its members accountable with more rigorous sanctions, compliance to AAM's suggested practices might be observed with more diligence and earnest.

Creating art crime specific statutes

Until laws are devoted specifically to art crime there will continue to be an issue with the ability to obtain accurate statistics on the true extent of art crime. This form of criminalization will continue to be a "dark figure of crime" and the punitive measures that correspond to normal property crime will not increase in severity if new criminal statutes are not created. Additionally, without accurate empirical statistical data, funding for increased resources for the research and prevention of art crime will continue to be difficult to obtain. The first recommended step to overcome this barrier is to appeal to state legislatures to create art crime specific legislation given these two forms of crime are different from their standard counterpart. At the current time, these crimes fall within the state statutes that encompass forms of theft and criminal mischief, where punitive measures can be inconsistent, disproportionate, and confusing. Agreeably, according to Farley (2005), creating a uniform definition of art is probably not in the industry's best interest due to the potential to legislate aesthetic judgement and legally define art. However, Miller (2009) advocates for state statutes specifically for art vandalism and, as mentioned in chapter three, statutes specific to art theft are also needed in order for punitive guidelines to be commensurate with the monetary losses of the destruction and/or theft of unique artifacts of culture. Since, both the theft and destruction of artwork

have the potential to deny the public future engagement with these objects this factor must also be considered when formulating state art crime statutes. Additionally, specifically to vandalism cases, not only is the value of the work a consideration for prosecutorial measures, but the costs associated with repairing the work also must be considered. Miller (2009) also notes that there are instances when an artwork has undergone restoration and the conservationists have not been able to restore the work to its original condition. Consequently, the loss of the market value of the work should be taken into consideration when sentencing art vandals. In sum, by creating specific criminal laws for art vandalism and art theft, the crimes will be clearly defined legally, specific and consistent penalties will exist, and potentially the art vandals and thieves will no longer rely on flimsy prosecutorial methods as a motivating factor for perpetration.

The creation of specific art crime statutes will also require dedicated lobbying efforts from museums, galleries, art educators, law enforcement, artists, art insurers, and collectors. Once these laws have been passed, law enforcement, prosecutors, defense attorneys, and judges will need to be educated as to what these statutes entail. Specialized training surrounding art objects and why these crimes are different from their standard forms of art vandalism and art theft will be the critical link to effective prosecution of these crimes. These legislative and grass roots efforts should in some regard also alter a culture of non-reporting of these crimes to a culture in which the victims will feel more comfortable reporting crimes and museums/galleries will engage in a relationship of mutual respect with our criminal justice system. Additionally, a way to create cohesiveness between the museum/gallery community and the above-mentioned entities is to keep an open line of communication, especially with law enforcement (Scott, 2009).

Scott (2009) also recommends “that police officials may be commissioned as advisors or asked to sit on security panels” (p. 206). Lastly, inviting law enforcement, judges, prosecutors, and other representatives of the criminal justice system to exhibition openings and other art functions is an informal method of exposing these groups to art and create social bonding among these various organizations.

Disinterested Law Enforcement Officials

As mentioned earlier, museums and galleries are hesitant to report crimes due to law enforcement not caring about art crimes. In fact, respondent #10 discloses, “Value of our pieces are \$5 - \$20. The police or insurance company isn’t interested”. A respondent in Scott’s (2009) work on vandalism reported that her institution had CCTV footage of an art vandal but that the perpetrator “was never reprimanded because the police failed to take the episode seriously” (p. 236). This respondent advocated “for a campaign to raise awareness of art vandalism among police forces” (p. 236). If law enforcement as engaged with art vandalism and art theft incidences as they are with these crimes’ standard counterparts, a greater number of victimized museums and galleries might be more willing to report victimization. Several scholars and art industry professionals have advocated for the training of local law enforcement in the dynamics of the art world, the specialized investigative skills required for art crime cases (Benson, 2013; Kerr, 2013; Pastore, 2009), and enlightening these police departments to the fact that many art crime cases are linked to crimes which law enforcement are traditionally more likely to invest more resources into, such as money laundering (Balcells, 2016; Nelson, 2009)), terrorist activity, (Clarke & Szydlo, 2017; De La Torre, 2006; Dobovsek, 2009; Jackson, 2016;

Pastore, 2009; Rutelli, 2016), organized criminal enterprises (Bailey, 1997; Dobovsek, 2009; Jackson, 2016; Kleberg, 2009; McCalister, 2005; Tijhuis, 2009), and drug trafficking (Bailey, 1997; Durney & Proulx, 2011; McCalister, 2005; Nairne, 2011; Tijhuis, 2009). In addition to the above-mentioned solutions, another option is to train one law enforcement detective per local police force in the specialized investigative skills needed for art crime cases in the event that an incident of victimization occurs. Also, since the civilian art beat squad in conjunction with Metropolitan Police has been successful in London, it might be worthwhile to initiate a similar unit as a pilot project in New York or Los Angeles. Museum and gallery personnel might be more comfortable discussing victimization to an industry insider and the civilian art team will possess the necessary contextual knowledge to avoid minimizing the seriousness of these forms of perpetration.

Online databases exist for stolen works of art, but not for the known thieves. Admittedly, the perpetrator is infrequently known unless it is an employee. However, the efficacy of a private registry of art thieves and vandals could be created and tested for use by the art industry to screen for potential predatory visitors to their institutions. Additionally, Burmon (2017) found in her study on characteristics of fine art theft and recovery of stolen artworks in the U.S. that “public awareness of the theft either directly or indirectly led to the return of the art” (p. 3). Therefore, as a public engagement awareness measure and a mechanism to increase transparency, an art theft alert app could be created. The philosophy behind it is analogous to the amber alerts for missing children. Logistically, when an artwork is stolen the app will activate its alert with the information of the object stolen, a picture if available, the time of the theft, the location,

and any information available about the perpetrators. This concept could only work if museums, galleries, and private collectors were willing to report more instances of victimization. Given the immediate popularity of Google's Arts & Cultural app's portrait feature in which a user is able to take a photograph of themselves and the app will look for a portrait matching a person's features in a museum

<https://www.npr.org/sections/thetwo-way/2018/01/15/578151195/google-app-goes-viral-making-an-art-out-of-matching-faces-to-paintings>, electronically retrieved January 15, 2018), it appears that users are engaged in the interactive nature of this app. Therefore, it is plausible that if stolen art became popular there would be more awareness of the missing objects, which in turn might increase recovery rates, as well as engage the general public in the preservation of cultural property. Thus, art institutions might have more confidence in reporting crimes.

Educating the public

Law enforcement agencies are not the only entity in which education surrounding art and art crime is vital to promoting the significance of protecting our cultural heritage. The general public is lacking an appreciation and general knowledge about its cultural property (Bodganos, 2016; Clarke & Szydlo, 2017; Gambino, 2007; Kerr, 2013).

Guardianship studies have found that one of the strongest measures in reducing crime is the public's involvement by creating cohesion within their communities in which neighbors look out for each other's property (Fisher, Sloan, Cullen & Lu, 1998), the existence of Neighborhood Crime Watch organizations (Bennett, Holloway & Farrington, 2006; Tilley & Webb, 1994), and when residents remain more than passive observers but

active guardians (Reynald, 2009, 2010). Edmund Capon, former director of the Art Gallery of New South Wales, echoed a similar sentiment within the art world context by stating “the public’s goodwill is our greatest insurance and it’s one of our greatest assets” The public has a role in safeguarding cultural property, through supporting the cultural institutions in their community (Chapell and Hufnagel 2016, p. 96)”. He further declared, “The public’s ‘goodwill’ is just as vital to life of a cultural institution as a good security system (Chapell and Hufnagel, 2016, p. 97)”. Consequently, engaging both the art and residential communities in the fight against art crime via educational measures is strongly recommended.

If art communities adopted an arts association arts crime watch group, criminal activity, security practices, and unified strategies for crime prevention could be shared within their own community, with local law enforcement, and among the public, incidences of art vandalism and art theft might be reduced. As a result, art criminals would realize that there is a concerted effort to curb victimization and the lackadaisical approach once taken by all art world stakeholders no longer exists. Thus, art criminals may be deterred from perpetration due to a culture of motivation to curb art crime rather than one imbued with apathy.

Several public educational measures have been put forth by both scholars and art world professionals. First, several art crime scholars posit that art institutions do not necessarily need to only house their artwork in structures with the latest high-tech security equipment and an army of guards in order to decrease victimization (Brisman; 2011, Dornberg 1987; Gamboni; 2007, Scott 2009). Museums and galleries have a host of alternative options available to them, beginning with education about art and art crime.

Public Service Announcements (PSAs) regarding art vandalism and art theft is a format in which to educate the public about these crimes and about art in general. Anthony Amore, current Director of Security and Chief Investigator at the Isabella Stewart Gardner Museum, utilized the internet and social media to engage the public's interest in art and art crime by creating a website dedicated to recovering stolen artworks. The website, "Stolen Cavalier," profiles several art thefts for the public to view. For example, one case currently highlighted is the theft of Frans van Mieris' *A Cavalier (Self Portrait)* (17th century) which was stolen from the Art Gallery of New South Wales in Sydney Australia on June 10, 2007. The local authorities gave up searching for the cherished work, but Amore "knows from experience that the only time you should give up the search is when the missing artworks have been found

(<https://stolencavalier.wordpress.com/>, electronically retrieved November 12, 2017)."

Kerr (2013) also suggested a public campaign, "Buyer Beware", which would educate the public about the importance of diligently researching any prospective artworks for sale due to the potential of buying a stolen work and the losses incurred by the buyer.

Art can be perceived as exclusively for the privileged, upper class and thus these crimes do not warrant much sympathy. In fact, according to Clarke and Szydlo (2017), not only does law enforcement view art crime as low on the hierarchy of criminal offenses, so does the public. Specifically, "Generally, people erroneously believe that art crimes and cultural crimes do not actually damage anyone in a direct way (p. 1-2).

However, if the public were to understand a spectrum of visual expressions; a greater respect for the preservation of artworks hopefully would ensue. Art education should begin as soon as possible to incorporate a visual arts appreciation into one's

psyche. In a 1987 interview by John Dornberg, Dario Gamboni held that strengthening security is one way to prevent art vandalism. However, he advocated that a more effective means was to provide “information, education, and enlightenment about art starting in the primary schools” (p. 108). Regretfully, due to proposed cuts to the National Endowment of the Arts and many American school systems suffering budget cuts, the arts programs are the first to be eliminated. If funding could be replaced for art education under the guise of crime prevention, then perhaps our youth would grow up with a visual vocabulary and respect for the visual arts. Additionally, according to Hyperallergic blog on March 28, 2017, “there has recently been a widespread push to make art museums more engaging to adolescents. Several museums have programs with this purpose, such as the Failure Lab at the Museum of Contemporary Art Denver, Open Art Space at the Museum of Modern Art in New York, the Youth Insights program at the Whitney Museum, and the Teen Creative Agency at the Museum of Contemporary Art Chicago. A particularly unique initiative is the Art Detectives program, which is a partnership between the Perez Art Museum Miami, the Miami Dade Police Department, Breakthrough Miami, and Links Inc. Greater Miami Chapter. This program pairs middle school students from underserved communities with police through the engagement of creating art together. The goal of this program is to create a safe space in which the teens from communities in which the police respond frequently to criminal activity and the police officers can interact in a different context. One that “humanizes each group for the other, transforming teens from troublesome bodies into true, curious individuals and the police from threatening and potentially lethal figures to grownups with hearts. Both groups will also learn to think critically about contemporary art”

(https://hyperallergic.com/364819/in-miami-a-museum-attempts-to-bring-teens-and-cops-together-over-art/?utm_medium=email&utm_campaign=In%20Miami%20a%20Museum%20Attempts%20to%20Bring%20Teens%20and%20Cops%20Together%20Over%20Art&utm_content=In%20Miami%20a%20Museum%20Attempts%20to%20Bring%20Teens%20and%20Cops%20Together%20Over%20Art+CID_f1b83c6918777b0155d21524f59c4b28&utm_source=HyperallergicNewsletter&utm_term=Read%20More, electronically retrieved

April 2, 2017). There are additional potential benefits to this program. First, both groups can gain an understanding and respect for the visual arts. Secondly, if any of the teens who participated in the program chose a career in the art industry they will be receptive to working with the local police with regards to reporting incidences of art vandalism and art theft and the police officers will be more sensitive to the destruction or theft of visual art and the art industry in general.

Art education does not have to cease once one ages out of the K-12 or the higher education school system. Community art engagement activities, free art education seminars in art museums and at public education facilities, and seminars with topics on art vandalism and art theft may also enhance the public's positive attitude and knowledge of art. Plus, if these recipients of the above mentioned free activities begin visiting art institutions either for the first time and/or more frequently, then the potential for additional place managers at the quaternary level increases. Furthermore, Clarke and Szydlo (2017) posit that engaged visitors can speak on behalf of the community to their shared public art institutions regarding the need for further protections of the works on display. A multitude of voices from community stakeholders have the ability to advocate

for security policy changes to safeguard their objects of cultural heritage. Thus, people can become a catalyst of change in addition to their role as guardians within the walls of the museums and galleries.

Lastly, other measures to be considered that were not widely proposed by a multitude of scholars and practitioners include re-conceptualizing security measures from the perspective of the art criminals' various motives. As mentioned in chapter one, Scott (2009) appealed to museums and galleries to consider the motive of the perpetrator when designing their security policies and practices. Secondly, a closer examination of the super-controllers and stakeholders that influence guardianship policies and procedures within the art industry may yield insights as to how these entities may be creating not only ineffective place managers, but unobtrusively facilitating an industry in which art theft and art vandalism can flourish despite guardianship measures implemented by art institutions. Pryor (2016) rightfully questions in her book, *Crime and the Art Market*, "Is the market a criminal's playground, open to illicit activity and providing an environment where good and bad apples are one and the same?" (p. 12). Lastly, in accordance with Wyly's (2014) qualitative study on the value of art and art theft, how is the astronomical financial value of art affecting art crime within a quantitative rather than qualitative empirical format?

In Closing

In conclusion, while this study did not produce the hypothesized results, this research did yield insights that could not have been garnered if the exploration of art theft, art vandalism and, guardianship in American art galleries and museums had not

been attempted. Given that this work was primarily exploratory and interdisciplinary in nature, this research should be continued empirically, both with a qualitative and quantitative research design.

Furthermore, Routine Activities Theory may or may not be the appropriate theory to explain art crime quantitatively, however. Few of the measures derived from RAT yielded any significance. However, the fact that both previous RAT quantitative research and art world professionals both conclude that victimization is reduced when entire communities work together lends credence to further testing of RAT within the context of the art world.

In closing, Anthony Amore reminds us, “When a masterpiece goes missing, civilization loses a piece of its connection with the period in which it was created. When we abandon the search for such items, we are making a statement about our attitudes towards such matters — a statement that does not speak well of us as a people”

(<https://stolencavalier.wordpress.com/>, electronically retrieved November 11, 2017).

Hence, regardless of what this research or any future research yields, unless art world members chose to abandon their objection of compliance and cohesion and chose to engage in proactive, transparent measures, the devastating trajectory of art crime (consistently ranked as one of the highest grossing criminal enterprises) will not alter.

REFERENCES

- Aarons, L. (2001). An Exploratory Study of the Illegitimate Art Market in Australia. *Australian and New Zealand Journal of Criminology*, 34, 14-27.
- Adams, L. (1974). *Art Cop Robert Volpe: Art Crime Detective*. New York: Dodd, Mead & Co.
- Adams, L. S. (1993). *Art and Psychoanalysis*. New York: Harper Collins. New York.
- Addington, A.A. (2009). Cops and Cameras: Public School Security as a Policy Response To Columbine. *American Behavioral Scientist*, 52, pp. 1426-1446.
- Agama, S.P. (2016). *The Art of Art Theft Retrieval* (Master's thesis). ProQuest Dissertations. (Reference No. 10096069)
- Agresti, A. & Finlay, B. (2009). *Statistical Methods for the Social Sciences*. Upper Saddle River, New Jersey: Pearson Education Inc.
- Alderman, K. (2014). Art Crime. *The Encyclopedia of Criminology and Criminal Justice*. 1-5.
- Allison, Paul D. (2002). Missing Data. *Sage University Papers Series on Quantitative Applications in the Social Sciences*. Thousand Oaks: Sage.
- American Alliance of Museums (adopted 1991, amended 2000). *Code of Ethics for Museums*. Retrieved June 11, 2015, from <http://www.aamus.org/resources/ethics-standards-and-best-practices/code-of-ethics>.

- Amineddollah, L. (2011). The Getty Museum's Non-Victorious Bid to Keep the 'Victorious Youth' Bronze. *3:1 Art & Cultural Heritage Law Newsletter of the Art & Cultural Heritage Law Committee of the ABA Section of International Law*, 30-32.
- Amineddoleh, L. (2013). The Role of Museums in the Trade of Black Market Cultural Heritage Property. *Art, Antiquity, and Law XVIII*, 227-254.
- Amore, A.M. (2015). *The Art Of The Con; The Most Notorious Fakes, Frauds, And Forgeries In The Art World*. Palgrave MacMillan: New York, NY.
- Augustine, M.C., Wilcox, P., Ousey, G.C., & Clayton, R.R. (2002). Opportunity Theory And Adolescent School-Based Victimization. *Violence and Victims*, 17, 233-253.
- Babbie, E. (2004). *The Practice of Social Research*. Belmont, California: Wadsworth/Thomson.
- Bailey, Martin. (1997). The Art Theft-drug Smuggling Link Exposed. *Trends in Organized Crime* 2, 46-47.
- Balcells, M. (2016). Go research an Art Thief: The Importance of Empirical Research on Art Theft. In A. Thompkins (Ed.), *Art Crime And It's Prevention: A Handbook for Collectors And Art Professionals* (pp. 31-44). London, UK: Lund Humphries.
- Barber, T. & Boldruck, S. (eds.). (2013). *Art Under Attack: Histories Of British Iconoclasm*. London: Tate Publishing.
- Barelli, J.J. (1986). *On Understanding The Business Of Art And Antique Theft: An Exploratory Study* (Doctoral Dissertation). Retrieved from ProQuest. (Order number 8615718).

- Barrett, D. (2000). Fake Art is an Offer You Can't Refuse. *New-York Post*.
September 30, 2000.
- Bazley, T.D. (2010). *Crimes of the Art World*. Santa Barbara: Praeger.
- Benson, B.C. (2013). Addressing Heritage Crime In Gauteng, South Africa: An Integrative Exposition (Doctoral Thesis). Retrieved from
<http://uir.unisa.ac.za/bitstream/handle/10500/13055/Phd%20Benson%20FINAL%20cover%20and%20body%20after%20exam%202013-08-26.pdf;sequence=1>.
- Benny, D.J. (2013). *Cultural Property Security: Protecting Museums, Historic Sites, Archives and Libraries*. Boca Raton: CRC Press.
- Bernick, L.L. (1998). Art and Antiquities Theft. *Transnational Organized Crime*, 4, 91-116.
- Bessette, A. (2016). Vandalism in Art Museums: Case Studies from 1985-2013. *Journal of Art Crime*, 15, 15-21.
- Bichler, G., Bush, S. & Malm, A. (2013). Bad Actors and faulty props: unlocking Legal and illicit art trade. *Global Crime*, 14, 359-385.
- Bogdamos, M. (2016). Thieves of Baghdad: and the Terrorist They Finance. In N. Charney (Ed.) *Art and Crime: Terrorists, Tomb Raiders, Forgers and Thieves* (pp. 118-129). London, UK: Palgrave-Macmillan.
- Boldrick, & Clay, R. (eds.). (2013). *Iconoclasm: Contested Objects, Contested Terms*. Surrey, England: Ashgate Publishing.
- Boldrick, S., Brubaker, L. & Clay, R. (eds.). (2013). *Striking Images, Iconoclasms Past and Present*. Surrey, England: Ashgate Publishing.

- Borroughs, K. (2005). Collection Protection. *Museums Journal*, May, 26-29.
- Boser, U. (2010). This Is No 'Thomas Crown' Affair. *The Wall Street Journal*, May 26, 2010.
- Breetzke, G.D. & Cohn, E.G. (2013). Burglary in Gated Communities: An Empirical Analysis Using Routine Activities Theory. *Journal of Criminal Justice Review*, 23, 56-74.
- Brisman, A. (2011). Vandalizing Meaning, Stealing Memory: Artistic, Cultural, and Theoretical Implications of Crime and Galleries and Museums. *Critical Criminology*, 19, 15-28. doi:10.1007/s10612-010-9104-x
- Brodie, N. & Proulx, B.B. (2013). Museum malpractice as corporate crime? The Case of J. Paul Getty Museum. *Journal of Crime and Justice*, 37, 399-421.
- Bunting, L., Alison, V., & Ritchie Handler, B.L. (2014). Art Galley Archives: Professionalization of a Commercial Sector. *Art Documentation: Journal of the Art Libraries Society of North America*, 33, 81-94.
- Burmon, K.M. (2017). *Patterns Of Fine Art Theft In The United States* (Doctoral dissertation). Retrieved from ProQuest Dissertations. (Reference No. 10616622)
- Burnham, B. (1975). *The Art Crisis: How Art Has Become The Victim Of Thieves, Smugglers-and Respectable Investors*. New York: St. Martin's Press.
- Burnham, B. (1978). *Art Theft: Its Scope, Its Impact, and Its Control*. New York: Publishing Center for Cultural Property.
- Burrow, J.D., Apel, R. (2008). Youth Behavior, School Structure, and Student Risk of Victimization. *Justice Quarterly*, 25, 349-380.

- Burrows, R. (1992). Museum Security: Artful Protection from Down Under. *Security Management*, 36.2, p. 34.
- Caesar, E. (2013, Nov. 17). Too hot to handle. *New York Times Magazine*, 28-33,4. Retrieved from <http://search.proquest.co/docview/1459711324?account=14665>.
- Caesar, E. (2013). What Is the Value of Stolen Art? *The New York Times Magazine*, November 13.,
- Cass, A.I. (2007). Routine Activities and Sexual Assault: An Analysis of Individual And School-Level Factors. *Violence and Victims*, 22, pp. 350-366.
- Champion, D.J. & Hartley, R.D. (201). *Statistics for criminal justice and criminology*. Upper Saddle Ridge, NJ: Prentice Hall.
- Chang, D.N. (2006). Stealing Beauty: Stopping The Madness Of Illicit Art Trafficking. *Houston Journal of International Law*, 28 (3), 829-869.
- Chappell, D. & Hufnagel, S. (Eds.). 2014. *Contemporary Perspectives on the Detection, Investigation, and Prosecution of Art Crime: Australasian, European and North American Perspectives*. London: Ashgate.
- Chappell, D. & Hufnagel, S. (2014). Law Enforcement's Still Evolving Role in Art Crime: Some Introductory Remarks. In D. Chappell & S. Hufnagel (Eds.) *Contemporary Perspectives on the Detection, Investigation and Prosecution of Art Crime* (pp. 1-11). Surrey, UK: Ashgate.
- Charney, N. (2009a). Q&A with Two Innovative Security Directors: Dennis Ahern and Anthony Amore. In N. Charney (Ed.) *Art and Crime: Exploring the Dark Side of the Art World* (pp. 125-136). Santa Barbara, California: Praeger.

- Charney, N. (2009b). Lessons from the History of Art Crime “Ten Cost-Effective Steps to Improve Security at Your Museum”. *Journal of Art Crime*, 2, 59-62.
- Charney, N. (2014). Art Crime in North America. In D. Chappell & S. Hufnagel (Eds.) *Contemporary Perspectives on the Detection, Investigation and Prosecution of Art Crime* (pp. 107-219). Surrey, UK: Ashgate.
- Charney, N. (Ed.). (2009). *Art and Crime: Exploring the Dark Side of the Art World*. Westport: Preager.
- Charney, N., Denton, P., & Kleeberg, J. (2012). Protecting Cultural Heritage from Art Theft: International Challenge, Local Opportunity. *FBI Law Enforcement Bulletin*, 81, 1-8.
- Charney, N. (Ed.). (2016). *Art Crime: Terrorists, Tomb Raiders, Forgers and Thieves*. New York, NY: Palgrave Macmillan.
- Clarke, R.V. (1999). *Hot Products: Understanding, Anticipating and Reducing Demand For Stolen Goods*. (Police Research Series Paper 112). London: Home Office.
- Clarke, R.V. & Bichler-Robertson, G. (1998). Place Managers, slumlords and crime in Low rent apartment buildings. *Security Journal*, 11, pp. 11-19.
- Clarke, C.M. & Szydlo, E.L. (2017). *Stealing History: Art Theft, Looting, and Other Crimes Against Our Cultural Heritage*. Lanham, Maryland: Rowman & Littlefield.
- Cohen, L.E. & Cantor. (1981). Residential Burglary in the United States: Life-Style and Demographic Factors Associated with the Probability of Victimization. *Journal of Research in Crime and Delinquency*, 18, 113-27.

- Cohen, L.E. & Felson, M. (1979). Social Change And Crime Rates: A Routine Activity Approach. *American Sociological Review*, 44, 588-608.
- Cohen, L.E., Kluegel, J.R., & Land, K.C. (1981). Social Inequality and Predatory Victimization: An Explanation and Test of Formal Theory. *American Sociological Review*, 46, 505-524.
- Cohen, S. (1973). Property destruction: motives and meanings. In C. Ward (Ed.) *Vandalism* (pp. 23-53). London, UK: The Architectural Press.
- Conklin, J.E. (1994). *Art Crime*. Westport: Praeger.
- Conley, S.S. (1995). International Art Theft. *13 Wis. Int'l L.J.*, 493.
- Cordess, C., & Turcan, M. (1993). Art Vandalism. *British Journal of Criminology*, 33, 95-102.
- Cornish, D. & Clarke, R.V. (1987). Understanding crime displacement: an application of rational choice theory. *Criminology*, 25, 933-947.
- Cornish, D. & Clarke, R.V. (2003). Opportunities, precipitators and criminal decisions: A reply to Wortley's critique of situational crime prevention. *Crime Prevention Studies*, 16, 41-96.
- Coupe, T. & Blake, L. (2006). Daylight and Darkness Targeting Strategies And The Risk Of Being Seen At Residential Burglaries. *Criminology*, 44, pp. 431-464.
- Crank, J., Koski, C., Johnson, M., Ramirez, E., Sheldon, A., & Peterson, S. (2010). Hot corridors, deterrence, and guardianship: An assessment of the Omaha metro Safety initiative. *Journal of Criminal Justice*, 38, pp. 430-438.
- Crowe, T.D. (2006). *Crime Prevention Through Environmental Design*. Woburn, MA: Butterworth-Heinemann.

- Cullen, F. T. (1999). *Criminological Theory: Past to Present*. Los Angeles: Roxbury.
- Cuno, J. (2004). Introduction. In Cuno, J. (Ed.). *Whose Muse? Art Museums And The Public Trust* (pp. 1-25). Princeton, NJ: Princeton University Press.
- Danzinger, D. (2007). *Behind The Scenes at the Metropolitan Museum of Art*. New York: Penguin Books.
- De La Torre, L. (2006). Terrorists raise cash by selling antiquities. *GSN: Government Security News*, 4,1,10,15.
- Del Piano, A.J. (1993). The Fine Art of Forgery, Theft, and Fraud: Corruption In the world of art and antiquities. *Criminal Justice*, 8, 16-20; 56-57.
- Dietzler, J. (2013). On 'Organized Crime' in the illicit antiquities trade: moving beyond the definitional debate. *Trends in Organized Crime*, DOI 10.1007/s12117-012-9182-0
- Dillman, A.D., Smyth, J.D., and Christian, M.D. (2014). *Internet, Phone, Mail, and Mixed Mode Surveys: The Tailored Design Method*. Hoboken, New Jersey: John Wiley & Sons.
- Dobovsek, B. (2009). Art, Terrorism, and Organized Crime. In N. Charney (Ed.) *Art and Crime: Exploring the Dark Side of the Art World* (pp. 64-71). Santa Barbara, California: Praeger.
- Dobovšek, B., Charney, N., & Škrbec, J. (2010). Art crime security. *Review of International Affairs*, 61, 91-105.

- Dobovšek, B. & Slak, B. (2011). The Significance of Studying and Investigation Art Crime: Old Reasons, New World. *Varstvoslovje [Journal of Criminal Justice and Security]*, 13, 392-405.
- Dobovsek, B., & Slak, B. (2013). Criminal inspectors and art crime investigation in Slovenia. *Journal of Art Crime*, 10, 31-44.
- Dolnick, E. (2005). *The Rescue Artist: A True Story Of Art, Thieves, And The Hunt For A Missing Masterpiece*. New York, New York: Harper-Perennial.
- Dornberg, J. (1987). Art Vandals: Why do they do it? *ARTnews*, 86, 102-109.
- Drent, D. (2009). Security for Temporary Exhibitions: Regular, Customized, or Bespoke. In N. Charney (Ed.) *Art and Crime: Exploring the Dark Side of the Art World* (pp. 143-151). Santa Barbara, California: Praeger.
- Drent, D. (2016). Security for Protection of Art: Strategy, Tactics, Technology, and Making New Paths. In A. Thompkins (Ed.), *Art Crime And It's Prevention: A Handbook for Collectors And Art Professionals* (pp. 110-120). London, UK: Lund Humphries.
- Durney, M. (2010). Art Theft Statistics: Valuable Tools in Need of Reliable Measures. *American Society of International Law Cultural Heritage and Arts Review*, Fall/Winter, 13-16.
- Durney, M. (2011). How an Art Theft's Publicity Can Impact the Stolen Object's Recovery Rate. *Journal of Contemporary Criminal Justice*, 27, 438-448.
- Durney, M. (2013). Reevaluating Art Crime's Famous Figures. *International Journal of Cultural Property*, 20, 221-232.

- Durney, M. & Proulx, B. (2011). Art Crime: A Brief Introduction. *Crime, Law, and Social Change*, 56, 115-132.
- Durney, M., & Proulx, B. (2011) Art Crime: A Brief Introduction. *Crime, Law and Social Change*. 56:2, 115-132.
- Eck, J.E. (1994). *Drug Markets and Drug Places: A Case-Control Study of the Spatial Structure of Illicit Drug Dealing*. (Doctoral Dissertation). Retrieved from Proquest Dissertation. (Order No. 9514517).
- Eck, J.E. (1995). A general model of the geography of illicit retail marketplaces. In J.E. Eck & D. Weisburd (Eds.). *Crime and Place* (pp.67-93). Monsey, NY: Criminal Justice Press.
- Eck, J.E. and Wartell, J. (1998). Improving the management of rental properties with drug problems: A randomized experiment. *Crime Prevention Studies*, 9, 161-185.
- Eck, J.E. & Guerette, R.T. (2012). Place-Based Crime Prevention: Theory, Evidence, And Policy. In B.C. Welsh & D.P. Farrington (Eds.), *The Oxford Handbook of Crime Prevention* (pp. 356-383). New York, NY: Oxford University Press.
- Efrat, A. (2016). Getting Governments to Cooperate against Looting: Insights from the American and British Experience. In N. Charney (Ed.), *Art and Crime: Terrorists, Tomb Raiders, Forgers and Thieves* (pp. 337-358). London, UK: Palgrave-Macmillan.
- Enders, Craig. (2010). *Applied Missing Data Analysis*. Guilford Press: New York. Horton, N.J.
- Falkenstein, M. (2005). The Training of the Guards. *ArtNews*, May, 134-137.

- Felson, M. (1986). *Linking Criminal Choices, Routine Activities, Informal Control, and Rational choice perspectives on offending* (pp. 119-128). New York: Springer-Verlag.
- Felson, M. (1995). Those Who Discourage Crime. In J.E. Eck & D. Weisburd (Eds.). *Crime and Place* (pp.67-93). Monsey, NY: Criminal Justice Press.
- Felson, M. (2006). *Crime and Nature*. London, UK: Sage Publications.
- Felson, M. (2013). The routine activity approach as a general crime theory. In E. McLaughlin & J. Muncie (Eds.) *Criminological Perspectives: Essential Readings, 3rd Edition* (pp. 188-194). London, UK: Sage.
- Felson, M. & Clarke, R. (1998). Opportunity Make the Thief: Practical theory for crime prevention (Police Research Series Paper 98). Retrieved from Home Office Policing and Reducing Crime Unit Queen Anne's Gate London <http://webarchive.nationalarchives.gov.uk/20110218135832/rds.homeoffice.gov.uk/rds/prgpdfs/fprs98.pdf>.
- Felson, M. & Cohen, L.E. (1980). Human Ecology and Crime: A Routine Activity Approach. *Human Ecology*, 8, 389-406.
- Felson, M., & Cohen, L.E. (1980). Social Change and Crime Rate Trends: A Routine Activity Approach. *Human Ecology and Crime*, 8(4), 588-608.
- Felson, M. & Eckert, M. (2016). *Crime and Everyday Life*. London, UK: Sage Publications.
- Fennelly, L. J. (1983). *Museum, Archive, and Library Security*. Boston, MA: Butterworths.

- Fidler, S. (2003, May 24). A black art: how the trade in stolen artifacts aids money laundering, organized crime, and terrorism. *Financial Times*, p.11.
- Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics, Fourth Edition*. Thousand Oaks, CA: Sage Publications Ltd.
- Fine, G., & Shatin, D. (1985): Crimes Against Art: Social Meanings and Symbolic Attacks. *Empirical Studies of the Arts*, 3, 135-152.
- Finkelhor & Asdigian. (1996). Risk Factors for Youth Victimization: Beyond Lifestyle/Routine Activities Theory Approach. *Violence and Victims*, 11, 3-19.
- Fisher, B.S. Cullen, F.T. & Turner, M.G. (2002). Being Pursued: Stalking Victimization In A National Study Of College Women. *Criminology and Public Policy*, 1, pp. 257-308.
- Fisher, B.S., Daigle, LE. & Cullen, F.T. (2009). What Distinguishes Single from Recurrent Sexual Victims? The Role of Lifestyle-Routine Activities and First-Incident Characteristics. *Justice Quarterly*, 27, pp. 102-129.
- Fisher, B.S., Sloan, J.J., Cullen, F.T., Lu, C. (1998). Crime In The Ivory Tower: The Level And Sources Of Student Victimization. *Criminology*, 36, 710. pp.671-710.
- Fisher, B.S. & Wilkes, R.P. (2003). A Tale of Two Ivory Towers: A Comparative Analysis of Victimization Rates and Risks between University Students in the United States and England. *British Journal of Criminology*, 43, pp.526-545.
- Fisher, B.W. & Tanner-Smith, E.E. (2015). Examining School Security Measures as Moderators of the Association Between Homophobic Victimization and

School Avoidance. *Journal of School Violence*, 00, pp.1-24.

- Flynn. (2016). The Art World: Compliant Victim? In A. Thompkins (Ed.), *Art Crime and Its Prevention: A Handbook for Collectors And Art Professionals* (pp. 19-30). London, UK: Lund Humphries.
- Freedberg, D. (1986). *Iconoclasts and Their Motives*. Maarsen, The Netherlands: Gary Schwartz.
- Freedberg, D. (1989). *The Power of Images: Studies in the History and Theory of Response*. Chicago: The University of Chicago Press.
- Friedrichs, D.O. (2007). *Trusted Criminals: White Collar Crime In Contemporary Society*. Belmont, CA: Thompson Wadsworth.
- Fuller, P. (1987). The Psychology of the Ripper. *New Society*, 81, 14-15.
- Gamboni, D. (2007). *The Destruction of Art: Iconoclasm and Vandalism Since the French Revolution*. London: Reaktion.
- Garofalo, J. & Clark, D. (1992). Guardianship and Residential Burglary. *Justice Quarterly*, 4, 443-463.
- Gerlis, M., & Pes, J. (2013, November 27). Recovery rate for stolen art as low as 1.5%. *The Art Newspaper*. Electronically retrieved February 7, 2018 from <http://www.theartnewspaper.com/articles/Recovery-rate-for-stolen-art-as-low-as-31145>
- Gill, M., Spriggs, A. (2005). *Assessing the Impact of CCTV*. Home Office Research Study, No. 292. London, UK: Home Office.

- Gillespie, A. (2016). Intentional Destruction Of Cultural Property. In A. Thompkins (Ed.), *Art Crime And It's Prevention: A Handbook for Collectors And Art Professionals* (pp. 191-206). London, UK: Lund Humphries.
- Grove, L. & Thomas, S. (2014). *Heritage Crime: Progress, Prospects, and Prevention*. New York, NY: Palgrave Macmillan.
- Gorvy, B. (1993). Massacre of the Innocents. *The Antique Collector*, 64, pp. 60-63.
- Hagan, F.E. (2006). *Research Methods In Criminal Justice And Criminology*. Boston, MA: Pearson Education Inc.
- Harnischfeger, U. & Kulish, N. (2008, February 12). At Zurich Museum, a Theft of 4 Masterworks. *The New York Times*. Retrieved from <https://www.nytimes.com>.
- Held, J. (1963). Alteration and Mutilation of Works of Art. *South Atlantic Quarterly*, 62, 1-28.
- Hill, C. (2003). Crime Watch. *Museums Journal*, August, pp.16-17.
- Ho, T. (1992). *Art theft in New York City: An Exploratory study in crime-specificity* (Doctoral Dissertation). Retrieved from ProQuest. (Order number 9227550).
- Hollington, K. (2014, July 22). After Drugs and Guns, Art Theft Is the Biggest Criminal Enterprise in the World. Retrieved June 11, 2015, from <http://www.newsweek.com/2014/07/18/after-drugs-and-guns-art-theft-biggest-criminal-enterprise-world-260386.html>.
- Hollis-Peel, M.E. & Welsh (2014). What makes a guardian capable? A test of Guardianship in action. *Security Journal*, 27, pp. 320-337.

- Holt, T.J. & Bossler, A.M. (2008). Examining the Applicability of Lifestyle-Routine Activities Theory for Cybercrime Victimization. *Deviant Behavior*, 30, pp. 1-25.
- Hope, A. (2009). CCTV, school surveillance and social control. *British Educational Research Journal*, 35, pp. 891-907.
- Houpt, S. (2006). *Museum of the Missing: A History Of Art Theft*. New York, NY: Sterling Publishing Co., Inc.
- Hoving, T. (1997). *False Impressions: The Hunt for Big-Time Art Fakes*. New York, NY: Touchstone.
- Hurley, D.C. (2002). *Closed Circuit Television: The Cincinnati Experience* (Doctoral Dissertation). University of Cincinnati, Cincinnati, OH.
- Introduction to SAS. UCLA: Statistical Consulting Group. From <http://www.ats.ucla.edu/stat/sas/notes2/> (accessed April 2, 2016).
- Johnson, I.M. (1999). School Violence: The Effectiveness of a School Resource Officer Program in A Southern City. *Journal of Criminal Justice*, 27, pp. 173-192.
- Keck et al. (1966). *A Primer on Museum Security*. Cooperstown: New York State Historical Association.
- Keller, S. (2011, May). *Threats Museums Face*. Paper presented at the Annual meeting of the American Association of Museums, Houston, Texas.
- Kennedy, Randy. "His Heart Is in the Art of Sleuthing." *The New York Times* 6 June 2010. Electronically retrieved February 15, 2018 from <http://www.nytimes.com/2010/06/07/arts/design/07wittman.html?pagewanted=all>
- Kerr, J. (2013). *The Securitization and Policing of Art Theft in London*. (Unpublished Doctoral Thesis). City University London, London, England.

- Kerr, J. (2015). *The Securitization and Policing of Art Theft; The Case of London*.
Burlington, VT: Ashgate Publishing.
- Kerr, J. (2016). The art of risk management: the crucial role of the global art insurance industry in enabling risk and security. *Journal of Risk Research*, 19, 331-346.
- Kila, J.D. & Balcells. (Ed.). (2015). *Cultural Property Crime: An Overview and Analysis of Contemporary Perspectives and Trends*. Leiden, The Netherlands: Koninklijke Brill NV.
- Kleberg, J. (2009). Unexpected and Accessible: Threats to University Collections.
In N. Charney (Ed.) *Art and Crime: Exploring the Dark Side of the Art World* (pp. 164-171). Santa Barbara, California: Praeger.
- Kleinman, K. (2007). Much Ado About Nothing: A Comparison Of Missing Data Methods and Software to Fit Incomplete Data Regression Models. *The American Statistician*, 61, pp. 79-90.
- Koldrud, K. & Prusac, M. (Eds.). 2014. *Iconoclasm From Antiquity to Modernity*. Surrey, England: Ashgate Publishing.
- LaGrange, T.C. (1994). Routine Activities And Vandalism (Masters Thesis). Retrieved from Proquest Direct. (Accession No. none).
- Lane, D.C., Bromley, D.G., Hicks, R.D., & Mahoney, J.S. (2008). Time Crime: The The Transnational Organization of Art and Antiquities Theft. *Journal of Contemporary Criminal Justice*, 24, pp. 243-262.

- Larvis, J. L. (2009). *A Perfect Pothunting Day: An Examination of Vandalism to the Cultural Resources of Canyon de Chelly National Monument, its Motivations, and Potential Solutions* (Master's Thesis). Retrieved from ProQuest Direct. Order No. 059019146)
- Lasley, J.R. (1989). Drinking Routines/Lifestyles And Predatory Victimization: A Casual Analysis. *Justice Quarterly*, 6, pp. 529-542.
- Lawton, B.A., Taylor, R.B., & Luongo, A.J. (2005). Police Officers on drug corners in Philadelphia, drug crime, and violent crime: Intended, diffusion, and displacement impacts. *Justice Quarterly*, 22, 427-451.
- Layne, S.P. (2009). Exercises in Futility: The Pursuit of Protecting Art. In N. Charney (Ed.) *Art and Crime: Exploring the Dark Side of the Art World* (pp. 137-142). Santa Barbara, California: Praeger.
- Lillios, K.T. (2013). Disciplining Bodies, Disciplining Objects: Mauseum Guards and The Museu Etmologico Portugues (1893-1929). *Museum Anthropology*, 36, 51-65.
- Liston, D. (Ed.). (1993). *Museum Security and Protection: A handbook for cultural heritage institutions. ICOM and the International Committee on Museum Security*. London: Routledge.
- Longmore-Etheridge, A. (2012). Museum Quality Protection. *Security Management*, October, 58-64.
- Lyall, S. (2000, February 3). Art World Nightmare: Made-to-Order Theft; Stolen Works Like Oxford's Cezanne Can Vanish for Decades. *The New York Times*. Retrieved from <https://www.nytimes.com>.

- Mackenzie, S. (2005). Criminal and Victim Profiles in Art Theft: Motive, Opportunity and Repeat Victimization. *Art Antiquity and Law*, 10, 353-370.
- MacNamara, A.M. (2013). *The Effects of Vandalism on the Value of Artworks in Public Collections*. (Masters Thesis). Retrieved from ProQuest. (accession number 1554321).
- Madensen, T.D. and Eck, J.E. (2008). Violence In Bars: Exploring The Impact of Place Manager Decision-Making. *Crime Prevention and Community Safety*, 10, pp.111-125.
- Madero-Hernandez, A. & Fisher, B.S. (2013). Routine Activity Theory. In Cullen, FT. & Wilcox P. (Eds.), *Oxford Handbook Of Criminological Theory* (pp. 513-534). Oxford, UK: Oxford University Press.
- Marcum, C.D., Higgins, G.E., & Ricketts. (2010). Potential Factors of Online Victimization of Youth: An Examination of Adolescent Online Behaviors Utilizing Routine Activity Theory. *Deviant Behavior*, 31, 381-410.
- Marinelli & Hasler. (2016). What Is Due Dilligence? Making the Case for a More Responsible Market. In N. Charney (Ed.) *Art and Crime: Terrorists, Tomb Raiders, Forgers and Thieves* (pp. 316-319). London, UK: Palgrave-Macmillan.
- Mason, D.L. (1979). *The Fine Art Of Art Security: Protecting Public And Private Collections Against Theft, Fire, And Vandalism*. New York: Van Nostrand Reinhold Company.

- Mazerolle, L.G., Kadleck, C., & Roehl. (1998). Controlling Drug and Disorder Problems: The Role of Place Managers. *Criminology*, 36, 271-404.
- McCalister, A. (2005). Organized Crime And The Theft Of Iraqi Antiquities. *Trends in Organized Crime*, 9 (1), 24-37.
- McClanan, A., & Johnson, J. (Eds.). (2005). *Negating the Image: Case Studies in Iconoclasm*. Surrey, England: Ashgate Publishing.
- McClellan, A. (2008). *The Art Museum From Boullée To Bilbao*. Berkley, CA: University of California Press.
- Meier, R.F. & Miethe. (1993). Understanding Theories of Criminal Victimization. In M. Tonrey (Ed.), *Crime and Justice: A Review Of Research* (pp. 459-499). Chicago, IL: University of Chicago Press.
- Menard, S. (2002). *Applied logistic regression analysis*. Thousand Oaks, CA: Sage Publications.
- Merritt, E. (2008). *National Standards & Best Practices for U.S. Museums*. Washington, DC: American Alliance of Museums.
- Miethe, T.D., Stafford, M.C. & Long, S.J. (1987). Social Differentiation in Criminal Victimization: A Test of Routine Activities/Lifestyle Theories. *American Sociological Review*, 52, 184-194.
- Miethe, T.D., Stafford, M.C. & Sloane, D. (1990). Lifestyle Changes and Risks of Criminal Victimization. *Journal of Quantitative Criminology*, 6, pp. 357-376.
- Miethe, T.D. & Meier, R.F. (1990). Opportunity, Choice, and Criminal Victimization: A Test of a Theoretical Model. *Journal of Research In Crime And Delinquency*, 27, pp. 243-266.

- Miethe, T.D. Hughes, M. & McDowall, D. (1991). Social Change and Crime Rates: An Evaluation of Alternative Theoretical Approaches. *Social Forces*, 70, 165-185.
- Miethe, T.D. & McDowall, D. (1993). Contextual Effects in Models of Criminal Victimization. *Social Forces*, 71, 741-759.
- Milmo, C. (2009). Stealing Beauty - The Curator Who Took Priceless Piece After Priceless Piece. *The Independent*, September 9, 2009. Retrieved from <http://www.independent.co.uk/news/uk/this-britain/stealing-beauty--the-curator-who-took-priceless-piece-after-priceless-piece-1222860.html?printService=print>.
- Moriarty, L.J. & Williams, J.E. (1996). Examining the Relationship Between Routine Activities Theory and Social Disorganization: An Analysis of Property Crime Victimization. *American Journal of Criminal Justice*, 21, pp. 43-59.
- Müller, C. & Boos, D. (2004). Zurich Main Railway Station: A typology of Public CCTV Systems. *Surveillance & Society*, 2, pp. 161-176.
- Mustaine, E.E. & Tewksbury, R. (1998a). Predicting Risks of Larceny Theft Victimization: A Routine Activity Analysis Using Refined Lifestyle Measures. *Criminology*, 36, pp. 829-857.
- Mustaine, E.E. & Tewksbury, R. (1998b). Specifying the role of alcohol in predatory victimization. *Deviant Behavior: An Interdisciplinary Journal*, 19, pp. 173-199.
- Mustaine, E.E. & Tewksbury, R. (1999). A Routine Activity Theory Explanation for Women's Stalking Victimitizations. *Violence Against Women*, 5, pp. 43-62.

- Mustaine, E.E. & Tewksbury, R. (2002). Sexual Assault of College Women: A Feminist Interpretation Of A Routine Activities Analysis. *Criminal Justice Review*, 27, pp. 89-123.
- Nairne, S. (2011). *Art Theft And the Case of Stolen Turners*. London, UK: Reaktion Books.
- Navarro, J.N. & Jasinski, J.J. (2012). Going Cyber: Using Routine Activities Theory To Predict Cyberbullying Experiences. *Sociological Spectrum*, 32, 81-94. *Criminal Justice*, 23, pp. 286-303.
- Navarro, J.N. & Jasinski, J.J. (2013). Why Girls? Using Routine Activities Theory To Predict Cyberbullying Experience Between Girls and Boys. *Women & Criminal Justice*, 23, pp. 286-303.
- Naylor, R.T. (2008). The underworld of art. *Crime, Law, and Social Change*, 50, 263-291.
- Nelson, D. (2009). Economic Woe, Art Theft, and Money Laundering: A Perfect Recipe. In N. Charney (Ed.) *Art and Crime: Exploring the Dark Side of the Art World* (pp. 197-204). Santa Barbara, California: Praeger.
- Neter, J., Wasserman, W. & Kutner, M.H. (1990). *Applied Linear Statistical Models* (3rd edition). Cleveland: CRC Press.
- Nicita, A. & Rizzolli, M. (2009). The Economics of Art Thefts: Too Much Screaming over Munch's The Scream? *Economic Papers*, 28, 291-303.
- Noblecourt, A.F. (1964). The Protection Of Museums Against Theft. *Museum*. 17:4, 169-232.

- Nordmarker, A., Norlander, T., & Archer, T. (2000). The effects of alcohol intake and induced frustration upon art vandalism. *Social Behavior and Personality*, 28, 15-28.
- Oliveri, V. (2014). A Tale of Two Cities, A Tale of Two Art Thefts. In D. Chappell & S. Hufnagel (Eds.) *Contemporary Perspectives on the Detection, Investigation and Prosecution of Art Crime* (pp. 79-99). Surrey, UK: Ashgate. ha
- Oram, R.W. & Hartley, A. (2009). Bringing It All Back Home: Recovery of Stolen Special Collections Materials. In N. Charney (Ed.) *Art and Crime: Exploring the Dark Side of the Art World* (pp. 172-184). Santa Barbara, California: Praeger.
- Outlaw, M., Ruback, B. & Britt, C. (2002). Repeat and Multiple Victimizations: The Role of Individual and Contextual Factors. *Violence and Victims*, 17, 187-204.
- Outlaw, M., Ruback, B. & Britt, C. (2002). Repeat and Multiple Victimizations: The Role of Individual and Contextual Factors. *Violence and Victims*, 17, 187-204.
- Passas, N., & Proulx, B.B. (2011). Overview of Crimes and Antiquities. In Manacorda, S. & Chappell, D. (eds.), *Crime in the Art and Antiquities World: Illegal Trafficking in Cultural Property*, 51-67. New York: Springer.
- Pastore, G. (2009). Defending Art. In N. Charney (Ed.) *Art and Crime: Exploring the Dark Side of the Art World* (pp. 125-136). Santa Barbara, California: Praeger.
- Pearson, L. S. (1986). Current Trends in Art Theft. *IFAR Reports*, 7, 3-4.
- Philips, C. (1925). *Emotion in Art*. Boston: Houghton Mifflin Company.

- Phillips, John. (1973). *The Reformation of Images: Destruction of Art in England, 1435-1660*. Berkeley: University of California Press.
- Pigott, T.D. (2001). A Review Of Methods for Missing Data. *Educational Research and Evaluation*, 7, pp. 353-383.
- Pratt, T.C., Holtfreter, K. & Reisig, M.D. (2010). Routine Online Activity and Internet Fraud Targeting: Extending the Generality of Routine Activity Theory. *Journal Of Research in Crime and Delinquency*, 47, pp.267-296.
- Proulx, B. (2011). Organized Crime Involvement in the illicit antiquities trade. *Trends in Organized Crime*, 14, 1-29. doi: 10.1007/s12117-010-9115-8
- Pryor, R. (2016). *Crime and the Art Market*. London, UK: Lund Humphries.
- Purkey, H. (2010). The Art of Money Laundering. *Florida Journal of International Law*, 22, 111-144.
- Ramsey, J. (2004). Stealing Beauty. *Brentwood Magazine*, Sept./Oct., pages not listed.
- Resource (2003). 'Resource: The Council for Museums, Archives and Libraries. Security In Museums, Archives and Libraries. A Practical Guide'
<http://www.ilam.org/ILAMDOC/doc-admin/Security-manual.pdf>
- Reynald, D. M. (2011a). Factors Associated with the Guardianship of Places: Assessing The Relative Importance of the Spatio-Physical and Sociodemographic Contexts in Generating Opportunities for Capable Guardianship. *Journal of Research in Crime and Delinquency*, 48, pp. 110-142.
- Reynald, D. M. (2009). Guardianship in action: Developing a new tool for measurement. *Crime Prevention and Community Safety*, 11, pp. 1-20.
- Reynald, D. M. (2010). Guardians on Guardianship: Factors Affecting the Willingness to

- Supervise, the Ability to Detect Potential Offenders, and the Willingness to Intervene. *Journal of Research in Crime and Delinquency*, 47, pp. 358-390.
- Reynald, D. M. (2011b). *Guarding Against Crime: Measuring Guardianship within Routine Activity Theory*. Burlington, VT: Ashgate Publishing Company.
- Reynald, D. M. (2011c). Translating CPTED into Crime Preventive Action: A Critical Examination of CPTED as a Tool for Active Guardianship. *European Journal on Criminal Policy and Research*, 17, pp. 69-81.
- Reynald, D. M. (2015). Environmental Design and Crime Events. *Journal of Contemporary Criminal Justice*, 3, pp.71-89.
- Reynald, D.M. & Elffers, H. (2009). The Future of Newman's Defensible Space Theory: Linking Defensible Space and the Routine Activities of Place. *European Journal of Criminology*, 6, pp.25-46.
- Reyns, B.W. (2013). Online Routines and Identity Theft Victimization: Further Expanding Routine Activity Theory beyond Direct-Contact Offenses. *Journal of Research in Crime and Delinquency*, 50, pp.216-238.
- Reyns, B.W. & Henson, B. (2015). The Thief With A Thousand Faces and The Victim With None: Identifying Determinants for Online Identity Theft Victimization With Routine Activities Theory. *International Journal of Offender Therapy and Comprehensive Criminology*, March, pp.1-21.
- Reyns, B.W., Henson, B., Fisher, Bonnie, S. (2011). Applying Cyber Lifestyle Routine Activities Theory to Cyberstalking Victimization. *Criminal Justice and Behavior*, 36, pp.1149-1169.
- Rice, K.J. & Smith, W.R. (2002). Sociological Models of Automotive Theft: Integrating

- Routine Activity and Social Disorganization Approaches. *Journal Of Research In Crime And Delinquency*, 3, pp. 304-336.
- Ritchey, D. (2010). It's Priceless: The Art of Securing Museums and Libraries. *Security*, September, 80, 82.
- Roneck, D.W. & Maier, P.M. (1991). Bars, Blocks, and Crimes Revisited: Linking the Theory of Routine Activities To The Empiricism Of "Hot Spots", *Criminology*, 29, pp.725-753.
- Rountree, P.W., Land, K.C., & Miethe, T.D. (1994). Macro-Micro Integration In The Study of Victimization: A Logistic Model Analysis Across Seattle Neighborhoods. *Criminology*, 32, 387- 414.
- Rutelli, F. (2016). The Return of Iconoclasm Barbarian Ideology and Destruction By ISIS as a Challenge for Modern Culture, Not Only for Islam. In N. Charney (Ed.) *Art and Crime: Terrorists, Tomb Raiders, Forgers and Thieves* (pp. 143-149). London, UK: Palgrave-Macmillan.
- Sampson, R., Eck, J.E., and Dunham, J. (2010). Super controllers and crime prevention: A routine activity explanation of crime prevention success and failure. *Security Journal*, 23, 37-51.
- Sampson, R.J. & Lauritsen, J.L. (1990). Deviant Lifestyles, Proximity to Crime And The Offender-Victim Link In Personal Violence. *Journal of Research in Crime and Delinquency*, 27, pp.110-139.
- Sarker, S.K, Midi, H., & Rana, S. (2011). Detection of Outliers and Influential Observations in Binary Logistic Regression: An Empirical Study. *Journal of Applied Science*, 11, 26-35.

- Schreck, C.J., Miller, J.M., & Gibson, C.L. (2003). Trouble in the School Yard: A Study of the Risk Factors of Victimization at School. *Crime & Delinquency*, 3, 460-484.
- Scott, H.E. (2009). *Confronting Nightmares: Responding to Iconoclasm in Western Museums And Art Galleries* (Doctoral Thesis). Retrieved from <http://research-repository.st-andrews.ac.uk/>
- Scott, H. E. (2009). *Confronting Nightmares: Responding To Iconoclasm In Western Western Museum and Art Galleries*. (Doctoral Thesis). Retrieved from <http://research-repository.st.-andrews.ac.uk/>.
- Scott, H.E. (2010a). Responding to Art Vandalism in British Museums and Galleries: A Survey of the Situation. *Journal of Art Crime*, Spring, pp. 11-24.
- Scott, H.E. (2010b). “Wholly Uninteresting”? The Motives Behind Acts Of Iconoclasm. In H. Morgan, J. L. Černič, & L. Milligan (Eds.) *Perspectives on power: An Interdisciplinary Approach* (pp. 21-40). Newcastle upon Tyne, UK: Cambridge Scholars Publishing.
- Seelye, K., & Mashberg, T. (2013, March 18). A New Effort in Boston to Catch 1990 Art Thieves. Retrieved June 11, 2015, from http://www.nytimes.com/2013/03/19/us/fbi-says-it-has-clues-in-1990-isabella-stewart-gardner-museum-art-heist.html?pagewanted=all&_r=.
- Sherman, L.W., Gartin, P.R., and Buerger, M.E. (1989). Hot Spots of Predatory Crime: Routine Activities And The Criminology Of Place. *Criminology*, 27, pp.27-55.
- Siebers, T. (2002). Broken beauty: Disability and art vandalism. *Michigan Quarterly Review*, 41, 223-245.

- Slattery, A.J. (2012). To Catch an Art Thief: Using International and Domestic Laws to Paint Fraudulent Art Dealers into a Corner. *Jeffrey S. Moorad Sports Law Journal*, 19, 827-871.
- Smith, W.R., Frazee, S.G., & Davison, E.L. (2000). Furthering The Integration of Routine Activity and Social Disorganization Theories: Small Units Of Analysis And The Study Of Street Robbery As A Diffusion Process. *Criminology*, 38, pp. 489-523.
- Smith, C. (2006). Museum Security: Mix High Tech With Guards; Add Trust. *The Santa Fe New Mexican*, February 10.
- Spadanuta, L. (2011). No Artistry in These Crimes. *Security Management*, July, 46-51.
- Stearn, M. (2013). Art And Destruction: The Artist As Anti-Curator In The Museum. In J. Walden (Editor), *Art and Destruction* (pp. 35-44). NE, UK: Cambridge Scholars Publishing.
- Straus, D. (2009). Implication of Art Theft in the Fine Art Insurance Industry. In N. Charney (Ed.) *Art and Crime: Exploring the Dark Side of the Art World* (pp. 87-106). Santa Barbara, California: Praeger.
- Straus, D. (2016). Insurance and Art Crime. In A. Thompkins (Ed.), *Art Crime And It's Prevention: A Handbook for Collectors And Art Professionals* (pp. 134-147). London, UK: Lund Humphries.
- Swartz, K., Osborne, D.I., Dawson-Edwards, C. & Higgins, G.E. (2016). Policing Schools: Examining the Impact of Place Management Activities on School

- Violence. *American Journal of Criminal Justice*, 41, 1-19.
- Tabachnick, B.G. & Fidell, L.S. (2013). *Using multivariate statistics (6th edition)*.
Boston: Pearson Education.
- Teunissen, J. and Hinz, E. (1974). The Attack on the Pietá: An Archetypal Analysis.
Journal of Aesthetics and Criticism, 33, 42-50.
- Tewksbury, R. & Mustaine, E.E. (2000). Routine Activities and Vandalism: A
Theoretical And Empirical Study. *Journal of Crime and Justice*, 23, pp. 81-110.
- Tewksbury, R. & Mustaine, E.E. (2000). College Students' Lifestyles and Self-
Protective Behaviors: Further Considerations of the Guardianship Concept in
Routine Activities Theory. *Criminal Justice and Behavior*, 30, pp. 327.
- Tewksbury, R. & Mustaine, E.E. (2001). Lifestyle Factors Associated with the Sexual
Assault of Men: A Routine Activity Theory Analysis. *The Journal of Male
Studies*, pp.153-183.
- The Speed Art Museum. (date unknown) *The Speed Art Museum Staff Emergency
Procedures Manual*. Louisville, KY: The Speed Art Museum.
- Thomas, K. (2002). The Gang That Couldn't Tell A Rubens from a Sandwich.
ARTNews, March, 110-113.
- Thompkins, A. (2016). Where to From Here? In A. Thompkins (Ed.),
Art Crime and It's Prevention: A Handbook for Collectors And Art Professionals
(pp. 1340147. London, UK: Lund Humphries.

- Tijhuis, A.J. (2009). Who Is Stealing All Those Paintings? In N. Charney (Ed.) *Art and Crime: Exploring the Dark Side of the Art World* (pp. 41-51). Santa Barbara, California: Praeger.
- Tillyer, M.S., Fisher, B.S. & Wilcox, P. (2011). The Effects of School Crime Prevention on Students' Violent Victimization, Risk Perception, and Fear of Crime: A Multi-level Opportunity Perspective. *Justice Quarterly*, 28, 249-277.
- Tompkins, A. (Ed.). (2016). *Art Crime And Its Prevention: A Handbook for Collectors And Professionals*. pp. 134-147. London, UK: Lund Humphries.
- Tseloni, A., Wittebrood, K., Farrell, G. & Pease, K. (2004). Burglary Victimization In England And Wales, The United States and the Netherlands: A Cross-National Comparative Test of Routine Activities and Lifestyle Theories. *British Journal Of Criminology*, 44, pp. 66-91.
- Tsirogiannis. (2016). Something Is Confidential in the state of Christie's. In N. Charney (Ed.) *Art and Crime: Terrorists, Tomb Raiders, Forgers and Thieves* (pp. 200-228). London, UK: Palgrave-Macmillan.
- Turk, A. (2005). Security in Motion. *Security Management*, 49, 40-46.
- Wakefield, A. (2003). *Selling Security: The private policing of public space*. Portland, OR: William Publishing.
- Walker, J.T. & Madden, S. (2013). *Statistics In Criminology And Criminal Justice: Analysis and Interpretation*. Burlington, MA: Jones & Bartlett Learning.
- Webb, J. (2008). *Stolen: The Gallery of Missing Masterpieces*. Toronto: Madison Press Books.
- Welsh, B.C. & Farrington, D.P. (2009a). *Making Places Safer: Surveillance and Crime*

- Prevention. Oxford, UK: Oxford University Press.
- Welsh, B.C. & Farrington, D.P. (2009b). Public Area CCTV and Crime Prevention: An Updated Systematic Review and Meta-Analysis. *Justice Quarterly*, 26, 716-745.
- Welsh, B.C., Mudge, M.E., & Farrington, D.P. (2010). Reconceptualizing public Area surveillance and crime prevention: Security guards, place managers and defensible space. *Security Journal*, 23, pp. 299-319.
- Wilcox, P., Land, K.C., & Hunt, S.A. (2003). *Criminal Circumstance: A Dynamic Multicontextual Criminal Opportunity Theory*. New York: Aldine de Gruyter.
- Wilcox, P., Madensen, T.D., and Tillyer, M.S. (2007). Guardianship in Context: Implications for Burglary Victimization Risk and Prevention. *Criminology*, 45, 771-803.
- Willemse, H., & Etman, O. (1995). Museum Security in The Netherlands: State of the Art. *Security Journal*, 6 (1), 53-60.
- Williams, M.J. (2008). Framing Art Vandalism: A Proposal to Address Violence Against Art. *Brooklyn Law Review*, 74, 580-631.
- Williams, M.J. (2009). Framing Art Vandalism: A Proposal to Address Violence Against Art. *Brooklyn Law Review*. 74, 581-631.
- Winge, S., & Knutsson, J. (2003). An evaluation of the CCTV scheme at Oslo central railway Station. *Crime Prevention and Community Safety*, 5, 49-59.
- Wittman, R.K & Shiffman, J. (2010). *Priceless: How I Went Undercover to Rescue the World's Stolen Treasures*. New York: Crown Publishers.

Wylly, M.J. (2014). *Motives of Art Theft: A Social Contextual Perspective of Value* (Doctoral Dissertation). Retrieved from ProQuest Dissertations. (Accession No.3625950)

Zhang, L, Messner, S., and Liu, J. (2007). A Multi-Level Analysis Of The Risk Of Household Burglary In The City Of Tianjin, China. *British Journal of Criminology*, 47, pp. 918-937.

Appendix A- Federal Art Crime Statutes

Title 18, United States Code, Section 659 - Theft From Interstate Shipment.

This statute makes it a federal offense to steal or obtain by fraud anything from a conveyance, depot or terminal, any shipment being transported in interstate or foreign commerce. The statute also prohibits the "fencing" of such stolen property. It is common practice to transport stolen art across state or country boundaries (http://www.fbi.gov/about-us/investigate/vc_majorthefts/jag/statutes, electronically retrieved September 12, 2014).

Title 18, United States Code, Section 1951 - Interference with Commerce by Threats of Violence (Hobbs Act).

This statute makes it a federal offense to obstruct interstate commerce by robbery or extortion or to use or threaten to use violence against any person or property in interstate commerce (http://www.fbi.gov/about-us/investigate/vc_majorthefts/jag/statutes, electronically retrieved September 12, 2014).

Title 18, United States Code, Section 2314 and 2315 - Interstate Transportation of Stolen Property.

This statute prohibits the transportation in interstate or foreign commerce of any goods with a value of \$5,000 or more, when the person transporting these goods knows them to be stolen. These statutes also prohibit the "fencing" of such goods

(http://www.fbi.gov/about-us/investigate/vc_majorthefts/jag/statutes, electronically retrieved September 12, 2014).

Title 18, United States Code, Section 668 - Theft of Major Artwork.

This statute makes it illegal to obtain by theft or fraud any object of cultural heritage from a museum and that is more than 100 years-old, or worth more than \$100,000. The statute also prohibits the "fencing" or possession of such objects, with knowledge they are stolen. The penalties include fines and as much as 10 years in prison. This law was originally proposed by Senator Edward Kennedy after the Isabella Stewart Gardner Museum theft in Boston in 1990 (<http://www.gpo.gov/fdsys/granule/USCODE-2011-title18/USCODE-2011-title18-partI-chap31-sec668>, electronically retrieved September 1, 2014).

Title 18, United States Code, Section 641 and 2114 - Theft of Government Property.

This statute makes it illegal to steal or embezzle any government property or to commit robbery of government property. Prosecutorial guidelines are established by the United States Attorney in each federal judicial district (http://www.fbi.gov/about-us/investigate/vc_majorthefts/arttheft/legislation, electronically retrieved September 13, 2014).

Appendix B
Demographic Variables

Figure B.1

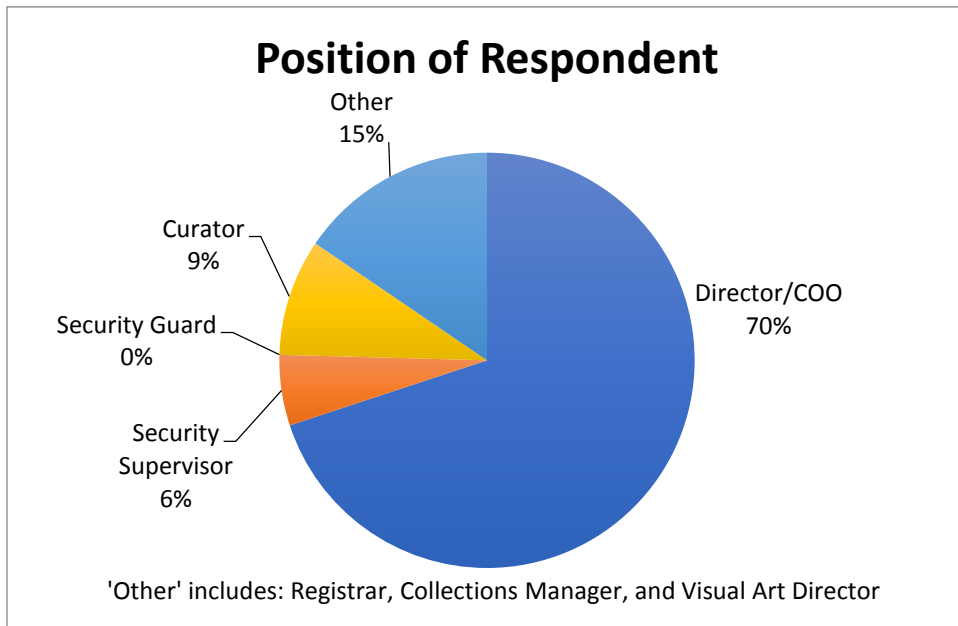


Figure B.2

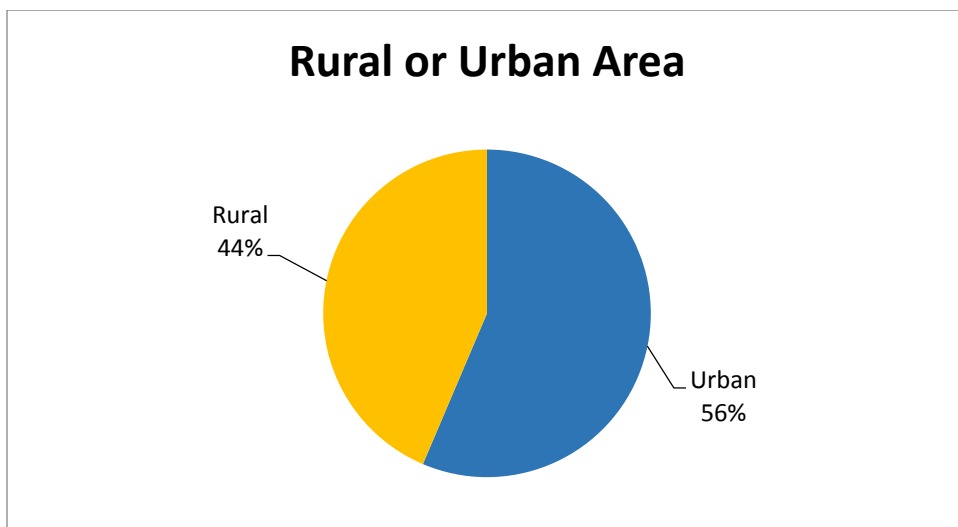


Figure B.3

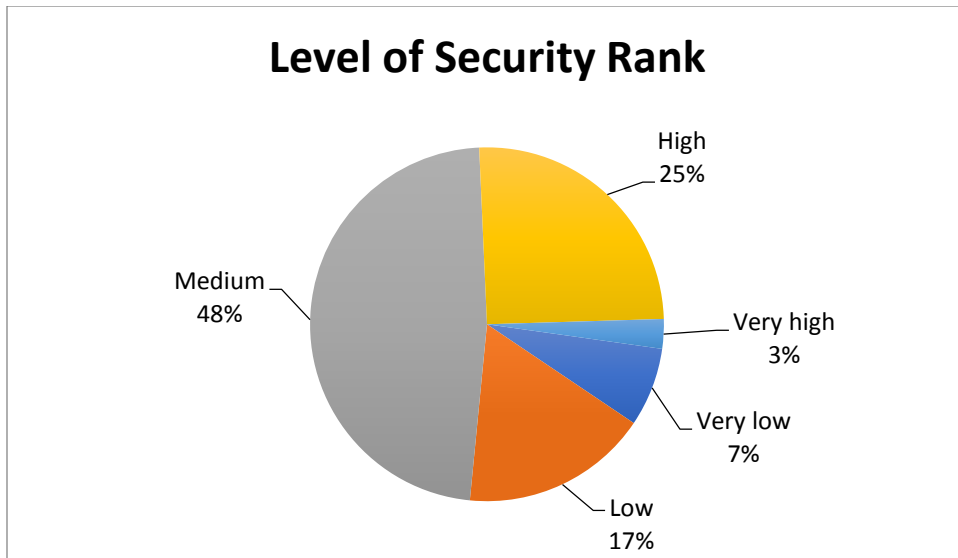


Figure B.4

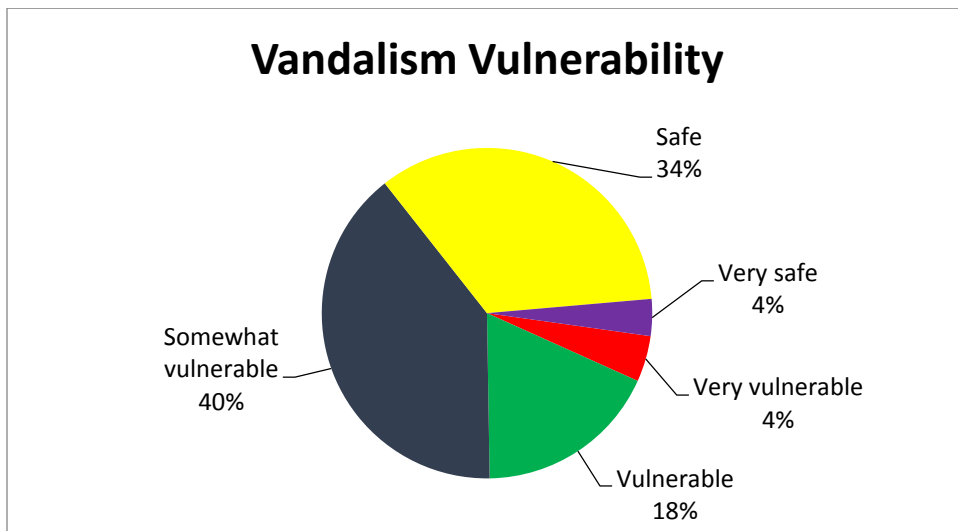
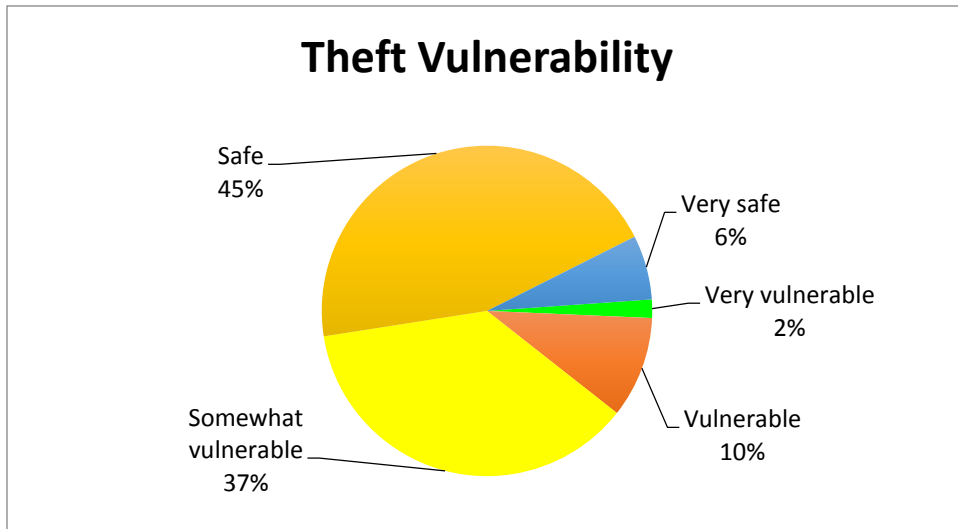


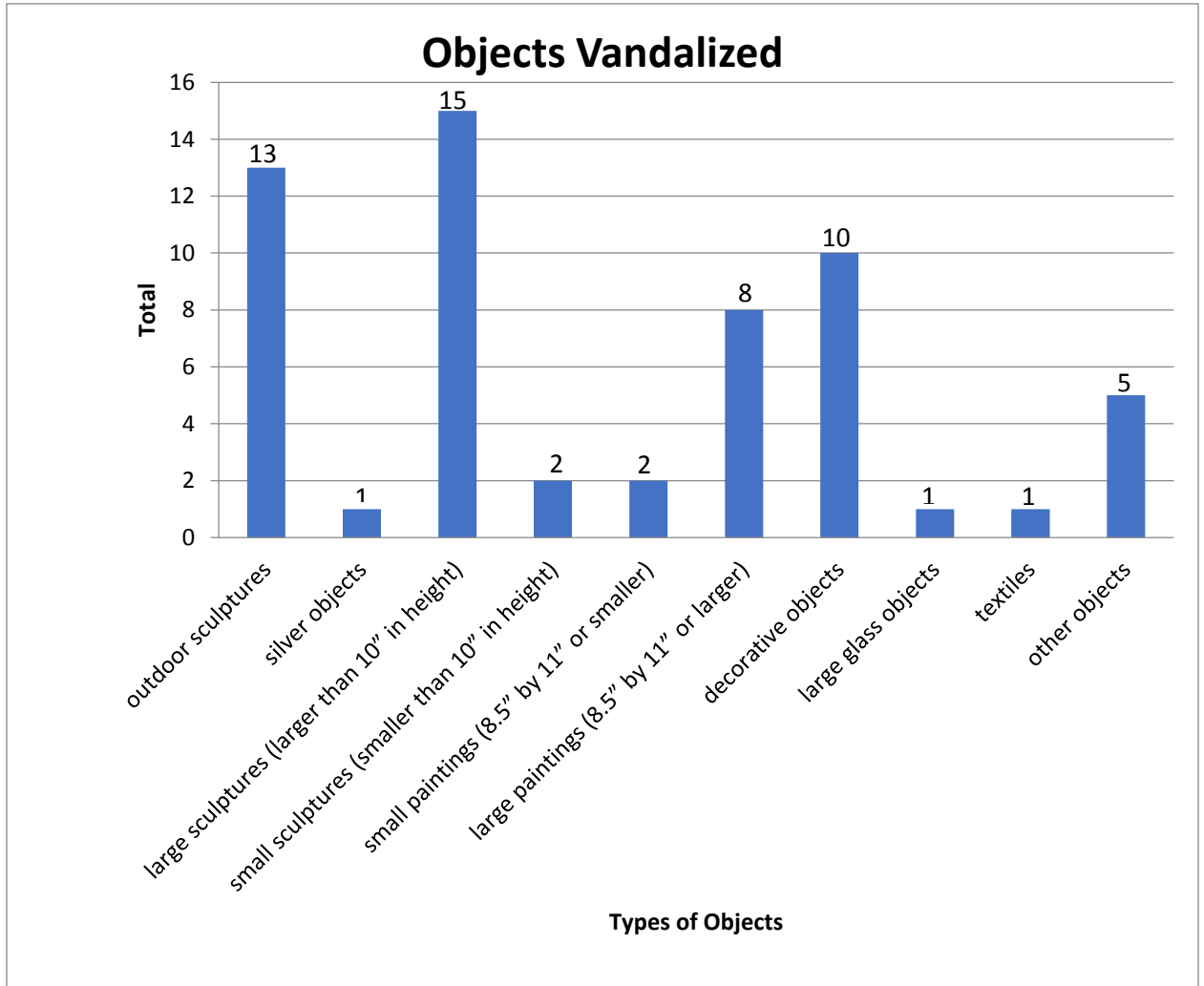
Figure B.5



Appendix C

Non-Theoretical Continuous Variables

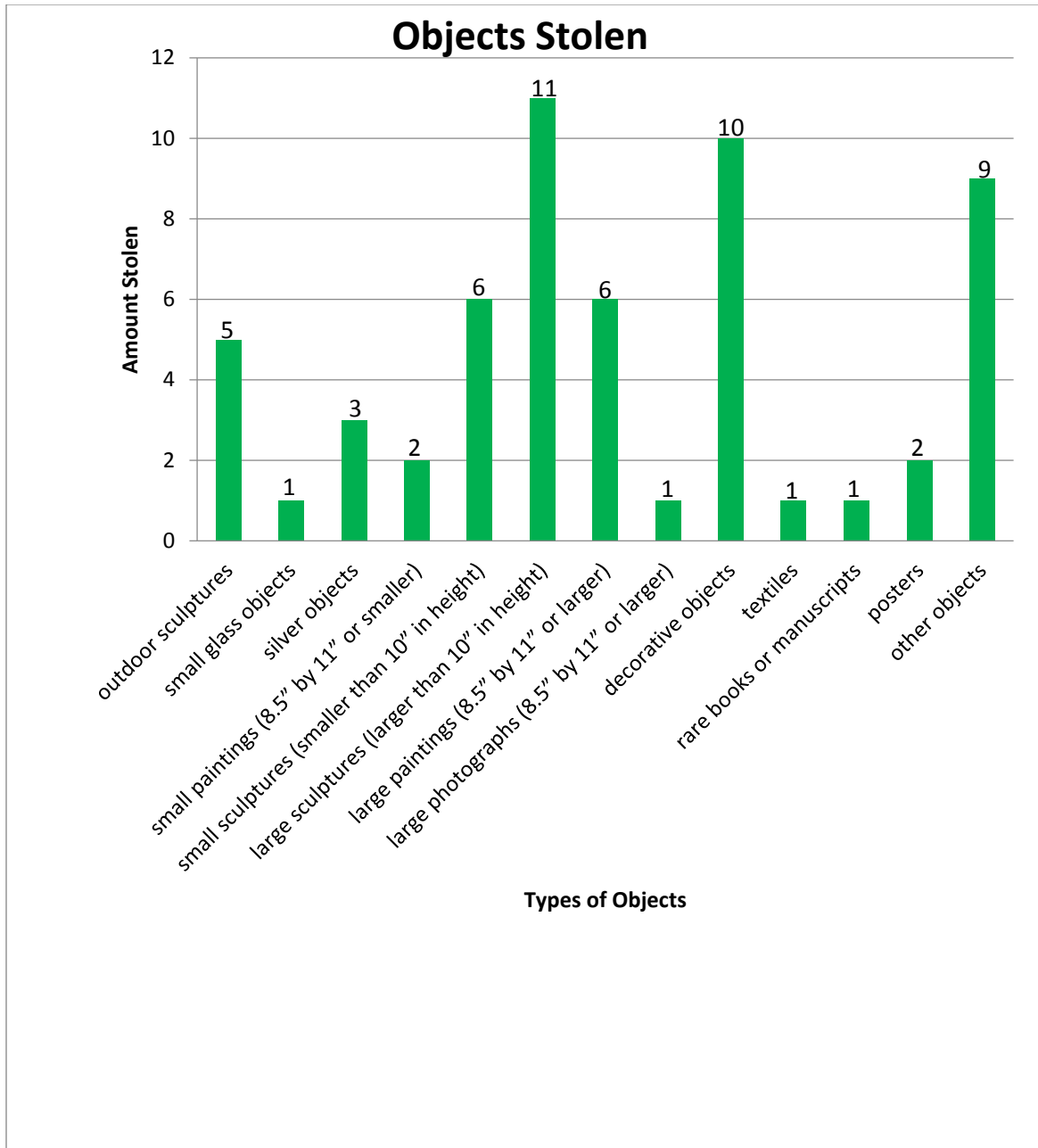
Figure C.1



'Other' artworks which are: jewelry and works on paper.

* The following objects were not vandalized: small photographs (8.5" by 11" or smaller), larger photographs (8.5" by 11" or larger), small glass objects, china objects, rare books or manuscripts, and posters.

Figure C.2



'Other' artworks which are: jewelry, illustrations, and a limited-edition print

* The following objects were not stolen: small photographs (8.5" by 11" or smaller), large glass objects, and china objects.

Figure C.3

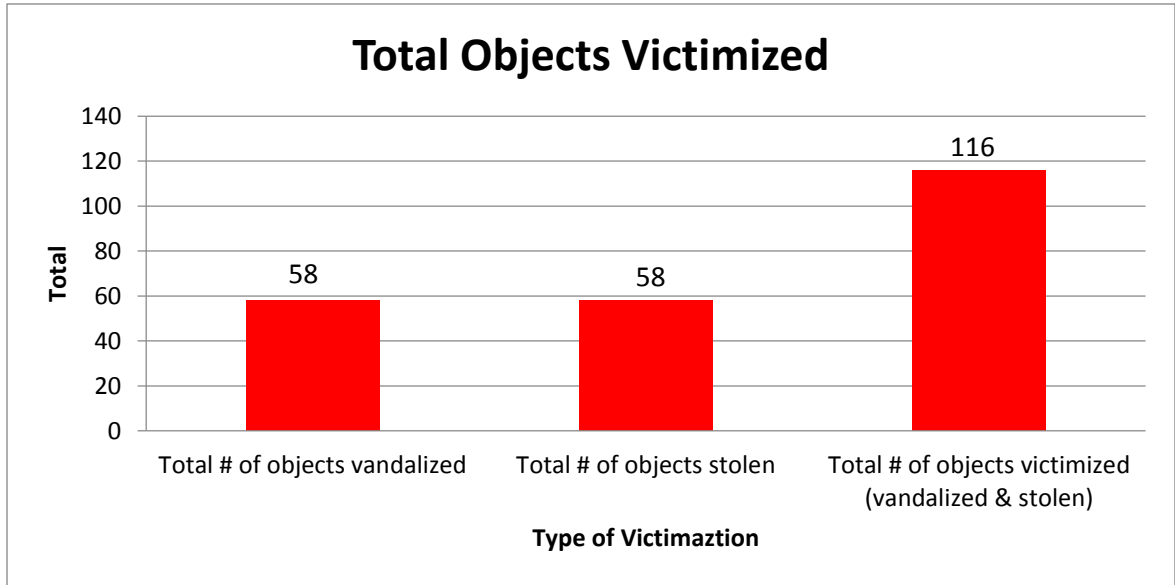
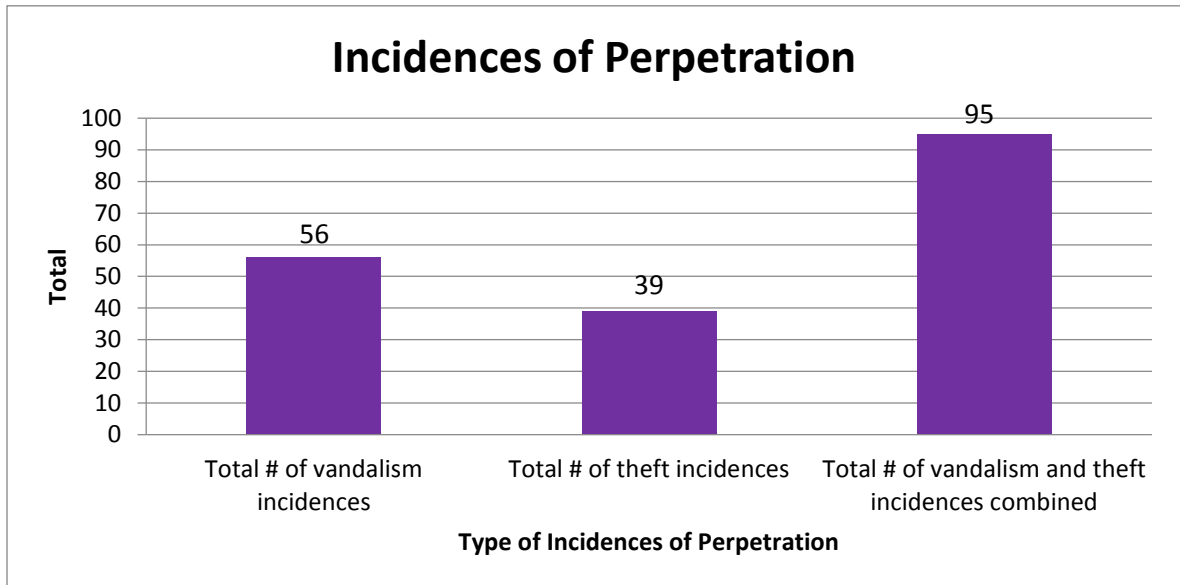


Figure C.4



Appendix D

Non-Theoretical Categorical Variables

Figure D.1

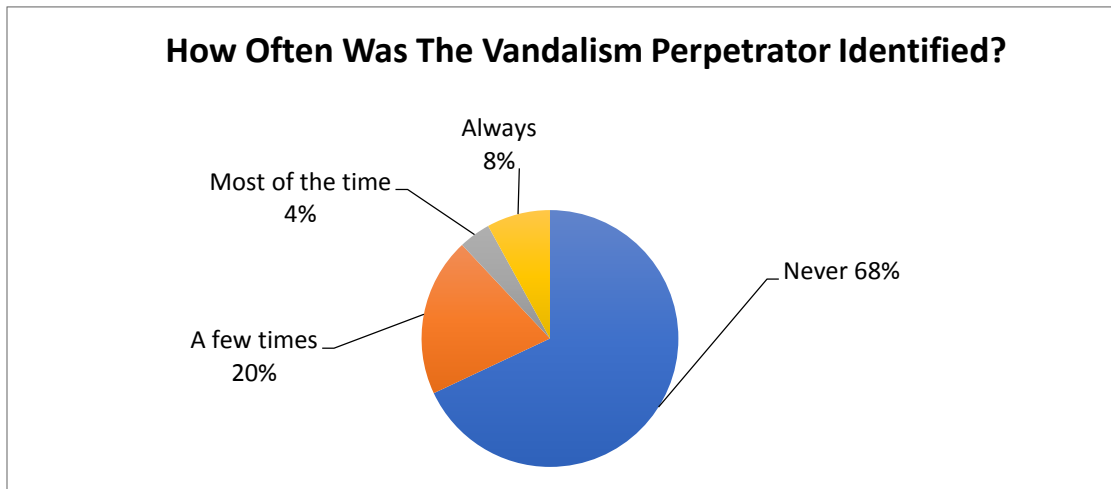
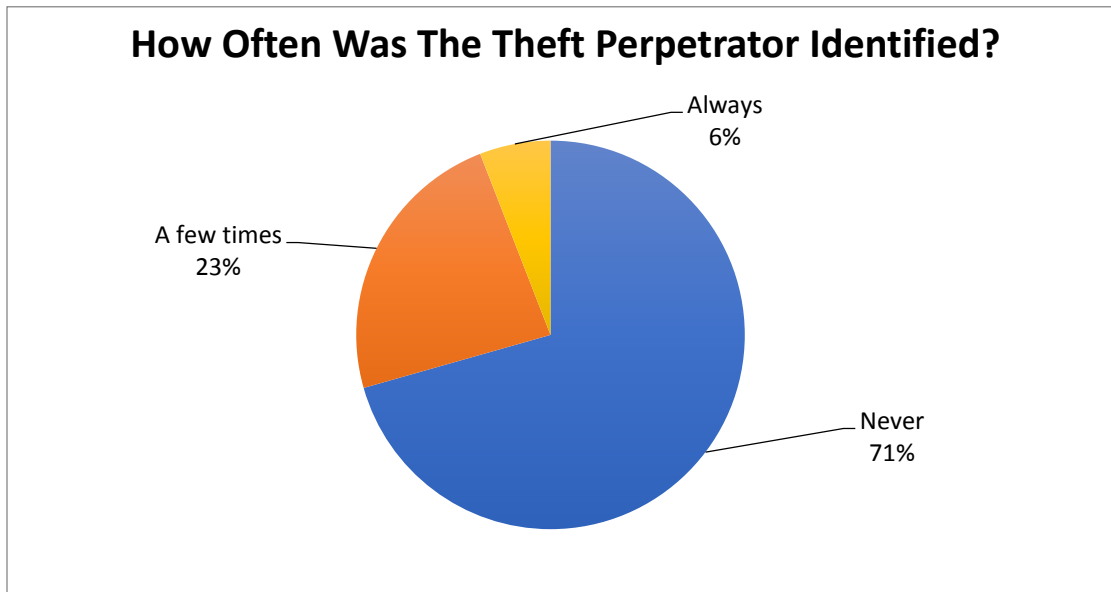
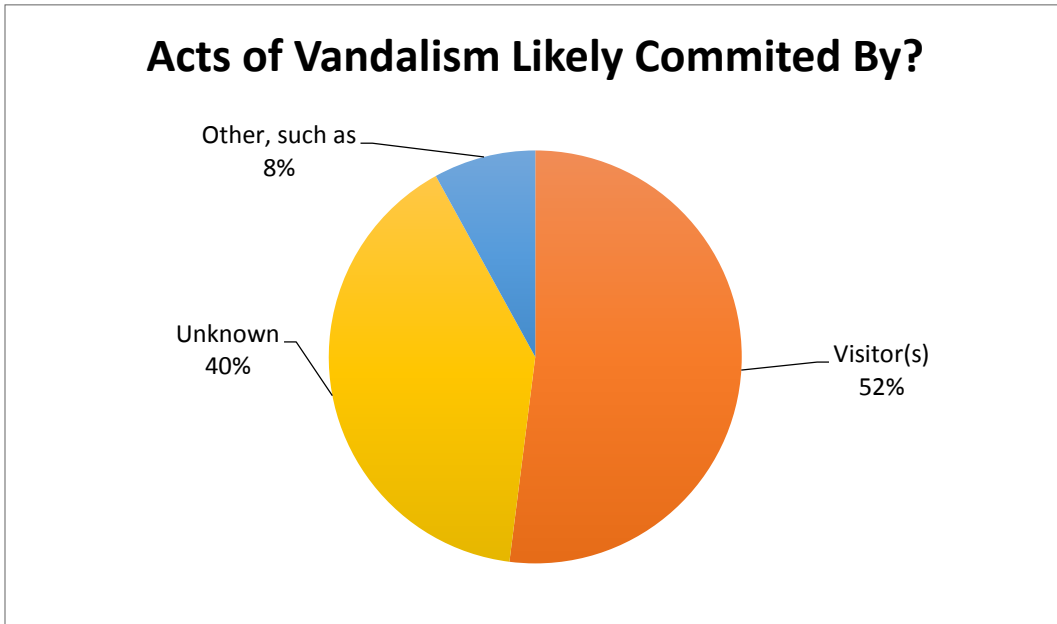


Figure D.2



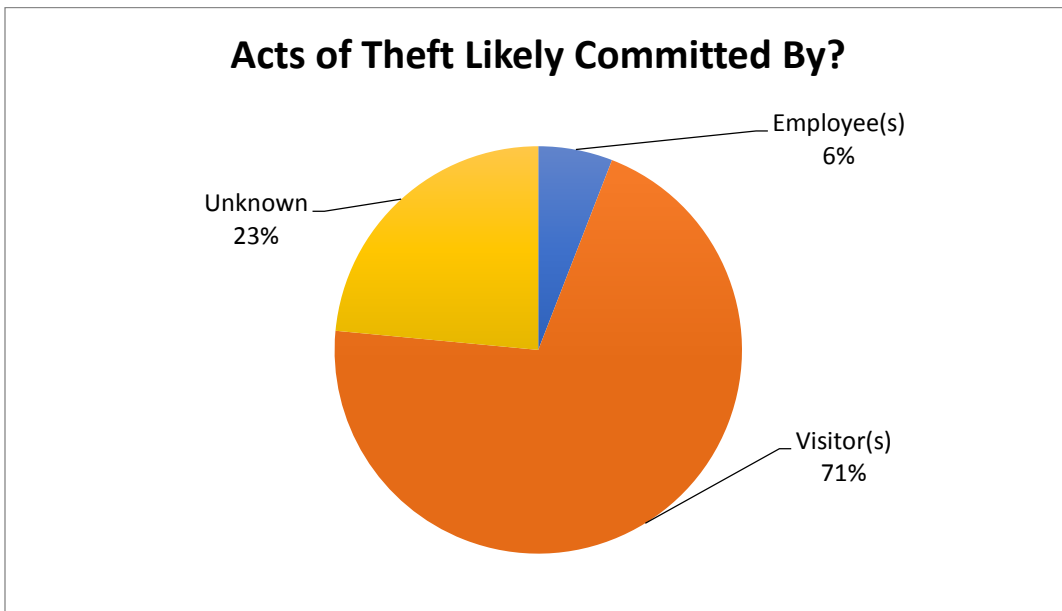
*No respondents answered the forced answer choice "most of the time".

Figure D.3



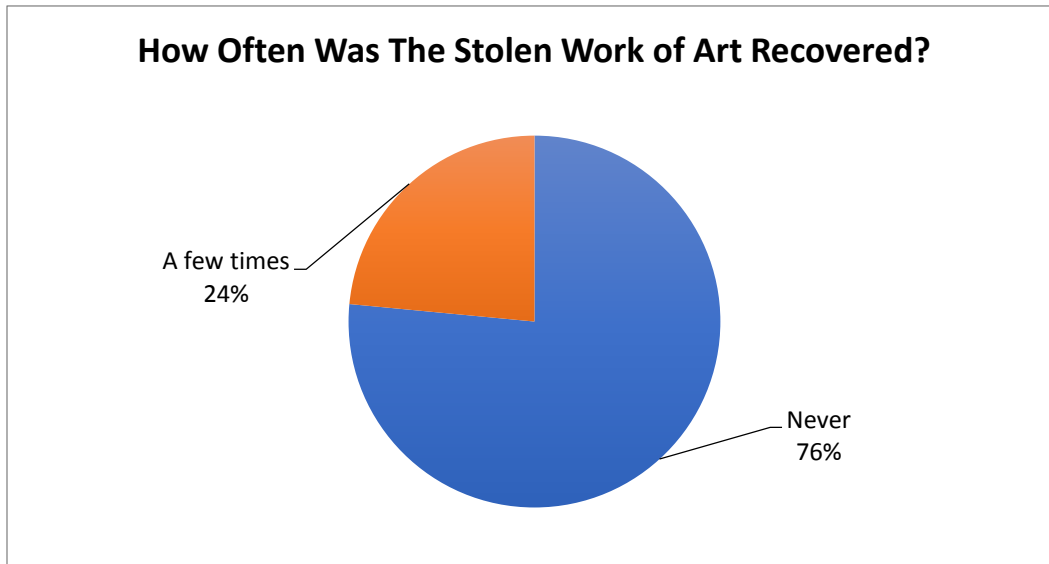
*No employee(s) or contract worker(s) were identified as a likely perpetrator of art vandalism.

Figure D.4



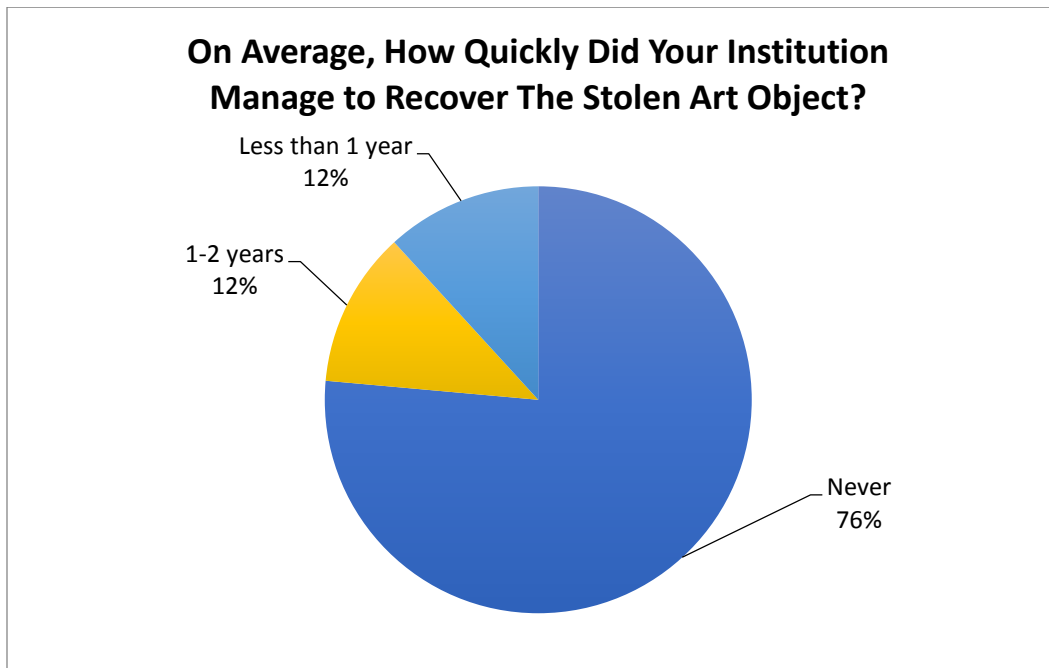
*No contract worker(s) or 'other' were identified as a likely perpetrator of art theft.

Figure D.5



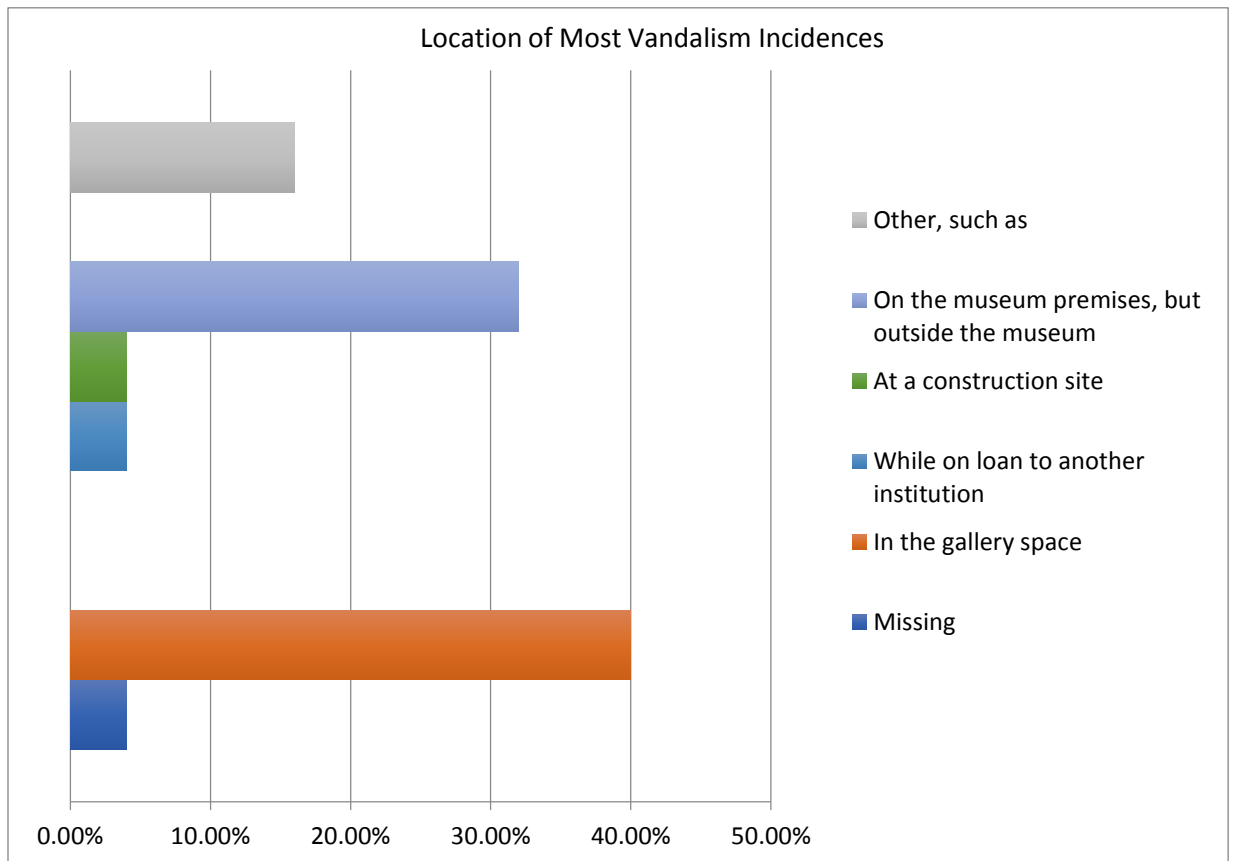
*No respondents answered the forced answer choices "most of the time" or "more than always".

Figure D.6



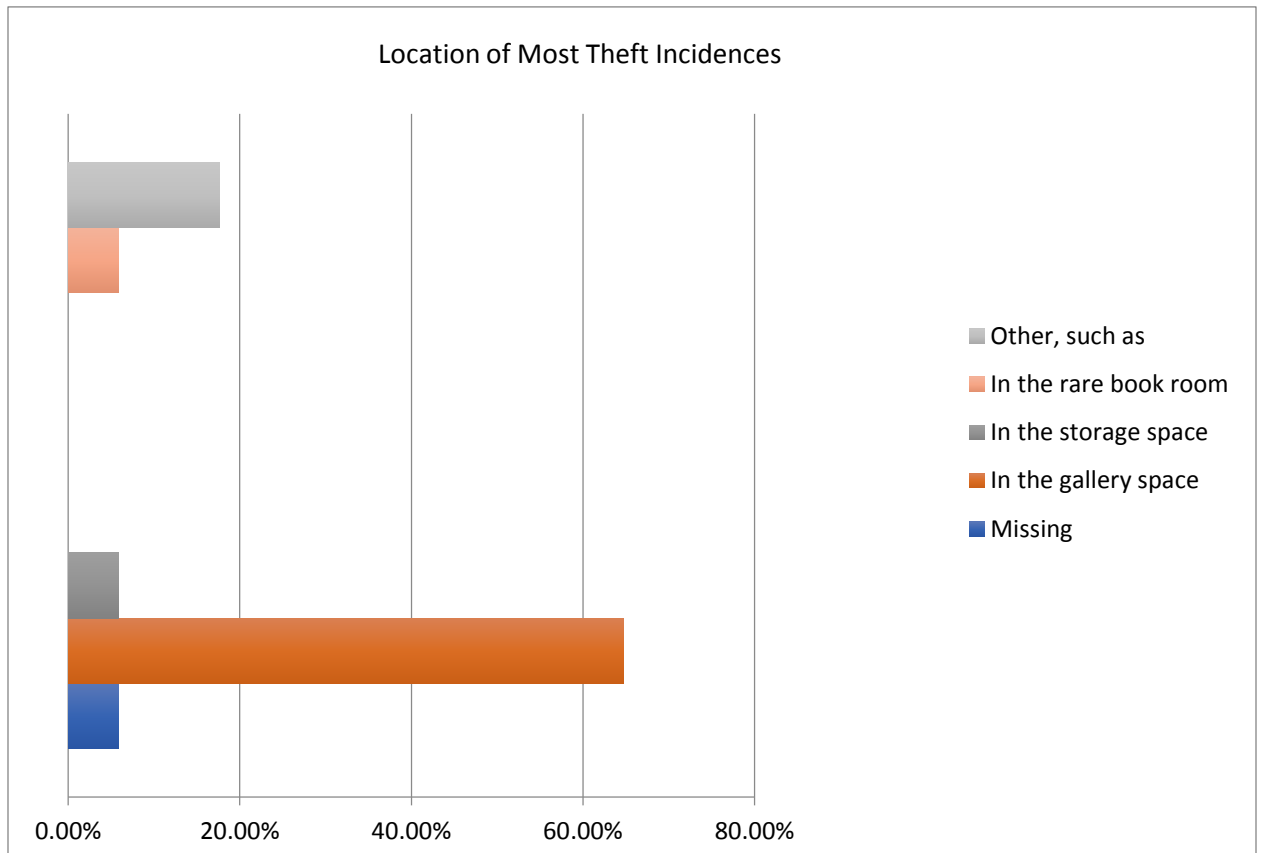
*No respondents answered the forced answer choices "3-5 years" or "more than 5 years".

Figure D.7



*No respondents answered the forced answer choices "in the storage space", "while in transit", or "in the rare book room".

Figure D.8



*No respondents answered the forced answer choices "while in transit", "while on loan to another institution", "at a construction site", or "on the museum premises, but outside the museum".

CURRICULUM VITAE

Katharine L. Salomon

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Education

UNIVERSITY OF LOUISVILLE – Louisville, KY
PhD. Interdisciplinary Studies. Expected completion August 2018.
(Successful dissertation defense June 29, 2018)

UNIVERSITY OF LOUISVILLE – Louisville, KY
M.S. Administration of Justice. 2008.

TRANSYLVANIA UNIVERSITY – Lexington, KY
B.A. Double major: Psychology and Studio Art. 1990.

Professional Experience

(Fall 2013)

PART-TIME LECTURER – Louisville, KY
University of Louisville, Department of Justice Administration

- Taught a course on U.S. Corrections (JA 202-75)

(2007- Present)

PROBATION & PAROLE INVESTIGATOR -- Louisville, KY

Kentucky Department of Corrections, Probation & Parole

- Prepares Presentence Investigation reports utilizing various resources including the offender, offender's family, court records and medical records (psychological and physical). Specialized case load of sex offenders.
- Interviews clients to gather information about the offender, the offender's background, social, mental health and substance abuse issues.
- Maintains dialogue with the client.
- Refers clients to appropriate community resources
- Prepares and maintains detailed client records and reports.
- Prepares all necessary documentation requested by courts, center office or Parole Board for sentencing hearings or legal purposes.

- Prepares and investigates all special assignments such as pardon, commutation of sentence, custody time credit and out-of-state requests for offender background information.
- Participates in Court adjudication and serves as court liaison.
- Provides recommendations to the Court regarding treatment options for mental health and/or substance abuse issues.
- Investigates the offender's prior criminal history.
- Utilizes available community service resources to recommend probation supervision to the Courts and Probation and Parole Officers.
- District 4 EEO Representative
- LSCMI Assessments
- Completed Thinking For A Change Facilitator Training
- Testifies in Truth in Sentencing hearings

(2006 – 2007)

COMPLIANCE ANALYST – Louisville, KY

Louisville Metro Human Relations Commission

- Analyzes and monitors vendors and vendor contracts.
- Investigates contracts and vendors to monitor and enforce affirmative action and equal opportunity laws and ordinances.
- Conducts on-site investigations of contractors and vendors.
- Conducts training seminars and workshops.
- Prepares and submits statistical reports and conducts special projects.
- Researches local and federal laws and regulations, legal opinions, court decisions and census materials concerning equal opportunity and affirmative action guidelines.

(2002 – 2006)

FAMILY ADVOCATE – Louisville, KY

Center for Women and Families/Louisville Metro Police Department

- Assist and collaborate with Domestic Violence Unit Detectives to appropriately follow-up and advocate for to domestic violence and sexual assault victims.
Accompany victims to court and maintain case notes on all clients having filed a domestic violence report to the police in District 4.
- Provide follow-up with clients to assess safety and legal needs.
Provide information to clients about community resources via home visits or phone calls. Conduct individual counseling with victims.
- Assist clients through the process of filing Emergency Protective Order and criminal complaints.
- Maintain and input monthly statistics for grant and Center requirements.
- Kentucky Domestic Violence Association Level I Certification.

- Run background checks and track offender cases and adjudications through various database and criminal tracking systems
- Committees: Art & Healing Committee (CWF) & Domestic Violence and Sexual Assault Committee (CWF)

(2001 – 2002)

DOMESTIC VIOLENCE INTAKE CLERK – Louisville, KY

Jefferson County Attorney (Domestic Violence Intake Center)

- Interview and provide victims with emergency protective orders and criminal complaints, as well as encourage the use of community resources.
- Safety planning and collect evidence.
- Coordinate with judges, attorneys, victim advocates and police officers.
- Ongoing follow-up communication with victims.

(1994- 2002)

FREELANCE ADVERTISING COPYWRITER-Midwest & Southeast

Self-employed copywriter

- Wrote print, radio and television advertising local and national markets.
- Participated in brand positioning, market and product research and client management.
Clients include: Doe-Anderson Advertising (Louisville), Paul Schultz Advertising(Louisville), Creative Alliance Inc.(Louisville), Sheehy & Associates(Louisville), Price Weber(Louisville), BBDO South(Atlanta), Long Haymes Carr Lintas (Winston Salem), Campaign Inc.(Atlanta), Center for Women and Families(Louisville)

Accounts include: Winston Cigarettes, Heine Bros. Coffee, Hanes Underwear, National City Bank, Dr. Martens (USA), Spam, Baptist Hospital East, Kentucky Utilities/LG&E, USA Network

Internships

(Spring 2011)

CURATORIAL INTERNSHIP – Louisville, KY

Hite Art Institute, University of Louisville

- Designed a state-wide prison art exhibit with art from Kentucky’s 12 state prisons from concept to execution (proposal to hanging of work)
- Worked with the local media and an advertising agency to promote the exhibit

- Authored the exhibit catalog
- Coordinated with many community partners

(Spring 2010)

MUSEUM SECURITY INTERNSHIP– Louisville, KY

JB Speed Art Museum

Become familiar with museum security policies, procedures and equipment

- Assisted in revising existing museum policies
- Assisted in surveillance of museum property, visitors and interior spaces during public events.

(Summer 2007)
Louisville,

LOUISVILLE METRO RE-ENTRY TASKFORCE INTERNSHIP–

Louisville Metro Re-entry Taskforce

- Created a release packet for RCC which included social service agency listings, toiletry items, and clothing vouchers.
- Assisted in creating a resource manual and worked with local non-profit agencies to provide material goods to inmates upon release

Volunteer Work

(2015-present)

AGENCY AMBASSADOR- Louisville, KY

Volunteers of America-Mid-States

- Assist the organization in raising awareness, fund raising, and improving the quality of their programming and outcomes

(Spring 2007)

PRO SE LEGAL CLINIC PROGRAM MANAGER – Louisville, KY

Center for Women and Families

- Organized and coordinated the completion and filing of pro se divorce petitions for victims of domestic violence with U of L law students and volunteer family law attorneys
- Maintained statistics
- Complied with grant requirements
- Worked within budgetary constraints to staff and fill the work space with supplies
- Fund raised for clinic financial and staffing needs

(1999-2002)

DOMESTIC VIOLENCE HOSPITAL ADVOCATE – Louisville, KY

Center for Women and Families/Louisville Metro Police Department

- Counseled victims of domestic violence at University of Louisville Hospital
- Submitted photographic and written documentation of victim's injuries

(1999-2001)

RESEARCH ASSISTANT/WEEKEND FORENSIC TECHNOLOGIST
ASSISTANT-Louisville, KY

Office of the Chief Medical Examiner of Kentucky

- Assisted in the preparation and execution of autopsies of forensic cases referred to the OCME
- Participated in the collaboration of research projects and data collection and analysis

Selected Exhibitions Curated

(August 2011) "Bars to Walls: Inmate Art Expressions", Schneider Hall Galleries, University of Louisville (with John Begley, Gallery Director)

(March 2010) "Civil War Song Sheets", Ekstrom Library, University of Louisville (With other students and course professors)

Selected Exhibitions Catalogs

(2011) Bars to Walls: Inmate Art Expressions, Louisville; Schneider Hall Galleries, Hite Art Institute

Peer-Reviewed Journal Articles

Salomon, Katharine, David J. Roelfs, Ryan Schroeder, Peter Morrin, and John Begley. Art Vandalism and

Guardianship in U.S. Art Institutions. *Arts*. Published first online, June 22, 2018.

Conferences and Symposia

November 2014, “The Parallels between Surveillance in Prisons and Museums”, Creative time Summit (21C Museum), Presenter, Louisville, KY

November 2012, “Bars to Walls: Inmate Art Expressions, Prison Art in Kentucky”, Presenter and Panel Chair, American Society of Criminology 64th Annual Meeting, Chicago, IL

November 16, 2011. “Forged: A Case Of Mistaken Identity Or Outright Deception?” Presenter, The American Society of Criminology 63rd Annual Meeting, Washington, DC

September 25, 2011. “Bars to Walls: Inmate Art Expressions” Symposium, Chao Auditorium, Ekstrom Library, University of Louisville, Organizer and Moderator. Louisville, KY

November 5, 2009. “Art Vandalism: A Preliminary Examination of Self- Stated Justifications”, Presenter, The American Society of Criminology 61st Annual Meeting, Philadelphia., PA

May 8, 2008, “An Overview of Female Sex Offenders”, Treatment and Evaluation of Sex Offenders, SORAAB 2008 Training, LaGrange, Kentucky

March 16, 2006, “Overview of Gender Based Violence”, National Conference on Gender Based Violence, Pelican Beach Resort, Dangriga, Belize. (Hosted by the Women’s Department-Belize and International Service Learning Program University of Louisville).

Guest Lectures

Spring 2013, "Presentence Investigations (PSIs) in Kentucky". US. Corrections, Department of Justice Administration, University of Louisville, Louisville, KY.

Spring 2011, "Presentence Investigations (PSIs) in Kentucky". Crime in America, Department of Justice Administration, University of Louisville, Louisville, KY.

Spring 2009, "Overview of Domestic Violence", Introduction to Corrections, Bellarmine University, Louisville, KY.

Spring 2006, International Service Learning Program (SLP) Seminar class "Domestic Violence in Belize", University of Louisville., Louisville, KY

Spring 2006, ISLP Seminar class "Overview of Domestic Violence". University of Louisville, Louisville, KY.

Professional Affiliations

Louisville Metro Re-Entry Task Force

Kentucky Council on Crime and Delinquency

Kentucky State Parole Officers Association

Southern States Correctional Association

The American Society of Criminology

International Foundation For Cultural Property Protection

American Correctional Association

Media Appearances

"Customized graduate degree: As Individual as you are," by Janene Zaccone. U of L Magazine, Summer 2012, p. 37.
file:///C:/Users/chava/Downloads/summer-2012.pdf

"Bar to Walls," Louisville Life (#601), KET. Producer/writer: Jayne McClew. 7:30 pm, Nov 5, 2011. http://www.ket.org/cgi-bin/cheetah/watch_video.pl?nola=KLOUL+000601

University of Louisville, School of Interdisciplinary and Graduate Studies Website, Graduate Student Spotlight (October 2011).
<http://graduate.louisville.edu/students/gsd/student-spotlight/student-spotlight-october-2011.html>

"New U of L Exhibit Showcases Prison Art," by Devin Katayama. WFPL Radio. August 19, 2011. <http://www.wfpl.org/2011/08/19/new-uofl-exhibit-showcases-prison-art/>

"Art Behind Bars: 'Bar to Walls' Showcases Art By Kentucky Inmates," by Chelsea Gifford. Leo Weekly, Art Section, August 17, 2011.
<http://leoweekly.com/ae/art-art-behind-bars>

"Interview: Artwork Made By Ky. Prisoners on Display at U of L." Noon News, WHAS TV, August 23, 2011.
<http://www.whas11.com/video/yahoo-video/Interview-artwork-made-by-prisoners-128248358.html>

"Hidden Talents: Art Exhibit Offers Look at Inmates' Creative Sides," by Larry Muhammad. The Courier-Journal, Section E, page 5E, Sunday, August 14, 2011. <http://www.courier-journal.com/article/20110815/SCENE05/308150003>

"Inmate Art Exhibit Planned By P&P's Katharine Salomon." by Todd Henson and Lisa Lamb Inside Corrections, Official Newsletter of the Kentucky Department of Corrections, Volume 4, Issue 1, March

2011. [http://corrections.ky.gov/about/Documents/March2011newsletter\[1\].pdf](http://corrections.ky.gov/about/Documents/March2011newsletter[1].pdf)

“DOC Employee Confirms Painting Is A Forgery,” by Todd Henson and Lisa Lamb. Inside Corrections, Official Newsletter of the Kentucky Department of Corrections, Volume 3, Issue 1, March 2010.

"Speed Museum Painting is Declared a Fraud," by Maggie Varner and Michael Kennedy. The Louisville Cardinal, Volume 84, Issue 20, February 2-8, 2010.

http://issuu.com/louisvillecardinal/docs/louisville_cardinal_2-2-10/1?mode=a_p

“Peachy Pairs” by Andrew Christou & Eric King. Creativity Magazine. March 1995, p. 16, 18.

Awards

October 2011 Student Spotlight Profile. School of Interdisciplinary and Graduate Studies, University of Louisville, Louisville, KY

KDOC Employee of the Quarter, 2008

Commissioner’s Award of Superior Performance, 2008

Service Above Self award from University of Louisville ISLP, 2006

Golden Key International Honour Society, 2006

REFERENCES FURNISHED UPON REQUEST