# DISHONEST ASSOCIATES IN THE WORKPLACE: THE CORRELATION BETWEEN MOTIVATION AND OPPORTUNITY IN RETAIL AMONG EMPLOYEE THEFT

by

### EDITH M. FIKES

Presented to the Faculty of the Graduate School of

The University of Texas at Arlington in Partial Fulfillment

of the Requirements

for the Degree of

MASTER OF ARTS IN CRIMINOLOGY AND CRIMINAL JUSTICE

THE UNIVERSITY OF TEXAS AT ARLINGTON

May 2009

Copyright © by Edith M. Fikes 2009

All Rights Reserved

#### **DEDICATION**

I dedicate this to my mother who passed away April 2007. I had just started working on my Masters the semester she was diagnosed and passed away with breast cancer. Although, she is not here to see me graduate in person, I know she is always watching over me. The sacrifices she made for me to have a better life was truly not understood until she passed away.

For Patsy White, professor, and pastor, who sat with my mother so many hours during her illness, Patsy read my first paper to be submitted to graduate school assuring me that I would succeed in graduate school. Even after Mother's passing, she kept up with my progress. In 2008, Patsy was killed in a car accident but her encouragement and tenderness towards my family will never be forgotten.

#### **ACKNOWLEDGEMENTS**

I would like to thank my major professor, Dr. Rhonda Dobbs. Her teaching skills, guidance, and patience did not go unnoticed. While I struggled in trying to finish this paper, she always came through in giving me encouragement and guidance to continue. To my committee members Dr. Alex del Carmen and Dr. Robert Sarver, I'd like to thank you for your time and feedback in assisting me in with this paper. Also, I'd like to thank Retailer XYZ for providing me with the data to use in my analysis.

UTA offered me the additional education and self-confidence to continue to grow in my career in which I will forever be thankful. I can only say that my time here was too short. I will treasure my fellow classmate friendships. Last but not least, I'd like to thank my Aunt Judy, and my sisters, Donna and Kathy. With our mother's recent passing, they continue to give me encouragement and strength to believe in myself and my endeavors.

April 27, 2009

#### **ABSTRACT**

# DISHONEST ASSOCIATES IN THE WORKPLACE: THE CORRELATION BETWEEN MOTIVATION AND OPPORTUNITY IN RETAIL AMONG **EMPLOYEETHEFT**

Edith M. Fikes, M.A.

The University of Texas at Arlington, 2009

Supervising professor: Rhonda Dobbs

White-collar crime is a major loss to the economy, employers, and consumers. It is a crime that often goes undetected, and when detected, employers rarely file charges, so estimates as to how often it occurs are hard to come by. White-collar crime is a very broad category so the focus of this study was on a sector of white-collar crime, retail employee theft. Cressey's (1973) fraud triangle contained three components: motivation, opportunity, and rationalization. Cressey (1973) claimed that if any of one of these three components did not exist, then the crime would not occur. In this study, retail employee theft was analyzed by reviewing associates whose employment was terminated for theft at Retailer XYZ in a 12 month period from July 1, 2007 to June 30, 2008. The study revealed that management failure in following correct policy and procedures was present in 77% of the cases of employee theft in the dataset. There was not a significant correlation between age, length of employment, and management failure. However, the study did reveal vulnerabilities that may contribute to associate theft.

٧

# TABLE OF CONTENTS

ACKNOWLEDGEMENTS		
ABSTRACT		
LIST OF ILLUSTRATIONS		ix
LIST OF TABLE	≣S	х
Chapter		Page
1. INTR	RODUCTION	1
	1.1 Statement of Problem	1
	1.2 The Background of Employee Theft	2
	1.3 Cressey's Fraud Triangle	3
	1.4 Purpose of Research	3
	1.5 Hypotheses	4
2. LITE	ERATURE REVIEW	6
	2.1 Defining White-Collar Crime	6
	2.2 Socially Sensitive Research	8
	2.3 Methodologies	9
	2.4 Methods of Theft	10
	2.5 Employee Responsibility Levels	10
	2.6 Loss Amounts	10
	2.7 Duration of Scheme	11
	2.8 Outcome	11
	2.9 Means of Discovery	13
	2.10 Peer Pressure	13
	2.11 Dishonesty Detection and Prevention	. 14

	2.12 Deterring Deviance	15
	2.13 A General Theory of Crime	16
	2.14 Low Self-Control	. 17
	2.15 Cressey's "Fraud Triangle"	19
	2.15.1 Motivation	20
	2.15.2 Opportunities	23
	2.15.3 Rationalization	24
	2.16 Hypotheses	25
3.	METHODOLOGY	26
	3.1 Research Design	26
	3.2 Population	27
	3.3 Measurement Instrument	27
	3.4 Variables	. 28
	3.5 Analysis Procedure and Research Limitations	29
	3.6 Hypotheses	29
4.	FINDINGS	30
	4.1 Demographic	30
	4.2 Opportunity	34
	4.3 Types of Theft	34
	4.4 Combining Opportunity and Motivation	35
	4.5 Hypotheses	. 38
	4.6 Limitations of Research Design	. 38
5.	DISCUSSION	40
	5.1 Review of Findings	40
	5.2 Weakness of Study	41
	5.3 Implications	42
	5.4 Future Research	43

# APPENDIX

A. DESCRIPTIVE STATISTICS	4	4
B. SUMMARY OF VARIABLES	4	.6
REFERENCES	4	8
BIOGRAPHICAL INFORMATION	5.	4

# LIST OF ILLUSTRATIONS

Figure		Page	
	2.1	Cressey's Fraud Triangle	19

# LIST OF TABLES

Table			Page
	4.1	Demographic Variables	32
	4.2	Opportunity Created by Management Control Failures	34
	4.3	Cross tabulation of Types of Theft by Management Control Failures	35
	4.4	Correlations of Age with Types of Theft	35
	4.5	The Relationship between Length of Employment and Control Failures by Management regarding all Associates	36
	4.6	The Relationship between Length of Employment and Control Failures by Management regarding Hourly Associates	38

#### CHAPTER 1

#### INTRODUCTION

When the general population thinks of "white-collar" crime, they are more likely to recall the more "celebrated cases" such as Enron, Martha Stewart or most recently, Bernie Madoff. In reality, society should be concerned about retail employee theft because financially speaking it is the most costly form of larceny in the United States annually (Hollinger & Adams, 2007).

#### 1.1 Statement of the Problem

Associate theft is a form of larceny. Society tends to view this type of theft differently than street crime. Associate theft is also treated differently than much street crime. The street criminal is more likely to be arrested and convicted, which could lead to limited legitimate opportunities in the future. The dishonest associate, however, is less likely to be criminally processed and might simply find employment elsewhere. Both may be guilty of essentially the same crime, but society reacts to them differently (Shover & Hochstetler, 2006).

In 2007, retailers estimated that approximately 44% of their losses were due to employee theft. According to the 2007 National Retail Security Survey, employee theft cost the 134 corporate retailers who responded approximately \$15.2 billion. The most significant source of inventory loss reported was employee theft. The survey showed that the average losses were approximately 1.44% of annual sales (Hollinger & Adams, 2008).

When employee theft is discovered, the employer generally terminates the dishonest employee, seeks restitution, and may pursue civil demand. Often, the employer does not press charges against the former associate. Further, the employer typically does not reveal the incident or the circumstances of the termination to a future employer. In order to avoid any potential civil repercussions, the former employer will not release any positive or negative information regarding

the former employee's job performance. Therefore, the associate may continue to commit theft at numerous employers without ever being arrested or convicted (Wells, 2007).

Why does an employee steal from their employer? In order to answer this question, the history of the employee-employer relationship needs to be reviewed in more detail.

#### 1.2 The Background of Employee Theft

As far back as the eighteenth century, it was common practice for workers' to retain a portion of the employer's goods entrusted to them. This was widespread and accepted as being legitimate and was sanctioned under traditional entitlement rights. This practice continued into the nineteenth century because of the traditional customs within the manufacturing industry. As the losses and costs accrued, manufacturers sought assistance from the legislature to challenge the traditional rights of employees to keep materials. With the passing of legislation, customary practices shifted from one of "right" to one of "wrongs," and the new language in the workplace was theft, dishonesty, and stealing rather than entitlement. "Perks" were no longer seen as legitimate. This period witnessed the beginning of criminalization of taking goods from the workplace. By the nineteenth century, acts of theft, fraud, blue-collar crime, and white-collar crime were viewed as deviant behavior (Locker & Godfrey, 2006).

Edwin Sutherland coined the term "white-collar" crime describing it as what he believed was a neglected area of criminal behavior. Sutherland (1940) expressed that white collar crime was a form of misrepresentation in financial statements, manipulation in the stock exchange, bribing public officials for government contracts, embezzlement, and misapplication of funds in bankruptcies. Sutherland (1940) stated that "these are what Al Capone called the legitimate rackets" (p. 3). Sutherland classified white-collar crime into two categories: a misrepresentation of asset values and a manipulation of power. Sutherland believed that the only difference between white-collar offenders and lower class offenders was that the criminal law was primarily written to control lower class criminals (Sutherland, 1940).

Wells (2007), a well known fraud examiner and author, pointed out that Sutherland intended the definition to mean criminal acts of corporations and individuals acting in their

corporate capacity. However, over time, the term has evolved to include almost any financial or economic crime, from the boardroom to the mailroom, which includes retail theft. According to Sutherland (1940), criminal statistics showed that crime to be higher in the lower class while it was lower in the upper class. For example, less than 2% of the upper class was committed to prisons. Criminologists used such criminal statistics from criminal justice agencies to derive general theories about criminal behavior. Many of these theories concluded that crime must be caused by poverty since it was primarily concentrated in the lower class. Sutherland (1940) disagreed and argued that the statistics were biased. He went on to state that criminality is learned directly or through interaction, rather than being associated with characteristics such as poverty.

Sutherland (1940) believed that if a person became a criminal it was determined mostly by his or her frequency of contact within the group who were not law-abiding citizens. In terms of white-collar crime, the person may become involved in criminal behavior because it is a general practice in the everyday business environment where he works. Sutherland called this the theory of differential association. However, at that time, he did not provide empirical research to support it.

#### 1.3 Cressey's Fraud Triangle

One of Sutherland's students, Donald R. Cressey, narrowed Sutherland's theory regarding white-collar crime by focusing his studies on embezzlement. Cressey (1973) created the "fraud triangle" that considered three variables as they are related to embezzlement: motivation, opportunity, and rationalization. He theorized that in order for embezzlement to take place, all three conditions must be present (Cressey, 1973). Cressey's theory has been applied to a number of studies examining embezzlement. These studies will be reviewed in the literature review section.

#### 1.4 Purpose of Research

The purpose of this study is to determine if motivation and opportunity are present in thefts by employees in a retail environment. If Cressey's (1973) fraud triangle can apply to the retail

environment, then by controlling one of the three components, retail employee theft can theoretically be minimized.

First, by analyzing the secondary data collected from Retailer XYZ, opportunity and motivation will be examined to determine if there is a significant relationship between the various types of losses, total amount of losses, age, length of employment, and cases with or without opportunities for theft.

Second, by analyzing the secondary data, an attempt will be made to identify a typical retail employee thief from the data provided in the study. A profile will be created of the most common characteristics of those who committed employee theft.

This study differs from most previous studies on employee theft. Typically, studies have analyzed data from anonymous surveys with loss prevention executives and fraud examiners. Knowing that this information is based on opinion and recollection, the analysis can be skewed by not reflecting normal day to day type of employee theft cases in a retail environment. This study is based on data from a retailer's database regarding associates terminated for employee theft.

#### 1.5 Hypotheses

Cressey's (1973) "fraud triangle" will be examined further. First, the researcher proposes that the "opportunity" arm of the triangle is the most likely controllable arm of the three components of the "fraud triangle. Lack of internal controls by management in a retail environment can create opportunities for associates to steal. When management fails to follow proper policy and procedures, a window of opportunity is created. Therefore, management failure affects the occurrence of theft from the employer.

Second, the researcher proposes that the "motivation" arm of the triangle is the next most likely influence regarding theft. The researcher proposes that certain variables can be analyzed to determine if there is a correlation to motivation with certain variables. Based on the information obtained from Retailer XYZ, the cases will be examined for opportunity in regards to management failure. Then motivation will be reviewed by examining age and length of employment related to employee theft.

In the literature review which follows, the following points will be explored: 1) White-collar crime and retail employee theft will be defined. 2) Review of previous studies and their profiles of an employee thief. 3) Can deviance be deterred? 4) Theories of crime and low self-control. 5) An in-depth look at Cressey's three components of the "fraud triangle" theory: motivation, opportunity, and rationalization.

#### CHAPTER 2

#### LITERATURE REVIEW

In this section, the author will provide a review of defining white-collar crime including current and previous literature. First, five case studies will be reviewed regarding white-collar crime. Such items reviewed in these cases are methods of theft, employee levels of responsibility, loss amounts, duration of schemes, outcome of cases, and means of discovery. Next, socially sensitive research, a general theory of crimes and low self-control are reviewed. Lastly, Cressey's "fraud triangle" is reviewed.

#### 2.1 Defining White-Collar Crime

Gottfredson and Hirschi (1990) wrote that there is no legal definition of white-collar crime since there is no crime defined by that name. Whereas, Shover and Hochstetler (2006) define white collar crime as being "committed by nonphysical means and by concealment or guile, to obtain money or property, to avoid the payment or loss of money or property, or to obtain business or personal advantage" (p. 6). Sutherland (1940) summarized a white-collar criminal as one who violates trust and creates distrust, lowers social morale, and produces social disorganization. In the end, the financial loss is minor compared to the damage done to social relations. Both Sutherland (1940) and Shover and Hochstetler (2006) viewed white-collar crime as being committed by men and women whose lives were distinguished by some form of "privilege." The respectability is taken for granted so they resist and deny seeing themselves as criminal.

White-collar crime can be divided into two categories: organizational and occupational.

Organizational crime, also known as corporate crime, is committed by officers, managers, or employees to further their personal interests as well as organizational interests and goals.

Occupational crime is a crime which benefits the perpetrator and harms the corporation (Shover & Hochstetler, 2006). Retail theft is a form of occupational crime.

Organizational crime is far more costly to the economy than occupational crime. Investigations of crime have predominantly focused on individuals and investigators have been slow to recognize the fact that crime can be organizational in nature. First, corporations may willfully tamper with or circumvent testing equipment endangering a safe work environment. Second, corporations may dispose of hazardous materials improperly creating a health risk in a particular environment. Third, businesses may fix prices to make a higher profit. Businesses actions are conducted in order to cut costs not taking into consideration that dangers are being imposed on society (Shover & Hochstetler, 2002).

With a slight variation, individual perpetrators of organizational crime are more concerned in "getting the job done" for their employer at all costs. This can be accomplished by falsifying information while not being directly told to do so. In doing so, they may gain financial bonuses and career advancement. Additionally, individuals may engage in crime due to pressure from supervisors without regard for other considerations (Shover & Hochstetler, 2002).

According to Friedrichs (2002), occupational crime is one of the principal forms of white-collar crime. The term occupational crime has been applied to activities outside of the original meaning of white-collar crime. However, it can be defined as illegal and unethical activities committed for financial gain in the workplace. The Association of Certified Fraud Examiners (2006) defines occupational fraud as "the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets" (p. 6).

Holtfreter (2005) claimed that there has been controversy regarding the definition of white-collar crime in determining the appropriate unit of measure. She categorized occupational fraud into three types: "asset misappropriation, corruption, and fraudulent statements" (p.353). Her analysis revealed that "middle-class" offenders were more likely involved in asset misappropriation or corruption while the "higher status" offenders were usually involved with

fraudulent statements (Holtfreter, 2005). Niehoff and Paul (2002) define misappropriation as an intentional act of an insider better known as an "employee" whom targets their employer. Wells (2007) wrote that misappropriation involves a variety of misconduct ranging from sophisticated investment swindles to petty theft. Whereas, Hollinger and Adams (2008) wrote that employee theft in retail involves the appropriation of either merchandise or cash.

According to Mustaine and Tewksbury (2002), organizations know there are internal losses but are often unable to identify who committed these thefts. The information regarding frequency, prevalence, and costs associated with employee theft is a guess at best. As a result, theft related losses are a contributing factor to a "business expense." Translating to a retail environment, Purpura (2002) wrote that employee theft in retail is not referred to as losses but is known as "shrinkage." Shrinkage is budgeted and defined as losses from employee theft, shoplifters and paperwork errors. Bailey (2006) points out that employee theft takes many forms such as unauthorized discounts, theft of cash, theft of merchandise, refund fraud, and even theft of time.

According to Sauser (2007), there is no universally accepted definition of employee theft which makes it difficult to measure the magnitude of the problem with accuracy. There is no single database for recording all employee theft. Various organizations, agencies, and researchers gather statistics in different ways. Some writers may inflate estimated employee theft dollars while others only report actual employee theft that has been detected.

#### 2.2 Socially Sensitive Research

The lack of accessibility to obtain information and insufficient data has been a concern in previous studies. Bailey (2006) proposed a method of data collection from employee surveys measuring the employee's commitment to their current employer. However, Bailey (2006) was unable to test his theory of planned behavior empirically due to a reluctance of the retailers that he contacted to participate in his study. He referred to employee theft in retail as "socially sensitive research." Shover and Hochstetler (2002) reiterated this point noting that retailers tend to keep their losses private and rarely share details on associate theft with the business world.

Corporations are afraid of liability issues so anonymous surveys are the easiest way to obtain information.

#### 2.3 Methodologies

KPMG Holding (2007) conducted a survey in 2007 utilizing 360 actual fraud investigations conducted by the KPMG Forensic department within Europe, the Middle East and Africa. Their survey was an online questionnaire in which fraud investigators were asked questions about perpetrators and actual fraud investigations that they conducted in various industries in the last few years. Out of several hundred fraud investigations, only profiles with clearly identifiable fraudsters were used for this survey.

Second, the Association of Certified Fraud Examiners (ACFE) conducted a study in 2006 asking Certified Fraud Examiners (CFE) to answer several questions about fraud cases they had investigated and to summarize the largest case that they had handled within the past two years (Association of Certified Fraud Examiners, 2006). Information on 1,134 fraud cases was examined in this study.

Third, Wilson (2004) surveyed risk management professionals who work for various industries across the nation about employee losses. A total of 2,163 respondents participated in this survey which represented 13.5% of the total population sought. The risk managers were contacted electronically and were asked to complete an anonymous survey regarding employee theft. They submitted their completed questionnaire via the Internet.

Fourth, Kamp and Brooks (1991) replicated and extended the research of Hollinger and Clark (1983) on the prevalence and correlates of employee counter-productivity. The methodology used was a survey given to two separate samples. One group consisted of 122 Chicago area retail employees and the other group was 132 college student employees from a southern university. The study failed to specify whether the students were retail employees or campus employees. Both samples consisted of subjects that responded to an advertisement to participate in a group testing session, for which they were paid.

The fifth study was conducted by Richard Hollinger, Ph.D., from the University of Florida. He publishes results from the National Retail Security Survey each year. He reports on the "shrinkage" in the retail industry and has done so for the past 15 years. He sends out surveys to loss prevention executives each year and the surveys are completed anonymously. There were a total of 134 corporate retail chains represented in the 2007 survey. The study measures employee theft, as well as shoplifting, vendor theft, and administrative errors (Hollinger & Adams, 2008). The findings of each of these studies will be summarized in the following sections.

#### 2.4 Methods of Theft

ACFE (2006) considered two categories of theft in retail, cash and non-cash. Cash losses accounted for 70.7% of the total losses associated with retail theft, involving such acts as billing, skimming, cash larceny, check tampering, expense reimbursements, register disbursements, payroll, and wire transfers. The non-cash losses accounted for 29.3% of the total losses and involved such items as theft of merchandise, accessing customer records for purposes of identity theft, revealing trade secrets, and fraudulent stock transfers. Similarly, the findings from the KPMG Holding study (2007) also indicated that the most common method of theft was cash losses. Wilson (2004) determined that the majority of losses reported were inventory/theft schemes, payables fraud, receivable fraud, diversion schemes, bribery/kickback schemes, bid rigging, fictitious write-offs, employee ghosting and expense schemes. There was no breakdown in these methods in percentages and the data examined included various industries.

## 2.5 Employee Responsibility Levels

The levels of responsibilities of the perpetrators varied among the different studies. Wilson (2004) identified the dishonest employees in the following categories: executive, 24%; management, 50%; clerk/accounting, 20%; and other, 6%. ACFE (2006) identified the dishonest employees in the following categories employees, 41.2%; managers, 39.5%, and owner/executive, 19.3%. Lastly, KPMG Holding (2007) identified dishonest employees in the following categories senior management (including board members), 60.0%; and management level, 26.0%. The Wilson (2004) and KPMG (2007) studies reflected a higher percentage of

perpetrators in management and executive level jobs while the ACFE (2006) study indicated that employees were most likely to be perpetrators. The different findings across the studies in terms of the distribution of perpetrators could be due to the examination of different industries. The Wilson (2004) and KPMG (2007) studies examined several industries, whereas, the ACFE (2006) study was focused on the retail industry.

#### 2.6 Loss Amounts

Wilson (2004) and ACFE (2006) categorized the loss amounts very similarly. In determining what percentage of theft cases fell in the range of \$100,000 to \$500,000, Wilson's (2004) findings stated that 44% of the cases fell within this range while 29.1% of the cases examined by ACFE (2006) did. Both of these surveys included only cases of theft involving loss of \$10,000 and above.

In the Chicago sample of the Kamps and Brooks (1991) study, 29% of the sample admitted to giving unauthorized discounts to friends while 30% of the college student sample admitted to giving unauthorized discounts. Thirty percent of the Chicago sample admitted to taking merchandise or property without permission compared to 44% of the college sample. Cash theft was admitted less frequently, with 9% of the Chicago sample admitting to cash theft while 11% of the college sample admitted to cash theft (Kamp & Brooks, 1991). Most relevant to the present study, Hollinger and Adams (2008) estimated that approximately 44% of retailers' losses were due to employee theft.

#### 2.7 Duration of Scheme

Wilson (2004) determined that the most common time frame a theft was discovered was when an employee had been employed between 1 to 2 years in 63% of the cases. ACFE (2006) determined that the average length of the time that a scheme was conducted prior to detection was 18 months until it was detected. KPMG Holding (2007) estimated that it was 1 to 5 years before detection while 26% of the perpetrators were 2 to 5 years, 36% of the time. Hollinger and Adams (2008) survey showed that the average employee caught stealing from their retail employer was employed for 11 months. While Kamp and Brooks (1991) did not examine the

length of scheme, they did examine the prevalence of theft over a six month time period. They found that associates in both samples admitted to stealing from their employer at least once in the past six months. Kamp and Brooks (1991) stated that they believed employee theft is seen as a very socially undesirable activity so it was reasonable to believe that employees were underreporting their involvement in theft. Also, about one-third of the subjects admitted to some form of theft and the subjects reported believing that half of their coworkers had engaged in such activity, too.

#### 2.8 Outcome

ACFE (2006) determined that 66.2% of the cases in retail theft examined were referred for prosecution when the case had a median loss of \$200,000. Breaking down the percentages of those associates caught stealing, 87.9% had never been charged for a previous theft crime, 7.7% had prior convictions, and 4.4% had been charged but not convicted. Organizations declined to prosecute for the following reasons: fear of bad publicity, 43.8%; internal discipline sufficient, 33.1%; private settlement, 30.4%; too costly, 21.5%; lack of evidence, 13.1%; civil suit, 5.8%; and employee disappeared, 0.8%.

Hollinger and Adams (2008) found that prosecution occurred in approximately 11.8% of the employee theft cases. In contrast, Wilson (2004) determined that criminal prosecution was sought in 87% of the cases examined; civil action recovery in 2%, and civil action non-recovery in 32%.

KPMG Holding (2007) found that in 50% of the profiles there was no communication within the organization of the details of the dishonest employee cases. Employers are apprehensive about investors or the stock exchange having knowledge of this type of loss. Therefore, the associate's employment was terminated and never spoken of in the former place of employment. In these cases, the organization is typically concerned about bad publicity if details were exposed. Fifteen percent of the profiles were revealed and communicated within organizations, but companies are very selective regarding what they will discuss openly and what stays behind closed doors.

#### 2.9 Means of Discovery

Wilson (2004) examined whether the organizations had an anonymous reporting process to report dishonesty. Fifty-nine percent stated they had such a reporting process. However, the most common method of discovery for cases of employee theft was found by accident, with 39% of the cases being discovered in this manner. It was reported by ACFE (2006) that 32.0% of the retailers had a hotline. ACFE (2006) found that the most common method of discovery was by "tips," with 40.2% of the cases being discovered in this way. The tips most commonly came from employees, followed by management, anonymously, customers, and lastly, vendors. The study by KPMG Holding (2007) revealed that fraudsters were detected 46% of the time by whistle-blowers or management reviews.

Wilson (2004) also measured five elements that were used to detect dishonesty and he found the following means of detection from most to least common: by accident, 39%; audits, 24%; management discovery, 20%; internal controls, 9%; and anonymous tip, 8%. ACFE (2006) measured five anti-fraud measures to determine if any of these measures were in place during the investigation. They found the following were present: external audits, 54.7%; internal audits, 54.7%; fraud training, 53.3%; surprise audits, 48.0%; and hotline tip, 32.0%.

#### 2.10 Peer Pressure

A group member or a co-worker that reports a peer's misconduct can expect to encounter negative reactions (Trevino and Victor 1992; Dozier and Miceli, 1985). Peer reporting is difficult and risky behavior among associates. Co-workers who are willing to monitor their peer's behavior and report violations to management are a vital resource for organizations. After all, a group member is more likely than management to be aware of a co-worker's dishonesty. Trevino and Victor (1992) note that management needs to be aware of the complex group pressures regarding peer reporting. Group norms are likely to prohibit tattlers and there can be severe consequences. These social conflicts can represent the mentality of us versus them, salary management versus the hourly associates. However, management can apply counter pressures, such as punishing all work group members for one associate's misconduct. This can have a

positive influence if all are punished by relieving some of the peer pressure related to reporting. According to Kamp and Brooks (1991) when management was perceived by the employees as being lenient, then employee attitudes were more pro-theft. On the other hand, when management was perceived as being strict, employees were more oriented towards anti-theft attitudes.

Trevino and Victor (1992) conducted a voluntary study with college students in the classroom. The college students were randomly assigned to four different groups. Each group was given scenarios regarding peer reporting. They were asked various questions about whether it was their responsibility to notify the professor of a peers' cheating. They concluded from the surveys that when peer reporting was viewed as a role responsibility of the group, and if the group members share the consequences of the peer's actions, they would be more inclined to report the incident. If they were not affected negatively, then they were less likely to report their peer even though they dislike the person. However, when it is emphasized as a role responsibility of the group, then they were more likely to report their peer.

#### 2.11 Dishonesty Detection and Prevention

Mishra and Prasad (2006) reviewed internal controls and random inspections in a retail setting. They modeled the retailer-employee interaction as a game and conducted field observations. They found that there was a probability of theft decreasing when random inspections increased. However, they found that by increasing the penalty and decreasing the inspections, the theft increased. Their analysis concluded that penalties are not much of a deterrent. Further, Mishra and Prasad (2006) found that a majority of retailers do not prosecute their employees who are caught stealing. When the associates know that employees caught stealing are rarely prosecuted, there is less fear of getting caught stealing. The failure to prosecute weakens deterrence. Additionally, they concluded that a decrease or lack of internal controls such as management failure to follow correct policy and procedure results in higher theft. According to KPMG Holding (2007), 49% of the fraudsters profiled committed fraud by exploiting weak internal controls. Most fraudsters did not abuse existing controls but rather took advantage

of insufficient controls. When management fails to follow proper policy and procedures, opportunities are created for an associate to steal which they might not have under normal circumstances.

#### 2.12 Deterring Deviance

Robinson and Bennett (1995) defined employee deviance as a voluntary behavior that violates organizational norms and in doing so threatens the well-being of the organization. Associates either lack the motivation to conform to the normative expectations or they become motivated to violate these expectations. The focus is on the violation of norms expressed by the organization rather than work groups or subcultures.

Oliphant and Oliphant (2001) conducted a study using a behavior-based method in a drug store with eight female associates as the subjects. The average age of the women was 28. They ranged from being employed 3 months up to 14 months. The items selected were determined according to high losses as well as some popular items. Each morning before the store opened the items selected were counted by the researcher and her assistant. By having two people count, reliability was maintained. After four weeks of baseline data collection, two charts were posted in the break room. One sign reflected the total retail loss value and the other sign reflected the number of items stolen. The associates did not know about the study, they did not know what items were involved, and were not informed who posted the signs.

The results of the study showed that the number of stolen items decreased once the postings were introduced. Theft of the targeted items actually reduced from a mean loss of \$30 per day to \$8 per day. Typically, management has a difficult time believing that their employees are stealing from them. Although the study revealed that his associates were stealing, the manager was reluctant to share the information with his superiors in fear that it would reflect badly on him (Oliphant & Oliphant, 2001).

Hollinger and Clark (1983) conducted a survey examining the perceived certainty and perceived severity regarding employee theft in the workplace. The data was collected from 47 corporations that consisted of 16 retail store organizations, 21 general hospitals, and 10

electronic manufacturing firms. A survey was mailed to a random sample of employees. The survey was anonymous and the questionnaire focused on their employment experience and their personal involvement in a variety of deviant workplace activities. Hollinger and Clark (1983) concluded that the deterrence effect seems to be less dependent on the social control than on the perceived risk of discovery and sanction. Their data suggested that perceived certainty is the stronger variable, while the weaker variable, perceived severity had only a marginal deterrent effect.

In regards to demographic variables, Hollinger and Clark (1983) concluded that younger employees are more involved in theft than are older workers. It could be that younger workers have a different normative set of expectations. Perhaps the punishment that they would expect to receive does not provide sufficient pain to deter them from the deviant act. Also, younger workers tend to have lower social and economic vulnerability to the effects of detection or punishment.

In management literature, according to Warren (2003), there are two types of deviant behavior. One presents deviant behavior in a negative light, such as employees who break the rules and are seen as those who cause the organization harm. The second emphasizes the positive forms of deviant behavior, such as whistle-blowing, functional disobedience, and exercising one's voice. Warren (2003) found that while both forms of deviant behavior share a fundamental similarity both require a departure from the norms whereby employees must resist social pressure to conform. The workplace environment can create its own norms in which the reference group will be the associates. It is when the environment encourages dishonesty that the reference group can become the norm causing the organization harm that can result in a form of white-collar crime.

#### 2.13 A General Theory of Crime

According to Gottfredson and Hirschi (1990), when it comes to theorizing white-collar crimes, these crimes are usually referred to as the exception. The term itself sets it apart from common crime just in its terminology. The idea of "white-collar crime" came about as a reaction

to the idea that crime is committed by the lower class. However, the white-collar offender seeks personal benefits just like the common criminal so a general theory of crime encompasses white-collar crime and common crime.

Gottfredson and Hirschi (1990) concluded that the theories that seem to apply most realistically to white-collar crimes are those that focus on the learning of cultural values. By using the Uniform Crime Report as their measuring tool, they examined the relation of age to white-collar crime, embezzlement and fraud. Arrest rates for the three categories of crimes peaked during people's late teens to early twenties and declined sharply by the late thirties to early forties. In fact, when it came to age, sex, and race, there was no difference in correlates when opportunity was taken into account. The only difference between white-collar crime and street crime is differential treatment in the legal system for white-collar crime (Gottfredson & Hirschi, 1990).

#### 2.14 Low Self-Control

Gibson and Wright (2001) used Gottfredson and Hirschi's general theory of crime in assessing the interaction between low self-control and delinquent coworkers in predicting delinquency in the workplace. A self-report survey was administered to high school seniors from various social and economic backgrounds in eight high schools in Tennessee. The survey showed that youths with low self-control were more likely to participate in delinquent behaviors such as theft and short-changing customers. According to Greenberger and Steinberg (1981) the results appeared to be consistent with previous literature on occupational delinquency which implies that when low self-control is coupled with a negative work environment, more deviance may occur.

Additionally, Langton, Piquero, and Hollinger (2006) conducted an empirical test regarding the relationship between employee theft and low self-control. Their data was collected at a large southeastern university in which 224 respondents enrolled in different sections of an introductory criminology course voluntarily participated. The students completed a self-report questionnaire regarding self-control pertaining to past, current, and future deviance in realistic scenarios

(Langton et al., 2006). Their findings reflected a strong correlation between behavioral indicators, attitudinal indicators, and resume fraud. They concluded that resume fraud is strongly correlated with intentions to engage in white-collar crime and also an indicator of an underlying criminal propensity such as low self-control that is a predictor to engage in employee theft (Langton et al., 2006).

Mustaine and Tewksbury (2002) conducted a study attempting to identify characteristics and behaviors of college students who steal from their employers. Focusing on individual occupational crime, their research was based on self-report data of a diverse sample of university students that were living off-campus and employed. First, they found that workplace theft does not require much thinking and can occur simply when the opportunity is made available. Individuals that have demonstrated prior illegal activity were more likely to act upon available opportunities when they were presented.

Second, Mustaine and Tewksbury (2002) found that alcohol was part of a subculture with the college students who participated in their study which revealed that getting drunk in public was frequent and surrounded by those less conformed. Drinking and getting drunk was socially accepted behavior so drinkers appear to blend in better and were more likely to obtain jobs in retail.

Third, Mustaine and Tewksbury (2002) found that most student jobs were low-paying and involved regular handling of cash and merchandise. These types of jobs provide the easiest ways to steal from their employer. Students feel strained and frustration with their job or employers. As a way of handling their economic frustration, they may steal. Mustaine and Tewksbury (2002) concluded that their findings were very supportive of the opportunity theory focusing on the context of their current social status rather than psychological characteristics.

Kimiecik and Thomas (2006) concluded that "opportunities" are the primary controllable factors that an employer can maintain to minimize losses. If a retailer has internal controls and enforces them consistently, the retailer will have minimal shrinkage. On the other hand, when internal controls are not in place, theft will occur based on the perception that management does

not care and does not enforce policy and procedures. Furthermore, Kimiecik and Thomas (2006) found that when a loss occurs by an employee, it is when the employee has taken advantage of the opportunity, steals because it appears to be easy, and perceives a low probability of getting caught. This would be very similar to the "fraud triangle" created by Cressey.

#### 2.15 Cressey's "Fraud Triangle"

Cressey (1973) focused his white-collar crime studies on embezzlers and referred to them as "trust violators." He believed that trust violators perceive that they have a financial problem which is non-sharable. They are aware that the problem can be secretly resolved by violating their position of financial trust and they rationalize with themselves that stealing is not wrong (Cressey, 1973).

Prior to publishing his book, "Other People's Money" in 1953, Cressey conducted interviews averaging 15 hours in length with 133 prison inmates who had been convicted of embezzlement. Based on his interviews, he theorized that in order for embezzlement to take place, three conditions must be present (Cressey, 1973). These three conditions were; (1) financial problems that are non-sharable as well as the opportunity to violate trust, (2) means with the knowledge of the workings of the corporation, and (3) rationalization of the crime with themselves (Cressey, 1973). Over the years, his model has become known as the "fraud triangle."

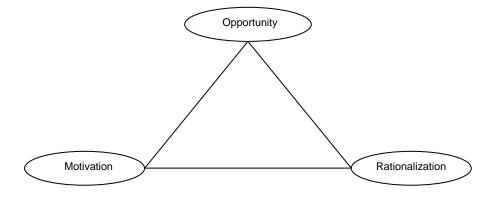


Figure 2.1 Cressey's Fraud Triangle

According to Cressey (1973), the first component necessary for fraud to occur is that there has to be a perceived financial need by the associate, which can occur at any level of the corporation. Once it has been defined that there is a financial need, the associate may notice opportunities to steal. It is at this point that an associate's commitment to the organization is a key variable. If there is commitment, the associate may or may not notice the opportunity but has no motivation to act upon the opportunity. Therefore, the third leg of the "fraud triangle" will not be completed and a loss will not occur (Cressey, 1973).

Second, if there is no commitment of the associate to the organization, the associate watches for an opportunity to steal. Third, the associate rationalizes with him or herself as to why it is not wrong to steal. The second and third step can be reversed, too. Cressey concluded that an embezzler's financial problems are "non-sharable" because of embarrassment or shame, and they rationalize their illegal behavior (Cressey, 1973).

#### 2.15.1 Motivation

According to Morrison and Robinson (1997), there are a number of motivational factors that may be involved in a situation where an associate seizes the opportunity to steal. Some of these factors can be a perceived psychological contract, culture, climate, social factors, demographics, or opportunity. It is not uncommon for an employee to believe that there is a psychological contract between the employer and the employee that has reciprocal obligations. These obligations are based on perceived promises and are not necessarily recognized by the organization. It is when the employee believes that the organization has failed to meet obligations within one's psychological contract that the employee perceives that there has been a breach of contract. There are two conditions that meet the model of a violation. First, reneging occurs when an agent or a supervisor knowingly breaks a promise to an associate. Second, incongruence is when the associate and the employer or supervisor has different understandings about a promise. Therefore, the employee perceives that a breach of contract has occurred and that his or her contributions have not been reciprocated appropriately (Morrison & Robinson, 1997).

An associate may feel anger or even outrage while assessing the perceived contract breach and violation. The associate will reflect upon whether he or she was dealt with honestly and respectfully and if there was adequate justification for the contract breach. The social contract is relevant to the experience of violation because this determines how the associate interprets the perceived breach of contract (Morrison & Robinson, 1997).

Management and supervisors play a critical role in minimizing the violation by providing realistic job outcomes and frequent communication regarding obligations and expectations of the employee. Special attention should be given to managing employees' perceptions and beliefs so he or she understands that promises may be broken and that there will be times of organizational changes (Morrison & Robinson, 1997). It is possible that organizational culture can be the cause of crime.

Shover and Hochstetler (2002) concluded that the culture in the workplace is the cause of crime. When corporate ethical violations occur, most often, workplace culture is the culprit. The workplace environment can encourage dishonesty. Despite the high level of consensus on the causal significance of cultural variation for organizational performance and crime, investigations regarding this suffer from fundamental and persistent shortcomings due to the difficulty in measuring culture.

Schmidtke (2007) conducted a study in a restaurant chain. The survey questioned employees about their attitudes towards the organization and theft. It was a voluntary survey which employees took home to complete and returned in a sealed envelope to deposit it in a box marked "completed surveys." Subjects were not compensated for their participation. Data was collected from 140 men and 70 women that represented about 49% of the non-supervisory personnel of the restaurant chain (Schmidtke, 2007).

According to Schmidtke (2007), social factors are related to the reactions of coworkers who observe theft in the workplace. If there is a perceived similarity between the coworker and the associate that is stealing, then the coworker is more likely to imitate the theft behavior than report the loss to management. When individuals are deciding whether they will imitate the theft

behavior or not, their focus is on the potential consequences for themselves. If they witness no negative consequences happening to the perpetrators, they may conclude that the possibility of being disciplined is low.

Schmidtke (2007) recommended that organizations pay attention to their organizational climate and culture. His study demonstrated that ethical culture affects perceptions of others' behavior and reactions to that behavior. Failure to take disciplinary action for theft behaviors may create a culture where this behavior is considered acceptable. If organizations ensure consequences, this may increase the likelihood that the behavior will be reported by co-workers rather than mimicked. Not only should the culture be considered but how the management treats associates has consequences.

Sauser (2007) reviewed research studies that have been conducted previously and he concluded that management must be fair and respectful towards the employees in order to deter employee theft. Additionally, group norms, organizational culture, and employee job satisfaction are behavioral constructs that deserve attention in reducing employee theft. Similarly, KPMG Holding's (2007) findings also pointed to the importance of culture and ethics policies. If these are not intact, the organization may be unknowingly supporting motivations for associates to steal.

Niehoff and Paul (2000) reviewed previous research and created a multifaceted approach attempting to reduce employee theft by a three theory combination relating each to a level of application. First, the demographic profile on a personal level can predict that certain personalities and backgrounds of employees will tend to steal. Second, social exchange and justice theory on a social level is that theft is a response to an injustice or perceived breach of contracts with associates. Treating employees with respect and maintaining a trustworthy workplace environment will minimize exposure. Third, on a systemic level, the equity theory holds that employees will steal if they have the perception of being low paid and an opportunity to do so presents itself due to poor internal controls. There will always be "bad" people that will steal but employers can be proactive by minimizing the opportunities (Niehoff & Paul, 2000).

#### 2.15.2 Opportunities

Greenberg (2002) conducted a study with 270 customer service representatives in which they were to complete an hour long questionnaire after working hours. Prior to the survey, moral development and ethics programs were in place in one office but not in the other office. They were told in return for them completing the questionnaire that payment would be either from the company itself or from the management. Participants were given the opportunity to steal by taking their payment from a bowl of pennies in which they believed that they would not be detected. Greenberg (2002) concluded that the associates that worked in an office with moral development and an ethics program in place were more likely to refrain from stealing. The associates that worked in an office that did not have an ethics program, on the other hand, were more likely to steal from their employers. Additionally, participants that believed that the money came from the managers, refrained from stealing under any conditions.

It is still not known what factors encourage or discourage employee theft. Opportunities present themselves and certain variables encourage or discourage theft behavior to steal. Greenberg (2002) concluded that employees were more likely to steal from their employer than from a co-worker. Employees relate more easily with their co-workers than an entity such as the corporation (Greenberg, 2002).

Felson and Clarke (1998) claimed there were three crime opportunity theories in progress. They referred to them as "approaches" since none at the time had been claimed as a formal theory. The three crime opportunity approaches are the routine activity approach, the crime pattern approach, and the rational choice perspective. First, the routine activity approach started out as an explanation of predatory crimes in which three elements must be present. The three elements are: (1) the offender must be motivated; (2) there must be a suitable target, and (3) there must be an absence of a guardian that could prevent the crime. If one of the three elements is missing, then the crime is not likely to take place.

Felson and Clarke (1998) and Cohen and Felson (1979) argued that structural changes can affect crime due to either the creation of the control of criminal opportunities. From this

perspective, control is critical in decreasing illegal activities. Predators are interested in targets that have value; as well they also consider the weight of the item to be taken, visibility or vulnerability of getting caught, and access to the target. If all four elements are present and the guardian is absent, a crime is likely to occur (Felson & Clarke, 1998).

Second, the crime pattern theory expressed that people interact with their physical environment either producing more or less crime based on opportunity. There are three main concepts: nodes, paths, and edges. Nodes refer to a sense of movement in which people move from one place to another with crime opportunities. Offenders will use the paths that are part of their everyday activity. The edges refer to boundaries of insiders and outsiders. Insiders commit more crime closer to home while outsiders tend to offend at the edges of their own areas (Felson & Clarke, 1998).

The third opportunity theory that Felson and Clarke (1998) discussed was the rational choice perspective. This theory focuses on the offender's decision making. The assumption is that the offender's behavior is purposive and will benefit him or her in some way. Offender's goals are generally short-term and long-term costs and benefits of the crime are typically not considered.

Felson and Clarke's (1998) three approaches of crime opportunities compared the following as such: 1) the routine activities approach referred to the larger society, 2) the crime pattern approach referred to the local area, and 3) the rational choice approach referred to an individual. In accepting that opportunity is a cause of crime, just as personal and social variables, policy and practice is more relevant in reducing the crime opportunities since it would affect a larger group.

#### 2.15.3 Rationalization

Piquero, Exum, and Simpson (2005) integrated the notion of "desire-for-control" and "rational choice," focusing on risks and rewards. They conducted a survey consisting of three scenarios. It was given to 13 business executives that recently attended an MBA program and 33 students that were currently enrolled in an MBA program. The questionnaire involved various

types of corporate violations, price-fixing, Environmental Protection Agency (EPA) violations, and bribery. The survey included various types of situations, individuals, and personality characteristics.

Their findings suggested that white-collar offenders possessed personality characteristics such as a tendency toward risk and recklessness, ambitiousness and drive, and egocentricity along with a hunger for power. Their desire-for-control was positively and significantly related to violation intentions. Individuals desiring more control may be unable to realize an appropriate end to reach for control, and are likely to engage in violations of the law. The crime is chosen because the benefit outweighs the perceived cost associated with committing the crime (Piquero et al., 2005). Additionally, Piquero et al., (2005), concluded that an individual with a high desire-for-control may resort to crime because of his desire to be in control coupled with a fear of failure. White-collar offenders feel the need to reassure themselves of their ability to succeed. Therefore, they perceive that in order to survive, and more importantly, get ahead, they will deceive their employer.

#### 2.16 Hypotheses

Applying Cressey's fraud triangle to the study of employee theft in a retail environment, the author seeks to answer the question if certain variables are present in cases of employee theft. Secondary data was reviewed to determine if opportunities and/or motivation were present in cases of theft in a retail environment. According to Cressey (1973), if any part of the triangle is broken, the loss will not occur. These two variables will be examined to see if they impact the type of theft or the amount of loss incurred as a result of the theft. Lastly, the data will be analyzed for commonalities among employees who commit retail theft.

In the following chapter, the methodological processes for this study will be discussed, as well as the design and the hypothesis. Then Chapter 4 will present the findings from the statistical analysis followed by the discussion in Chapter 5

#### **CHAPTER 3**

#### **METHODOLOGY**

The purpose of this study is to determine if motivation and opportunity are present in cases of employee theft in the retail environment. This study will focus on the opportunity and motivation arms of Cressey's "fraud triangle." The data used will be discussed in this chapter, along with the method of data collection, data analysis, and a discussion of the author's hypotheses.

#### 3.1 Research Design

Secondary data obtained from Retailer XYZ was utilized in this study. Retailer XYZ asked to remain anonymous to limit any exposure for civil litigation. The data was drawn from a database of information retained and controlled by the corporate loss prevention department of Retailer XYZ. The data was obtained with the approval of the Vice-President of Loss Prevention from Retailer XYZ. Additionally, approval was acquired from the Institutional Review Board (IRB) at the University of Texas at Arlington before beginning the study. The file contained data from a one year time frame and included information on all employees terminated for dishonesty from July 1, 2007 to June 30, 2008. The loss prevention department at Retailer XYZ regularly retains information about associates terminated for dishonesty. The retailer employs investigators that conduct internal investigations within their designated area, in which they interview relevant parties and assist with the termination of associates causing a loss to the corporation. Upon closing of the investigations, the investigators enter the data regarding the case into the database. In order to protect the privacy of the former associates, identifying markers have been removed.

Specific information about each case is entered into the database with various formatted variables that must be entered into the system. Additionally, a text summary of the

investigation along with the outcome of the case is included. Retailer XYZ uses this database to track theft cases and trends in theft over time. The researcher utilized SPSS to examine the association between measures of motivation and opportunity with characteristics of theft. The goal was to determine if there was a significant correlation in the population between age, length of employment, control failure by management, type of theft, and the amount of loss due to the theft. T-tests and crosstabulations were used to analyze this data.

Although, there are three arms in Cressey's fraud triangle, only two were examined in this study due to the nature of the data available. The researcher attempted to determine if opportunities and/or motivation were present in these cases of employee theft and if they impacted the type of theft or the total loss incurred as a result of the theft. Lastly, the data will be analyzed for commonalities among employees who commit retail theft.

## 3.2 Population

This subjects studied in this research were associates terminated for dishonesty during a certain point in time from a retail job. Dishonesty included cases of theft, fraud, and intent to cause a loss to the corporation. The entire population of the 502 cases within the dataset at Retailer XYZ during the July 1, 2007 to June 30, 2008 time period was used. These subjects were selected based on the fact that the information was from a database in retail and research of this type has not typically been done in the retail field due to the sensitivity of the data. Also, this was the most recent information available to obtain with the approval and cooperation of Retailer XYZ.

## 3.3 Measurement Instrument

The measurement instrument for this study was carefully reviewed for the best possible process of analyzing the information. From the researcher's findings, very limited academic research has been conducted on retail theft using secondary data along the lines of what is utilized in the present study. This type of a research design is a valuable tool and the results are quantifiable. The findings could represent relevant application in areas where academic literature

is currently limited introducing sensitive information anonymously from retail that is rarely shared. The data dictionary for the secondary data used in this study is located in Appendix B.

## 3.4 Variables

A quantitative methodology was used in analyzing the variables in this study. The units of analysis are the associates terminated for theft. Two dependent variables are used, the type of theft and the total loss amount. Type of theft is categorized into 5 groups; cash (CASH), merchandise (MDSE), rewards abuse (REWARDS), theft of services (SVCS), and point-of-sale (POS). Each is measured as a dichotomous dummy variable. The total loss amount is a continuous variable measured in dollars.

The primary independent variables of interest are motivation and opportunity. Although, there are not direct measures of motivation included in the data set, there are two variables that can be used as proxy measures of commitment, length of employment (LOE), and age of the associate (AGE). Both are continuous variables. LOE is measured in years and months and AGE is measured in years. Each of these variables is viewed as commitment and in return should determine motivation.

The measure of opportunity utilized in the study is management control failure. Management control failures had numerous categories as options in the database. Also, the author found that investigators at Retailer XYZ did not always fill in this answer. The author reviewed the summary of the cases lacking this answer then determined if the theft was a result of management not following proper policy and procedure. By doing so, the author converted control failures (CONTFAIL) to be measured nominally, 0 = no, and 1 = yes.

The demographic variables included are GENDER and RACE which are both nominal level variables. Associate levels of responsibility is a dummy variable (MGMTHOUR) with Hourly Associates = 0 and Salary Management = 1. Other variables that were included in the dataset were source of information (INFO), and outcome of the case (OOC). INFO reveals how the case was discovered and what led to the investigation. OOC explains what action, if any, was taken with the associate upon termination.

## 3.5 Analysis Procedure and Research Limitations

The population of the associates in Retailer XYZ database terminated for theft remains limited and is representative of the time period from which it was taken. Findings can vary in the past and the future among the associates terminated for theft as well as the variables involved.

In analyzing data in quantitative research, threats to internal and external validity must be considered. One potential threat to internal validity that should be considered in this study could be instrumentation. Instrumentation is a potential problem with secondary data. Investigators may define the various kinds of theft differently. Also, omission of information (missing data) for the various variables can hinder the analysis. For example, control failure was not always classified so the researcher had to review the summary of the case to determine if a loss occurred due to management not following correct policy and procedure. The author acknowledges this weakness in the research design. The limitations to this research study should be acknowledged when reviewing and attempting to interpret the findings of the research in Chapters 4 and 5. These concluding chapters will contain the findings of the current study and address limitations of the study.

## 3.6 Hypotheses

Cressey's "fraud triangle" model consists of the three main elements: motivation, opportunity, and rationalization. Cressey's theory claims that if any one of the three elements is missing then the theft will not occur. Only two of the elements are included in this study. It is expected that both motivation and opportunity will be present in the majority of the cases of theft included in the data. More specifically, it is anticipated that age and length of employment (LOE) will be related to the type of theft and to the total loss amount. The researcher expects to find that management's control failures will be a key factor in most cases and that control failures will impact both the type of theft and the total loss amount.

#### CHAPTER 4

#### **FINDINGS**

This chapter presents the results of the statistical analysis of the data. Associations were measured using t-tests, cross tabulations, and ANOVA.

## 4.1 Demographics

A total of 502 cases were reviewed in the current study (N=502). The methodological procedures regarding the population selection and the IRB approval was discussed in Chapter 3. The Statistical Package for the Social Sciences (SPSS) software was used for the coding of the variables contributing to the results of the study. The descriptive statistics for the sample are provided in Table 4.1. As shown, 59% of the cases involved male employees and 41% involved females. For ease of analysis, the researcher categorized age into ranges, the majority of associates terminated for theft were in the age range between 18 and 22 years of age (48%), followed by 23% between 23 and 28 years of age, 10% were between 29 and 35 years of age, 6% of the associates were between the ages of 16 and 17 years of age, 9% were between 36 and 45 years of age, and 4% were between 46 and 55 years of age. In reviewing the descriptive statistics for the continuous version of this variable, the researcher found that 25 years of age was the mean, 22 years of age was the median, and 18 years of age was the mode for an associate terminated for theft. There were 11 cases missing data regarding age of the associate.

The majority of the associates terminated for dishonesty were white at 55%, followed by Black at 24%, Hispanic at 18%, and Asian at 3%. There were 123 associates included in the data for which race was not indicated. The associate levels were divided into two groups reflecting that 88% were hourly associates and 12% were salary management.

The original data for the length of time employed was a continuous variable. The data was converted to an ordinal variable for ease of analysis. When reviewing the employment with

the company as a continuous variable, the mean of an associate's length of employment with the company was three months while the mode was four months. Categorically, the majority of the associates terminated for theft were those employed up to six months at 36%. Followed by associates employed six months up to one year at 23%, then from one year up to three years at 28%, and then for those three years and beyond at 13%. The data regarding length of employment was missing for seven of the cases.

In reviewing the outcome of the case, the survey revealed that 87% of the associate's were terminated without any criminal charges filed. Next, 8.9% were terminated and the case was referred for prosecution, 2.7% were 17 years of age or younger were terminated and released to their parents, and 1% were terminated or resigned and had a police report filed. The data regarding outcome of the case was missing 21 of the cases.

The survey included the source of the information. The source of information revealed how the case was discovered which led to the investigation. The source of information revealed that management discovered the associate or incident the majority of the time at 53.5%. This was followed by hourly associates at 15.4%, discovery by a Loss Prevention Manager at 15.2%; discovery by Home Office at 9.4%, report by an outside source at 2.5%, and viewing Closed Circuit Television at 2.5%. The data regarding source of information was missing 14 of the cases.

The original data for the amount of loss per case was a continuous variable. For ease of analyzing the information, the researcher categorized the losses into eight ordinal categories. The leading category was \$10 to \$24 at 39.4%, followed by \$25 to \$199 at 20.5%, \$200 to \$499 at 14.1%, \$500 to \$999 at 10.2%, \$1,000 to \$2,499 at 12.7%, \$2,500 to \$4,999 at 1.6%, \$5,000 to \$9,999 at 1%, and \$10,000 to \$14,999 at 0.4%. The total loss for each case in which an associate was terminated for theft had a mean value of \$523.

The types of theft were grouped into five categories: cash, merchandise, rewards abuse, theft of services, and point-of sale. Cash theft included cash theft from the register and/or the safe. Merchandise theft included merchandise stolen from back stock, damages, resale, lockup,

and sales floor. Rewards abuse included unauthorized usage of the rewards program. Such items would include ringing up a customer's sale on one's own rewards account. Such transactions would result in a rewards check that the associate was not entitled to obtain. Theft of services would include failure to pay for copy center or computer work, unauthorized delivery fees, and payroll manipulation. Point-of-sales included manipulation of cash or gift cards issuance and/or redeemed, fraudulent cash post voids, fraudulent item corrects, improper use of customer property, fraudulent returns, misappropriation of coupons, under-ringing, and giving away merchandise to friends and/or family. The following were omitted from the types of theft when classifying into categories: workplace violence, vandalism/destruction of company product, and home office activity/hotline call. This resulted in a total of five cases being omitted. The leading type of theft was point-of-sale with 171 cases at 38%, followed by merchandise theft with 115 cases at 26%, rewards abuse with 110 cases at 24%, cash theft with 36 cases at 8%, then theft of services with 18 cases at 4%.

Table 4.1 Demographic Variables

Variable	Frequency	Percentage
		(%)
Gender		
Male	297	59
Female	205	41
Age		
16 – 17 years old	31	6
18 – 22 years old	233	48
23 – 28 years old	115	23
29 – 35 years old	51	10
36 – 45 years old	43	9
46 – 55 years old	18	4
Race		
White	210	55
Black	89	24
Hispanic	69	18
Asian	11	3
Associate Level		
Hourly Associates	439	88
Management	63	12
Length of Employment		
0 to 6 months	179	36
6 months to 12 months	113	23

Table 4.1 - continued

1 year to 3 years       140       28         3 years and Longer       63       13         Outcome of the Case       Terminated –no charges filed       420       87         Referred for prosecution       43       9         Released to parents       13       3         Resigned & police report filed       5       1         Source of Information         Management       261       54         Hourly Associate       75       15         Loss Prevention Manager       74       15         Corporate Office       46       9         Closed Circuit Television       12       3         Outside Source       20       4         Amount of Loss       310,000 to \$14,999       2       1         \$10,000 to \$9,999       5       1         \$2,500 to \$4,999       8       2         \$1,000 to \$2,499       64       13         \$20 to \$499       71       14         \$25 to \$199       103       20         \$0 to \$24       198       39         Types of Theft       36       8         Cash Theft       36       8         Merchandise The	rable 4.1 - continued		
Outcome of the Case         420         87           Referred for prosecution         43         9           Released to parents         13         3           Resigned & police report filed         5         1           Source of Information         5         1           Management         261         54           Hourly Associate         75         15           Loss Prevention Manager         74         15           Corporate Office         46         9           Closed Circuit Television         12         3           Outside Source         20         4           Amount of Loss         3         1           \$10,000 to \$14,999         2         1           \$5,000 to \$9,999         5         1           \$2,500 to \$4,999         8         2           \$1,000 to \$2,499         64         13           \$500 to \$499         51         10           \$20 to \$499         71         14           \$25 to \$199         103         20           \$0 to \$24         198         39           Types of Theft         36         8           Cash Theft         36         8	1 year to 3 years	140	
Terminated –no charges filed         420         87           Referred for prosecution         43         9           Released to parents         13         3           Resigned & police report filed         5         1           Source of Information	3 years and Longer	63	13
Referred for prosecution       43       9         Released to parents       13       3         Resigned & police report filed       5       1         Source of Information	Outcome of the Case		
Released to parents       13       3         Resigned & police report filed       5       1         Source of Information	Terminated –no charges filed	420	87
Resigned & police report filed         5         1           Source of Information         261         54           Management         261         54           Hourly Associate         75         15           Loss Prevention Manager         74         15           Corporate Office         46         9           Closed Circuit Television         12         3           Outside Source         20         4           Amount of Loss         310,000 to \$14,999         2         1           \$5,000 to \$9,999         5         1           \$2,500 to \$4,999         8         2           \$1,000 to \$2,499         64         13           \$500 to \$999         51         10           \$200 to \$499         71         14           \$25 to \$199         103         20           \$0 to \$24         198         39           Types of Theft         36         8           Cash Theft         115         26           Rewards Abuse         110         24           Theft of Services         18         4	Referred for prosecution	43	9
Source of Information         261         54           Management         261         54           Hourly Associate         75         15           Loss Prevention Manager         74         15           Corporate Office         46         9           Closed Circuit Television         12         3           Outside Source         20         4           Amount of Loss	Released to parents	13	3
Management       261       54         Hourly Associate       75       15         Loss Prevention Manager       74       15         Corporate Office       46       9         Closed Circuit Television       12       3         Outside Source       20       4         Amount of Loss	Resigned & police report filed	5	1
Hourly Associate       75       15         Loss Prevention Manager       74       15         Corporate Office       46       9         Closed Circuit Television       12       3         Outside Source       20       4         Amount of Loss	Source of Information		
Loss Prevention Manager       74       15         Corporate Office       46       9         Closed Circuit Television       12       3         Outside Source       20       4         Amount of Loss       ***       ***         \$10,000 to \$14,999       2       1         \$5,000 to \$9,999       5       1         \$2,500 to \$4,999       8       2         \$1,000 to \$2,499       64       13         \$500 to \$999       51       10         \$200 to \$499       71       14         \$25 to \$199       103       20         \$0 to \$24       198       39         Types of Theft       36       8         Cash Theft       36       8         Merchandise Theft       115       26         Rewards Abuse       110       24         Theft of Services       18       4	Management	261	54
Corporate Office         46         9           Closed Circuit Television         12         3           Outside Source         20         4           Amount of Loss             \$10,000 to \$14,999         2         1           \$5,000 to \$9,999         5         1           \$2,500 to \$4,999         8         2           \$1,000 to \$2,499         64         13           \$500 to \$999         51         10           \$200 to \$499         71         14           \$25 to \$199         103         20           \$0 to \$24         198         39           Types of Theft         36         8           Cash Theft         115         26           Rewards Abuse         110         24           Theft of Services         18         4	Hourly Associate	75	15
Closed Circuit Television         12         3           Outside Source         20         4           Amount of Loss             \$10,000 to \$14,999         2         1           \$5,000 to \$9,999         5         1           \$2,500 to \$4,999         8         2           \$1,000 to \$2,499         64         13           \$500 to \$999         51         10           \$200 to \$499         71         14           \$25 to \$199         103         20           \$0 to \$24         198         39           Types of Theft         36         8           Cash Theft         36         8           Merchandise Theft         115         26           Rewards Abuse         110         24           Theft of Services         18         4	Loss Prevention Manager	74	15
Outside Source       20       4         Amount of Loss       \$10,000 to \$14,999       2       1         \$5,000 to \$9,999       5       1         \$2,500 to \$4,999       8       2         \$1,000 to \$2,499       64       13         \$500 to \$999       51       10         \$200 to \$499       71       14         \$25 to \$199       103       20         \$0 to \$24       198       39         Types of Theft       36       8         Cash Theft       36       8         Merchandise Theft       115       26         Rewards Abuse       110       24         Theft of Services       18       4	Corporate Office	46	9
Amount of Loss         \$10,000 to \$14,999       2       1         \$5,000 to \$9,999       5       1         \$2,500 to \$4,999       8       2         \$1,000 to \$2,499       64       13         \$500 to \$999       51       10         \$200 to \$499       71       14         \$25 to \$199       103       20         \$0 to \$24       198       39         Types of Theft       36       8         Cash Theft       36       8         Merchandise Theft       115       26         Rewards Abuse       110       24         Theft of Services       18       4	Closed Circuit Television	12	3
\$10,000 to \$14,999	Outside Source	20	4
\$5,000 to \$9,999       5       1         \$2,500 to \$4,999       8       2         \$1,000 to \$2,499       64       13         \$500 to \$999       51       10         \$200 to \$499       71       14         \$25 to \$199       103       20         \$0 to \$24       198       39         Types of Theft       36       8         Cash Theft       36       8         Merchandise Theft       115       26         Rewards Abuse       110       24         Theft of Services       18       4	Amount of Loss		
\$2,500 to \$4,999	\$10,000 to \$14,999	2	1
\$1,000 to \$2,499 64 13 \$500 to \$999 51 10 \$200 to \$499 71 14 \$25 to \$199 103 20 \$0 to \$24 198 39  Types of Theft Cash Theft 36 8 Merchandise Theft 115 26 Rewards Abuse 110 24 Theft of Services 18 4	\$5,000 to \$9,999	5	1
\$500 to \$999       51       10         \$200 to \$499       71       14         \$25 to \$199       103       20         \$0 to \$24       198       39         Types of Theft       20       30         Cash Theft       36       8         Merchandise Theft       115       26         Rewards Abuse       110       24         Theft of Services       18       4	\$2,500 to \$4,999	8	2
\$200 to \$499       71       14         \$25 to \$199       103       20         \$0 to \$24       198       39         Types of Theft       36       8         Cash Theft       36       8         Merchandise Theft       115       26         Rewards Abuse       110       24         Theft of Services       18       4	\$1,000 to \$2,499	64	13
\$25 to \$199       103       20         \$0 to \$24       198       39         Types of Theft         Cash Theft       36       8         Merchandise Theft       115       26         Rewards Abuse       110       24         Theft of Services       18       4	\$500 to \$999	51	10
\$0 to \$24	\$200 to \$499	71	14
Types of Theft         36         8           Cash Theft         115         26           Merchandise Theft         110         24           Rewards Abuse         110         24           Theft of Services         18         4	\$25 to \$199	103	20
Cash Theft       36       8         Merchandise Theft       115       26         Rewards Abuse       110       24         Theft of Services       18       4	\$0 to \$24	198	39
Merchandise Theft         115         26           Rewards Abuse         110         24           Theft of Services         18         4	Types of Theft		
Rewards Abuse         110         24           Theft of Services         18         4	Cash Theft	36	8
Theft of Services 18 4	Merchandise Theft	115	26
	Rewards Abuse	110	24
Point-of-Sale Theft 171 38	Theft of Services	18	4
	Point-of-Sale Theft	171	38

## 4.2 Opportunity

Opportunity was measured according to control failures by management. If management failed to do any of the following, their actions or lack of actions assisted in creating an opportunity for the associate to steal from their employer. Such items would include the following: damage cage not secured, entering or exiting the building alone, failure to check returns for contents, failure to inspect trash, failure to processed non-receipted returns, failure to review refund report, failure to scan product, failure to secure cash pick up, failure to secure customer's credit cards, failure to secure merchandise, failure to secure product per merchandising guidelines, improper/unauthorized use of company funds, incorrect register access, key controls, lock up

door propped open, bag checks not conducted, manager not present at the front lanes, password integrity, unauthorized associate in lock up, and unauthorized price overrides

If the loss was not a result of a manager's actions or lack of actions, then "none" was selected for the control failure variable. Due to the importance of this particular variable, the researcher reviewed case summaries to determine if there was a management failure or not, for those cases for which no data was initially entered by the investigator. For analysis, the variable was a nominal variable with 0=No and 1=Yes.

Conducting a t-test the results displayed in Table 4.2 indicates that 77% or 369 of the associates terminated for theft had an opportunity created for them to steal while 23% or 110 associates terminated for theft did not have an opportunity created for them by management failing to follow correct policy and procedure. Control failure by management was significant at .01 which led to a significant range of amount. The mean loss incurred for the cases in which there was a management control failure was \$631 compared to \$245 when there was not a management control failure. Twenty-three of the cases were missing the data and/or the researcher was unable to determine from the summary how the case should be classified.

Table 4.2 Opportunity Created by Management Control Failure

	Control Failure by Management Y/N	N	Mean	Std. Deviation	Std. Error Mean
Total Amount	No	110	\$245.1645	\$606.29341	\$57.80781
	Yes	369	\$631.3207	\$1,366.51340	\$71.13785

Independent Samples Test – Significant at .000 – 95% confidence interval Significance at .004 (2-tailed)

#### 4.3 Types of Theft

Table 4.3 presents the cross tabulation of the fives types of theft by management control failure. As shown, 43.2% of the cases in which there was a control failure were point-of-sale theft, 26.3% were merchandise theft, 20.2% were rewards abuse, 6.0% were cash theft, and 4.2% were theft of services. There was a significant relationship between these two variables as indicated by phi. Point-of-sale theft and merchandise theft seem to be more strongly related to control failure than do the other forms of theft.

Table 4.3 Cross tabulation of Types of Theft by Management Control Failure

	Control Failure by Management		
	No	Yes	
Cash Theft	16	20	
	15.4%	6.0%	
Merchandise Theft	23	87	
	22.1%	26.3%	
Rewards Abuse	39	67	
	37.5%	20.2%	
Theft of Services	4	14	
	3.8%	4.2%	
Point-of-Sale Theft	22	143	
	21.2%	43.2%	

Phi and Cramer's V = .257 and Sig = .000

## 4.4 Combining Opportunity and Motivation

The first column of Table 4.4 presents the bivariate correlation coefficient of age and each of the five types of theft. As shown, age is significantly correlated with only one of the five types of theft, theft of services. The next two columns show the bivariate correlation coefficient of age and type of theft when there is no control failure and when there is a control failure. The last column then, examines both a motivation measure and the opportunity measure at the same time. As shown, age was positively and significantly correlated with theft of services when there was a control failure and when there was not a control failure.

Table 4.4 Correlations of Age with Types of Theft

	Total	No Control Failure CONTFAIL=0	Control Failure CONTFAIL=1
Cash Theft	.081	.106	.072
Merchandise Theft	059	.005	075
Rewards Abuse	023	166	.007
Theft of Services	.172**	.268**	.146**
Point-of-Sale Theft	043	031	034
Total Amount of Loss	.040	022	.048

\*\* p<.01; \* p<.05

In order to determine if there is a significant relationship between the length of employment, total loss amount of a case, and management control failure, the ANOVA table was examined. The computation was done with the entire population. Table 4.5 displays the findings that there is a significant relationship between control failure and total loss amount. Associates terminated for theft when employed up to 6 months have a mean loss amount of \$244 in comparison when an associate terminated for theft involved a control failure by management the mean amount of loss was \$540. Associates terminated for theft when employed 6 months to 12 months had a mean loss amount of \$181 in comparison when an associate terminated for theft involved a control failure by management the mean amount of loss was \$807. **Associates** terminated for theft when employed 1 year to 3 years had a mean loss amount of \$138 in comparison when an associate terminated for theft involved a control failure by management the mean amount of loss was \$497. Associates terminated for theft when employed 3 years and longer had a mean loss amount of \$721 in comparison when an associate terminated for theft involved a control failure by management the mean amount of loss was \$819. Overall, the mean amount of loss was \$249 when there was not a control failure by management in comparison when an associate case involved a control failure by management the mean amount of loss was \$633. The difference in means was only .079. The examination of the association was Eta squared at .014 showing that it was not a strong correlation between length of employment, amount of loss, and control failure by management.

<u>Table 4.5 The Relationship between Length of Employment and Control Failures by Management Regarding All Associates</u>

	Control Failure by			
Length of Employment	Management	Mean	N	Std. Deviation
0 to 6 months	No	\$244.1969	45	\$638.18024
	Yes	\$540.5455	125	\$957.197.47
6 months to 12 months	No	\$181.3165	17	\$259.77337
	Yes	\$807.2869	94	\$1,530.44019
1 year to 3 years	No	\$138.4406	34	\$284.29008

Table 4.5 - continued

Table ne continued				
	Yes	\$497.5565	100	\$850.20343
3 years and longer	No	\$721.8073	11	\$1,239.48077
	Yes	\$819.4496	47	\$2,449.16426
Total	No	\$249.7019	107	\$614.16809
	Yes	\$633.1228	366	\$1,3171.25252

Eta square =.014, Sig =.079

The ANOVA table was computed a second time to analyze if there was a significant relationship between the length of employment, total loss amount of a case, and management control failure when the management cases are excluded from the data. Again, there is a significant difference between control failure and loss. Table 4.6 reflects that associates terminated for theft when employed up to 6 months have a mean loss amount of \$245 in comparison when an associate terminated for theft involved a control failure by management the mean amount of loss was \$524. Associates terminated for theft when employed 6 months to 12 months had a mean loss amount of \$171 in comparison when an associate terminated for theft involved a control failure by management the mean amount of loss was \$703. terminated for theft when employed 1 year to 3 years had a mean loss amount of \$97 in comparison when an associate terminated for theft involved a control failure by management the mean amount of loss was \$466. Associates terminated for theft when employed 3 years and longer had a mean loss amount of \$143 in comparison when an associate terminated for theft involved a control failure by management the mean amount of loss was \$198. Overall, the mean amount of loss was \$180 when there was not a control failure by management in comparison when an associate case involved a control failure by management the mean amount of loss was \$531. However, it was not a significant difference. The examination of the association was Eta squared at .017 showing that the correlation between length of employment, amount of loss, and control failure by management was not a strong one.

<u>Table 4.6 The Relationship between Length of Employment and Control Failures by Management</u>
Regarding Hourly Associates

	Control Failures			
Length of Employment	by Management	Mean	N	Std. Deviation
0 to 6 months	No	\$245.2014	44	\$645.52231
	Yes	\$524.9437	118	\$958.68163
6 months to 12 months	No	\$171.8137	16	\$265.22358
	Yes	\$703.3116	86	\$1,246.37482
1 year to 3 years	No	\$97.8270	30	\$150.35561
	Yes	\$466.1301	88	\$845.85886
3 years and longer	No	\$143.1533	6	\$343.35189
	Yes	\$198.8080	25	\$304.38139
Total	No	\$180.5376	96	\$465.85607
	Yes	\$449.7565	317	\$907.64501

Eta square =.017, Sig = .071

## 4.5 Hypotheses

Motivation and opportunity were reviewed in this study determining if there was a strong correlation. First, the author theorized that management's failure to comply with policy and procedures is significant and creates the opportunity for the employees to steal. Second, the author theorized that motivation could be analyzed, and show a potential relationship between length of employment and age of associate.

Management failure to follow proper policy and procedures showed a strong relationship when using the t-test between management failure and employee theft. Also, cross tabulations revealed when reviewing the types of theft that showed that point-of-sales theft, merchandise theft, and rewards abuse had a high correlation when there was a management control failure. The length of employment and age of associate did not show a strong correlation between management failure and total loss.

## 4.6 Limitations of Research Design

The study consisted of fraud cases that were obtained from a secondary dataset. The types of flaws from previous studies have reflected information regarding "celebrated cases" while

some studies were estimates from loss prevention executives and fraud examiners. The lack of detailed information or information not answered in the database being reviewed can impact the evaluation. Additionally, some investigators may classify information differently than others. The room for error or interpretation of information may have influenced the results of the study. Inability to determine full-time hourly and part-time hourly associates with the database would have been helpful in classifying the groups in the study. Also, the investigators did not always record sufficient information regarding each case entered into the database. A number of the cases had to be reviewed by the researcher to determine if management failure was an element of the employee theft case.

#### CHAPTER 5

#### DISCUSSION

The purpose of this study was to determine if there was a correlation between motivation and opportunity in the retail environment that influences the type of theft and/or amount of loss in regards to employee theft. In this chapter, the researcher will once again review the correlations and the means found through the analysis of the study while discussing the limitations of this study. In conclusion, the author will conclude with the implications for policy and areas of consideration for future research.

## 5.1 Review of Findings

In reviewing the data examined regarding the opportunity arm of the "fraud triangle," the data analysis revealed that the majority of the time an associate created a loss was when management failed to follow correct policy and procedures in the store. Also, when comparing the loss to when management failed to control or not, it was found that the loss amount increased dramatically when management failed to control. This indicates that the opportunity arm is important to consider in the occurrence of employee theft in a retail environment.

In reviewing the data regarding the motivation arm of the "fraud triangle," the correlation between the age of the associate, the amount of loss, and management failure, the relationship was found to not be statistically significant. The t-test, cross tabulations, and the ANOVA table revealed that there were not any significant measures of association but it did reveal that the mean amount of loss increased when management failed to follow correct policy and procedure. According to Hollinger and Adams (2008), the national mean amount of loss was \$1,443 which is significantly higher than Retailer XYZ at \$523. It is unknown if all retailers surveyed in Hollinger and Adams (2008) survey included cases with a zero amount. Therefore, this could affect the results since Retailer XYZ included zero amount cases.

The most common associate apprehended was a white male between the ages of 18 to 22 years old, an hourly associate, employed up to 6 months, \$523 was the mean amount loss, it occurred at the point-of-sale, and management discovered the loss. The amount of loss was significantly higher when management created the opportunity for the associate to steal at a mean of \$450 versus a mean of \$180 when there was not an opportunity created by the management.

Associate theft at the point-of-sale was the most likely type of theft to occur in this study as well as previous studies reviewed. However, theft of services reflected that management failure did not increase the amount of the loss. The duration of the scheme and/or length of employment varied. While in this study the length of time being employed was up to 6 months as the most common, other studies revealed longer time frames anywhere from one year to 18 months. Termination of employment and not filing criminal charges is most likely the outcome in this data and those studies previously reviewed.

## 5.2 Weakness of Study

In attempting to show a relationship for the motivation arm, it revealed that the variables chosen, length of employment and age were probably not the strongest variables to use in this analysis. The variables were limited in the dataset in being able to review of the motivational aspect of the study.

The research in the current study was limited by several factors. The study was based on a population sample that was terminated for theft so the researcher was unable to compare this group to entire population employed at Retailer XYZ. The researcher was unable to compare the data to associates terminated for other reason and in comparing any of the demographics.

In reviewing the data, the investigators did not always fill out all of the data needed. As a result, there was omission of data that may have affected the results. The management control failure variable was important to the analysis but many cases lacked an answer for this variable. Therefore, the researcher reviewed a number of cases and answered the question yes or no in regards to management control failure.

The study revealed that the hourly associates were the majority in associates caught stealing. The data was not sorted by full-time hourly or part-time hourly associates. If this information had been used, this would have been another variable that could have been analyzed to assist in examining commitment which reflected motivation.

#### 5.3 Implications

Seeing that retail is privately owned by its shareholders and not part of the public sector, the organization has the luxury of handling crime how they determine is most cost-effective and in the best interest of the retailer. The organization does not have to answer to society like state and local agencies. Therefore, most of the time, situations are handled behind closed doors. The legal system is only introduced when the retailer believes that it is the best solution concerning bottom-line profitability.

Filing criminal charges against an associate for stealing is not always in the best financial interest of the retailer. In determining the best possible solution, some of the following variables have to be considered: 1) the total loss, 2) the likelihood of the associate reimbursing the organization for the incurred loss, 3) the recovery of the merchandise, 4) how previous cases of the exact type of loss has been handled, 4) how strong the evidence is for the case, 5) how cooperative the local law enforcement are, and 6) the time involved if charges are filed. All variables are considered and then a decision is made on whether to file criminal charges. If criminal charges are not filed, the retailer will seek restitution for the estimated total loss. Additionally, the retailer will seek civil demand, too. Civil demand is sought in attempt to recover the time invested investigating and closing the case by the investigator.

If a retailer seeks an aggressive approach and files criminal charges on the majority of their associates caught for theft, they run the risk of the following: 1) an increase of civil lawsuits, 2) insufficient evidence for conviction, and 3) bad publicity in the press which can lead to a loss in stock market price. Therefore, retailers have to focus on a balance between cost-effectiveness and profitability of the corporation.

The benefit of doing this research was giving the reader the ability to view theft through the private sector instead of the public sector which is what is generally taught in the school of Criminal Justice. By introducing a more inside look into the theft in a retail sector, the author hopes to increase the awareness for the need to teach more about white-collar crime in the Criminal Justice program so students can have a clearer understanding about this type of theft.

Retail is very diverse just as loss prevention departments vary in responsibility from a large retailer to a small retailer. Determining what the "shrinkage" concerns are at the organization and the budget for the loss prevention department will determine what their loss job responsibilities will be at the retailer. Also, this can be a primary factor during tough economic times on whether the loss prevention department offers value to the organization or merely an additional expense.

## 5.4 Future Research

The researcher recommends that there needs to be further research into this type of theft. Instead of studying one retailer's database, a larger sample of multiple retailers' data should be examined. By expanding to various other types of retail environments, a more thorough analysis should be obtained. Also, a study should include research with better measures of motivation. In addition, to fully examine Cressey's fraud triangle, measures of rationalization should also be included. The researcher believes that Cressey's study would be a much better fit if the data includes employees who have not stolen to be able to draw conclusions about factors that may lead to theft.

## APPENDIX A

# DESCRIPTIVE STATISTICS

**Table A.1: Descriptive Statistics** 

	N	Minimum	Maximum	Mean	Std. Deviation
Type of Theft	502	1	39	16.79	11.697
Type of Theft Categorized	449	1	5	3.38	1.411
Cash - Type of Theft	449	0	1	.08	.272
Mdse - Type of Theft	449	0	1	.26	.437
Rewards Abuse - Type of Theft	449	0	1	.24	.431
Theft of Services - Type of Theft	449	0	1	.04	.196
Point-of-Sale - Type of Theft	449	0	1	.38	.486
Adult or Juvenile	502	0	1	.06	.241
Age of Associate	490	16	59	24.83	8.225
Age Categories	492	1	6	2.79	1.211
Race	379	1	4	1.69	.869
Gender	502	0	1	.41	.492
Length of Employment	495	1	4	2.18	1.061
Outcome of the Case	481	1	4	1.17	.511
Total Amount	502	\$.00	\$12,000.00	\$523.3127	\$1,219.42010
Amount of Loss Categorized	502	1	8	6.53	1.588
Associate's Position	502	1	19	11.48	4.121
Management vs. Hourly Associates	502	0	1	.13	.332
Source of Info Categorized	488	1	6	2.04	1.394
Method of Operation Categorized	445	1	8	4.21	2.214
Control Failure by Management	479	0	1	.77	.421

## APPENDIX B

# SUMMARY OF VARIABLES

Table B.1. Summary of Variables

Name	Label	Coding
Dependent Variable		
TOTAMTLOSS	Total amount loss per case	Amount in dollars
AMTLOSSCAT	Total amount of loss categorized	1 = \$10,000 to \$14,999 2 = \$5,000 to \$9,999 3 = \$2,500 to \$4,999 4 = \$1,000 to \$2,499 5 = \$500 to \$999 6 = \$200 to \$499 7 = \$25 to \$199 8 = \$0 to \$24
Control Variable		
CONTFAIL	Management failed to follow policy and procedure	0 = No 1 = Yes
Independent Variables		
RACE	Race	1 = White 2 = Black 3 = Hispanic 4 = Asian
GENDER	GENDER	0 = Men 1 = Female
CASH	Type of theft was cash	0 = No 1 = Yes
MDSE	Type of theft was merchandise	0 = No 1 = Yes
REWARDS	Type of theft was rewards abuse	0 = No 1 = Yes
SVCS	Type of theft was theft of services in copy center or electronic services	0 = No 1 = Yes
POS	Type of theft was at the register	0 = No 1 = Yes
TOTAL	All types of theft categorized	1 = Cash 2 = Merchandise 3 = Rewards Abuse 4 = Theft of Services 5 = Point of Sale
AGE	Age of each associate	Age in years

Table B.1. - continued

Table B. I Continued		T.
AGECAT	Age groupings	1 = 16 to 17 yrs old 2 = 18 to 22 yrs old 3 = 23 to 28 yrs old 4 = 29 to 35 yrs old 5 = 36 to 45 yrs old 6 = 46 yrs old and beyond
LOE	Length of employment with retailer	1 = 0 to 6 months 2 = 7 months up to 12 months 3 = 1 year up to 3 years 4 = 4 years and beyond
MGMTHOUR	Salary management or hourly associate	0 = Hourly Associate 1 = Management
OUTCOME	Outcome of the case	1 = Terminated 2 = Prosecuted 3 = Released to parent 4 = Police report filed
SOURCE	Source of information that led to the investigation	Management = 1, Hourly Associate = 2, Area Loss Prevention Manager = 3, Corporate Office = 4, Closed Circuit TV = 5, and Outside Source = 6

#### REFERENCES

- Association of Certified Fraud Examiners (2006). Report to the Nation on National Fraud and Abuse. Retrieved from http://www.acfe.com/documents/2006-rttn.pdf.
- Bailey, A. A. (2006). Retail employee theft: A theory of planned behavior perspective.

  International Journal of Retail & Distribution Management, 34(11), 802-816.

  doi: 10.1108/09590550610710219.
- Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review, 44(4),* 588-608. Retrieved from http://libproxy.uta.edu:2055/stable/2094589.
- Cressey, D. R. (1973). *Other people's money* (Rev. ed.). Montclair, New Jersey: Patterson Smith Publishing Corporation.
- Dozier, J. B., & Micelli, M. P. (1985). Potential predictors of whistle-blowing: A prosocial behavior perspective. *Academy of Management Review*, 10(4), 823-836. Retrieved from http://libproxy.uta.edu:2055/stable/258050
- Felson, M., & Clarke, R. V. (1998). Opportunity makes the thief. *Practical Theory for Crime Prevention*. Retrieved from Research, Development and Statistics Directorate Web site:

  http://www.homeoffice.gov.uk/rds/prgpdfs/fprs98.pdf
- Frank, C. (2001). Knocking out opportunity. Security Management, 45(3), 109-111. Retrieved from http://libproxy.uta.edu:2072/pqdweb?did=69788786&sid=8&Fmt=3&clientId=89&RQT=309&VName=PQD.
- Friedrichs, D. O. (2002). Occupational crime, occupational deviance, and workplace crime:

  Sorting out the difference. *Criminology and Criminal Justice*, *2*, 243-255.

  doi:10.1177/17488958020020030101

- Gibson, C., & Wright, J. (2001). Low self-control and coworker delinquency: A research note.

  \*\*Journal of Criminal Justice, 29(6), 483-492. Retrieved from

  http://libproxy.uta.edu:2072/pqdweb?did=92784075&sid=4&Fmt=2&clientId=89&RQT=30

  9&VName=PQD
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford: Stanford University Press.
- Greenberg, J. (2002). Who stole the money, and when? Individual and situational determinants of employee theft. *Organizational Behavior and Human Decision Processes, 89*, 985-1003. doi: 10.1016/S0749-5978(02)00039-0
- Hollinger, R. C., & Adams, A. (2008). 2007 National Retail Security Survey: Final Report.
  Retrieved September 26, 2008, from Department of Criminology, Law and Society Web
  Site: http://www.crim.ufl.edu/research/srp/srp.html
- Hollinger, R. C., & Adams, A. (2007). 2006 National Retail Security Survey: Final Report.
  Retrieved September 20, 2007, from Department of Criminology, Law and Society Web
  Site: http://www.crim.ufl.edu/research/srp/srp.html
- Hollinger, R. C., & Clark, J. P. (1983). Deterrence in the workplace: Perceived certainty, perceived severity, and employee theft. *Social Forces*, 62(2), 398-418. Retrieved from http://libproxy.uta.edu:2067/ehost/detail?vid=6&hid=14&sid=d53a46e6-039a-46f7-bba8-16c8b70bce0a%40sessionmgr3&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=a9h &AN=5280879.
- Holtfreter, K. (2005). Is occupational fraud "typical" white collar crime? A comparison of individual and organizational characteristics. *Journal of Criminal Justice*, *33(4)*, 353-365. doi:10.1016/j.jcrimjus.2005.04.005
- Kamp, J., & Brooks, P. (1991). Perceived organizational climate and employee counterproductivity. *Journal of Business and Psychology, 5(4),* 447-458.
- Kimiecik, R. C., & Thomas, C. (2006). Loss prevention in the retail business. Hoboken: John Wiley & Sons, Inc.

- KPMG Holding (2007). *Profile of a Fraudster Survey* 2007. Retrieved from http://profile of a fraudster://acfe.com.
- Langton, L., Piquero, N. L., & Hollinger, R. C. (2006). An empirical test of the relationship between employee theft and low self-control. *Deviant Behavior*, *27*, 537-565. doi:10.1080/01639620600781548
- Locker, J. P., & Godfrey, B. (2006). Ontological boundaries and temporal watersheds in the development of white-collar crime. *British Journal of Criminology, 46,* 976-992. doi:10.1093/bjc/az1081
- Lynch, M. J., McGurrin, D., & Fenwick, M. (2004). Disappearing act: The representation of corporate crime research in criminological literature. *Journal of Criminal Justice*, 32(5), 389-398. Retrieved from http://libproxy.uta.edu:2072/pqdweb?did=708058431&sid=5& Fmt =2&clientId=89&RQT=309&VName=PQD
- McGloin, J. M., Sullivan, C. J., Piquero, A. R., & Pratt, T. C. (2007). Local life circumstances and offending specialization/versatility: Comparing opportunity and propensity models.

  Journal of Research in Crime and Delinquency, 44, 321-346.

  doi:10.1177/0022427807302664
- Mishra, B. K., & Prasad, A. (2006). Minimizing retail shrinkage due to employee theft.

  International Journal of Retail & Distribution Management, 34(11), 817-832.
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review, 22(1), 226-256.*
- Mustaine, E. E., & Tewksbury, R. (2002). Workplace theft: An analysis of student-employee offenders and job attributes. *American Journal of Criminal Justice*, *27(1)*, 111-127. Retrieved from http://libproxy.uta.edu:2072/pqdweb?did=592315841&sid=6&Fmt=3&clientId=89&RQT=309&VName=PQD.

- Niehoff, B. P., & Paul, R. J. (2000). Causes of employee theft and strategies that HR managers can use for prevention. *Human Resources Management*, *39(1)*, 51-64. Retrieved July 5, 2008 from Criminal Justice Periodicals database.
- Oliphant, B. J., & Oliphant, G. C. (2001). Using a behavior-based method to identity and reduce employee theft. *International Journal of Retail & Distribution Management, 29(10),* 442-451. Retrieved from http://libproxy.uta.edu:2072/pqdweb?did=232905791&sid7&Fmt=2 &clientId= 89&RQT=309&VName=PQD.
- Piquero, N. L., Exum, M. L., & Simpson, S. S. (2005). Integrating the desire-for-control and rational choice in a corporate crime context. *Justice Quarterly*, 22(2), 252-280. doi: 10.1080/07418820500089034
- Purpura, P. P. (2002). *Security and loss prevention* (4th ed.). Woburn, Massachusetts: Butterworth-Heinemann.
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, *38*(2), 555-572. Retrieved from http://libproxy.uta.edu:2055/stable/256693.
- Sauser, W. I. (2007). Employee theft: Who, how, why, and what can be done. Sam Advanced Management Journal, Summer, 72(3), 13-25. Retrieved from http://libproxy.uta.edu:2067/ehost/pdf?vid=4&hid=6&sid=79c21a67-03c9-4a51-b005-73f87f3a924a%40SRCSM1.
- Schmidtke, J. W. (2007). The relationship between social norm consensus, perceived similarity, and observer reactions to coworker theft. *Human Resource Management*, *46(4)*, 561-582. doi: 10.1002/hrm.20182
- Shover, N., & Hochstetler, A. (2002). Cultural explanation and organizational crime. *Crime, Law and Social Change*, *37(1)*, 1-18.
- Shover, N., & Hochstetler, A. (2006). *Choosing white-collar crime*. New York: Cambridge University Press. Retrieved from http://libproxy.uta.edu:2076/Reader/.

- Sutherland, E. H. (1940). White-collar criminality. *American Sociological Review, 5(1),* 1-12. Retrieved from http://libproxy.uta.edu:2055/stable/2083937.
- Trevino, L. K., & Victor, B. (1992). Peer reporting of unethical behavior: A social context perspective. *The Academy of Management Journal*, *35(1)*, 38-64. Retrieved from http://libproxy.uta.edu:2055/stable/256472.
- Warren, D. E. (2003). Constructive and destructive deviance in organizations. *Academy of Management Review*, 28(4), 622-632. Retrieved from http://libproxy.uta.edu:2055/stable/30040751
- Wells, J. (2007). *Corporate fraud handbook: Prevention and detection* (2nd ed.). Hoboken: John Wiley & Sons, Inc.
- Wilson, R. A. (2004). Employee dishonesty: National survey of risk managers on crime. *Journal of Economic Crime Management, 2(1),* 1-25. Retrieved from http://www.utica.edu/acade mic/institutes/ecii/publications/articles/BA2D546B-BC9E-1844-8B0ADF5FB1B84B99.pdf

## **BIOGRAPHICAL INFORMATION**

Edith M. Fikes earned her Bachelors degree in Criminal Justice from Sam Houston State University in Huntsville. Her professional field has been in retail loss prevention for over 18 years. After obtaining her Masters in Criminology and Criminal Justice from University of Texas at Arlington, she plans to obtain her certification as a Certified Fraud Examiner. She has been an associate member of the Association of Certified Fraud Examiners since 2007. She plans to pursue a career further into the "white-collar" crime arena with a focus in forensic accounting and investigation.