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GENDER DIFFERENCES IN
VARIETIES OF INSURANCE FRAUD

NATALIA T. RUGGIERO
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Reviewed and approved* by the following:

Darrell Steffensmeier
Liberal Arts Research Professor of Sociology and Criminology
Thesis Supervisor

Stacy Silver
Associate Professor of Sociology and Human Development and Family Studies
Honors Adviser

* Signatures are on file in the Schreyer Honors College.

ABSTRACT

This thesis contributes to the literature on female crime and also research on insurance fraud, which could be presently viewed as a serious crime problem. The study addressed three main questions: (1) Are women as involved in insurance fraud as much as men? (2) Which types of insurance frauds are women more likely to be involved in? (3) Do women tend to commit insurance fraud alone, in mixed sex groups, or with other females? Two sources were used to explore the role of gender in different forms of insurance fraud. First, quantitative data from the Coalition Against Insurance Fraud were collected from current news stories. The news reports provided information on 15 forms of insurance fraud – of which medical, workers compensation, and auto related frauds were the most common. Second, an interview was conducted with an FBI fraud expert. Key findings were as follows. Overall, more men were involved in insurance fraud than women. Findings suggest, though, that when it comes to less lucrative forms of fraud, there are significant similarities between male and female involvement. Both genders committed more health related frauds than any other insurance fraud considered in the dataset. The largest difference between genders was evident when looking at the organization of the fraud – whether the fraud was committed alone or if there were 2 or more offenders. When women were involved in fraud, the majority committed fraud in a mixed sex group, usually with their significant other or kin. Females seldom committed fraud with other females. Findings were generally consistent with extant research and theory on gender differences in involvement in crime, and in financial fraud in particular.

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Chapter 1

INTRODUCTION

The primary reason I am conducting this honors thesis is to explore the role of gender in financial fraud, with specific focus on insurance fraud. Insurance fraud represents a serious form of financial fraud, about which we know very little. According to the Coalition Against Insurance Fraud, insurance frauds have become one of the United States' costliest crimes, stealing roughly \$80 billion a year across all lines of insurance (n.d.). Moreover, gender and crime is an interesting topic, especially with the changing of female roles in modern society.

Two data sources were used to pursue the aims of this study. Primarily, data were collected from the Coalition Against Insurance Fraud, an anti-fraud alliance, in order to analyze gender differences in types of insurance fraud. Additionally, an interview was conducted with Special Agent Stephen Collins, a certified fraud examiner currently working for the Federal Bureau of Investigation, to further investigate gender differences in fraud.

The research questions this study sought to answer are as follows: (1) Are women as involved in insurance fraud as much as men? (2) Which types of insurance frauds are women more likely to be involved in? (3) Do women tend to commit insurance fraud alone, in mixed sex groups, or with other females? The variables considered in this study include both defendant and case characteristics, and are as follows: gender, age, sex composition of co-offending partnerships or groups, co-offender relationships, monetary loss or profit of the fraud, defendant's punishment in terms of (a) sentence outcome of probation versus jail/prison and (b) monetary amount of the fine or restitution.

This honors thesis unfolds as follows: First, fraud is defined through the FBI's Uniform Crime Reports and its inconsistencies are explored. Second, a review of prior literature on gender differences in fraud involvement is provided. Third, the dataset and variables used in this study are described in detail. Fourth, the findings are presented. Lastly, inferences are drawn based on the findings of this study and future areas of research are suggested.

Discrepancies in Fraud Definition

Fraud, as defined by the FBI, is the fraudulent conversion and obtaining of money or property by false pretenses (FBI, 1984, p.79; FBI 1998, p. 407). This definition is employed by the Uniform Crime Reports (UCR), a data source published by the FBI and commonly utilized when consulting crime rates. The UCR was started by the International Association of Chiefs of Police, with the purpose of meeting the need for a reliable source of uniform crime statistics for the nation (Federal Bureau of Investigation, 1984). Included in annual UCR reports are arrest statistics for twenty-nine categories of crime, including fraud. The arrest statistics provide information on both the sex and the age of arrestees. In 2014, 16 females comprised roughly 40 percent of all those arrested for fraud.

The definition of fraud used in the UCR is of concern because it has a broad, summary category of "fraud" in general (see Steffensmeier, 1989; Steffensmeier, Harris, & Painter-Davis, 2014/15). Fraud covers a broad range of illegalities that include a spectrum of serious, corporate crime and also non-lucrative, non-occupational crimes (e.g. check fraud, welfare fraud). The issue arises when analyzing gender differences in this category. From the UCR statistics, it appears as if females have a high involvement in fraud – i.e. comprise about 40 percent of all

arrests for fraud. Therefore, the statistics lead many analysts to believe that having a high involvement in UCR arrests for “fraud” must also mean that females have a high involvement – both in general and as compared to men – in lucrative corporate, white collar crimes (e.g. Dodge, 2009). There is a difference between upper-level white collar or corporate fraud (usually well-organized schemes to steal large amounts of money) and ordinary or conventional types of fraud (e.g. welfare fraud, credit card fraud, some insurance claims) [for a review, see Steffensmeier, Schwartz and Roche, 2013]. As I show later, the insurance frauds represented in this study tend to constitute ordinary fraud more so than lucrative fraud.

Review of Prior Literature

It is essential to begin by discussing prior literature on what constitutes female involvement in crime in general. According to Steffensmeier and Allan, gender is the single best predictor of crime (2000). In general, women tend to be less involved in criminal activity than men. This could be due to a variety of reasons. First, women may have fewer opportunities to be involved in crime (Steffensmeier & Allan, 1996). They may be more concerned with fulfilling nurturing role obligations, such as maternity responsibilities, or with society’s perception of female beauty and sexual virtue. Second, women may be less involved due to institutional sexism in the underworld (Steffensmeier & Terry, 1986). In this case, institutional sexism refers to the prejudice against women, which restricts the illegal opportunities available to them in the underworld crime network (the world of criminals involved in organized crime). They may be discriminated against because of the stereotypes that they lack traits most valued by thieves, such as physical strength and emotional stability (Steffensmeier & Terry, 1986). When women are

involved in crime, however, they tend to have minor roles and make less profit than their male co-conspirators (Steffensmeier, et al, 2013).

Next, it is important to review the literature on gender differences in fraud. The first article on which this thesis is based on is Steffensmeier, Harris, and Painter-Davis' "Gender and Arrests for Larceny, Fraud, Forgery, and Embezzlement: Conventional or Occupational Property Crime Offenders?" (2015). This article, henceforth referred to as the "LFEE Exegesis", aims to interpret Uniform Crime Report patterns and trends in male and female arrest data. The LFEE examines the UCR categories of larceny, fraud, forgery, and embezzlement to determine whether male arrests compared to female arrests were for minor, conventional crimes or serious, occupational crimes. Steffensmeier, et al. found that most arrests within LFEE categories were for minor, conventional property crime with small financial loss and low-level felony charges (2015). The crimes with the highest female involvement included: shoplifting, bad checks, and welfare/ benefit fraud. As compared to females, male involvement in larceny and fraud was much higher for theft of motor vehicles, transportation fraud, and counterfeiting. The main finding of this study was that those arrested for larceny, fraud, forgery, and embezzlement committed minor, conventional crimes of small financial loss significantly more than serious, occupational offences (Steffensmeier, et al., 2015).

The second article on which this study is based is Steffensmeier, Schwartz, and Roche's "Gender and Twenty-first Century Corporate Crime: Female Involvement and the Gender Gap in Enron-Era Corporate Frauds" (2013). This study focused on lucrative, white collar fraud. Its aim was to explore whether women's changing involvement in corporate America had an effect on female involvement in serious corporate crimes (Steffensmeier, et al., 2013). Prior research had suggested that with the 21st century rise of women in the workforce, more women would be

involved in corporate fraud (Dodge, 2009). To analyze these implications, they looked at accounting schemes, Ponzi schemes, and insider trading fraud, all involving large sums of money and financial loss.

Their research found that women, as compared to men, were much less likely to be involved in fraud conspiracy groups of major financial crimes. When women were involved, Steffensmeier, et al. observed that they played minor roles in the scheme and gained less profit as compared to their male co-offenders (2013). Additionally, they pinpointed two main pathways for female involvement in fraud. The first is through relational ties, more specifically, having close relationships with the main male co-offender. Second, women became involved due to the corporate position they occupied, which the article referred to as “utility”. Furthermore, they proposed that an increase in the number of women in positions of corporate leadership might lead to less corporate financial fraud. They suggest that female executives may be more ethical and might provide more credible oversight, though these hypotheses were not tested in the study. Therefore, according to this prominent article in female involvement and fraud literature, a rise in women in the workforce and in executive positions does not show high female involvement in corporate fraud.

Being that this study primarily focuses on insurance frauds, a review of research on gender differences in this topic is necessary. Insurance fraud is the act of providing false information to an insurance company in order to collect money not entitled to the offender (Derrig, 2002). It always involves insurance companies, either as perpetrators or as victims, and can apply to consumers, insurers, or agents (Derrig, 2002). According to the Coalition Against Insurance Fraud, people often make the mistake of thinking insurance fraud is a victimless crime,

yet it can cause serious financial loss to taxpayers (n.d.). As compared to white collar or corporate fraud, though, insurance fraud is less lucrative and less serious. According to Steffensmeier and Allan, “The pattern of higher female share of offending for mild forms of law-breaking and a much lower share for serious offenses is confirmed by the numerous self-report studies...” (1996). Female involvement in this type of crime, then, may differ from what was observed in the LFEE Exegesis and “Gender and Twenty-first Century Corporate Crime”. In certain less serious forms of fraud (such as check or welfare fraud), female involvement is almost equal to men’s. This may be because these types of fraud are more consistent with female skills, opportunities, and daily routines (Schwartz, 2007).

Evidently, fraud is a major form of crime, but the literature indicates that the extent that females are involved depends on the type of fraud. Through the data collected from the Coalition Against Insurance Fraud, this study seeks to determine if female involvement is as high as male involvement in less lucrative frauds as compared to the literature on serious, white collar crimes. In accordance with the literature, three hypotheses are set forth in this study.

Hypotheses

The research questions this study sought to answer are as follows: (1) Are women as involved in insurance fraud as much as men? (2) Which types of insurance frauds are women more likely to be involved in? (3) Do women tend to commit insurance fraud alone, in mixed sex groups, or with other females? Based on the review of past literature, the hypotheses tested in this study are as follows:

Hypothesis 1: Overall, more men will be involved in insurance fraud than women.

Hypothesis 2: If women are involved, they are more likely to be proportionately involved in less lucrative forms of insurance fraud as compared to men (i.e. the gender gap will be smaller for less lucrative than lucrative frauds).

Hypothesis 3: When women are involved in insurance fraud, they will most often commit fraud with male co-offenders.

Chapter 2

DATA AND METHODS

All quantitative data for this study were collected through Fraud News Daily articles, published by The Coalition Against Insurance Fraud (CAIF). Every Fraud News Daily article from December 2015 to July 2016 was compiled to create the dataset. This study was conducted with the approval of the Pennsylvania State University's Institutional Review Board, under the following study number: 00005906.

Dataset

The Coalition Against Insurance Fraud (CAIF) is an anti-fraud alliance of insurance organizations, consumers, government agencies, and legislative bodies. This alliance was founded in 1993 in dedication to preventing insurance fraud. The CAIF website aims to inform consumers, insurance companies, government agencies, and others on how to detect, protect, and deter against fraud. It also acts to inform consumers of scam warnings, where to report fraud, and of new research data. The CAIF serves as a leeway to gaining information on insurance fraud, for which national statistics are not currently available (Coalition Against Insurance Fraud, n.d.).

The CAIF releases daily reports through e-mail, called *Fraud News Daily*, containing four to six current news stories in each. The stories each detail a different case of fraud that occurred recently in the United States. Each story is categorized in the report by the type of

primary form of insurance fraud involved in the news story or case. Through the Fraud News Daily reports, one can find information on the defendant(s), details of the insurance fraud, and usually, convictions and sentences. The Coalition Against Insurance Fraud provides the general public access to a unique database on insurance frauds. For this reason, it is a valuable source of previously unexamined information.

Justification of Dataset

The sample utilized in this study is generalizable to the US population because all cases occurred within the 50 states. Since all cases occurred within the last year, the dataset is a strong representation of the prevalence of insurance fraud in our present-day society. Its strength also comes from its ability to pinpoint the monetary loss these frauds have on taxpayers, consumers, and companies. However, the dataset's slight shortcoming results from a lack of reported information¹. Being that all instances of fraud in this sample occurred in late 2015 to mid 2016, the convictions and sentencing of defendants in some cases were not available. This is usually due to the fact that the case may still be ongoing and the court proceedings have not yet taken place. Missing values were therefore accounted for by searching for specific cases online, outside of CAIF databases, to find updated or finalized information on the verdict.

¹ A review on the shortcomings of the CAIF dataset is detailed in the "Limitations" section of Chapter 4, "Conclusion".

Dataset Characteristics

To date, the CAIF categorizes each case of insurance fraud into fifteen distinct types. The following is a complete list of the classifications of insurance fraud as classified by the CAIF, including a description and/or example of each:

(1) Workers Compensation encompasses employers who do not purchase adequate coverage for their employee(s), employees who fake injuries for paid time off, and employees who work and receive workers compensation payments while they are supposed to be recovering from an alleged injury.

(2) Medical Fraud (frauds other than Medicare/Medicaid) encompasses stealing someone's identifying information (i.e. SSN) in order to illegally file insurance claims on their behalf, billing other insurance companies (such as Blue Cross Blue Shield, United Healthcare, Aetna) for unnecessary procedures, or for accepting kickbacks when referring patients to particular medical offices.

(3) Medicare/Medicaid encompasses billing Medicare/Medicaid for procedures that were not medically necessary or that were not actually provided.

(4) Crop Insurance Fraud is most often committed by farmers. This fraud could entail placing farms in another's name in order to receive counter-cyclical payments under the Government Crop Insurance Program or feigning to have failed crops in order to collect insurance money.

(5) **Arson** is illegally burning homes or businesses for insurance payouts. An example of this is burning one's own home on fire and fleeing the scene or setting fire to a building one owns to collect insurance payments.

(6) **Agent Fraud** refers to insurance agents who pocket their clients' premiums, sell insurance that is fake or unnecessary, and/or provide unneeded coverage to boost premiums.

(7) **False Claim** encompasses filing false reports by reporting fraudulent information to receive insurance compensation. An example of this is a person filing a fabricated claim with their insurance company, stating that their home was damaged, and receiving insurance money as a result of the lie.

(8) **Drug Diversion** is the abuse of prescription drugs. This fraud is committed by visiting multiple medical facilities to obtain unnecessary prescription drugs, signing blank prescription orders, or illegally distributing narcotics.

(9) **Auto Fraud** is committed by filing a false claim after the theft of a vehicle, providing fake statements or paperwork about an automobile accident, or setting a vehicle on fire after a crash.

(10) **Auto Give-ups** is the false reporting of a stolen vehicle after hiding the car themselves (phony theft), faking an automobile theft, or setting one's own car on fire.

(11) **Staged Crashes** entail claiming nonexistent injuries after car crashes in order to exploit their insurance coverage, purposely crashing into unsuspecting drivers, or staging crash set-ups by willing conspirators.

(12) Disability Fraud is the collecting of payments from an insurance company for an alleged disability by someone who should not be receiving them, or collecting a higher amount than one is entitled to receive.

(13) Life Insurance Fraud is one of the most serious types of fraud of this list. Plotting to kill someone, actually killing someone, and staging a death to receive life insurance benefits all fall under this category.

(14) Insider Fraud is the falsifying of company documents and statements to receive money not entitled to the company. Insider fraud occurs when employees or employers take advantage of their position within a company. The first example of insider fraud is a business owner falsifying wire transfers, bank statements, or letters of credit to make it appear to financial rating and auditing companies that the company could afford to cover more or higher insurance payouts than is actually the case. By doing this, the owner receives additional money in premiums from policyholders who did not have the insurance coverage they thought they did. A second example is of a department store employee crediting him/herself with large amounts of money on store gift cards and then cashing the gift cards in order to pocket the money.

(15) Contractor Fraud occurs when fake contractors approach a resident feigning they are from an insurance company, fixing something in the resident's home, then demanding money for their services that were otherwise unneeded and unwarranted.

The following table is a complete summary of the frequency of each type of insurance fraud in this study. The sample encompasses 7 months of CAIF Fraud News Daily stories (December 2015 to July 2016).

Table 1. All Fraud Types

Type of Fraud	Frequency	Percent
Medicare/Medicaid	172	19.9
Workers Compensation	116	13.4
Drug Diversion	109	12.6
Staged Crashed	77	8.9
Medical	75	8.7
Arson	72	8.3
Auto Give-Ups	53	6.1
Auto	46	5.3
Agent	43	5.0
False Claim	27	3.1
Life Insurance	27	3.1
Disability Fraud	22	3.5
Insider Fraud	11	1.3
Contractor Fraud	8	0.9
Crop Insurance	6	0.7
Total	864	100.0

As Table 1 displays, a total of 864 defendants are included in the study population. Of those defendants, nearly 20% committed Medicare/Medicaid fraud, making this category the largest in the sample. It is followed by Workers Compensation, 13.4% of all frauds, and Drug Diversion, 12.6% of all frauds. The smallest category is Crop Insurance, committed by less than 1% of the defendants in the sample.

For ease of making the dataset more comprehensible and accessible to work with, the fifteen types of insurance fraud were collapsed into five distinct categories. The frauds were combined based on substantive similarities. The first collapsed category is **Medical**, which combines Medical, Medicare/ Medicaid, Drug Diversion, and Disability Fraud types. The second collapsed category is **Auto**, which combines Auto Fraud, Auto Give Ups, and Staged Crashes. The third category, **Workers Compensation**, includes only Workers Compensation fraud. The fourth category, **Agent fraud**, contains only Agent Fraud. Lastly, the **Miscellaneous** collapsed category contains Arson, Insider Fraud, False Claim, Contractor Fraud, Crop Insurance, and Life Insurance fraud types.

Table 2. Collapsed Fraud Categories

Type of Fraud	Frequency	Percent
Medical	378	43.8
Auto	176	20.4
Workers Compensation	116	13.4
Miscellaneous	151	17.5
Agent	43	5.0
Total	864	100.0
Medical: Medical, Medicare/Medicaid, Drug Diversion, Disability Auto: Auto, Auto Give-Ups, Staged Crashed Misc.: Life, Contractor, Crop, Arson, False Claim, Insider Fraud		

Table 2 presents the five collapsed categories of insurance fraud. In accordance with Table 1, it also indicates that medical related frauds are being committed by disproportionately more offenders (43.8%) than the four other types of combined frauds. The second largest combined insurance fraud is Auto, being committed by 20.4% of defendants. The smallest category in the sample is Agent, being committed by only 5% of defendants.

Defendant and Case Characteristics

A codebook for manual data analysis was developed based on a review of various Fraud News Daily articles and past literature². Beginning with December 2015, each Fraud News Daily article was coded onto an excel spreadsheet by date, city, and state of the press release. The major variables considered in this study are:

Sex of Defendant refers to the gender of the offender. Two categories were coded for: (0) male or (1) female. If the gender of the defendant was not explicitly stated in the Fraud News Daily article, it was assumed through their name or by further researching the case online.

Age of Defendant refers to the age of the offender at the time of the press release. Being that the Fraud News Daily articles are released soon after the defendant(s) is arrested for, or found guilty of a crime, it is safe to assume they were close to the age reported when they committed the crime. When age was not stated in the CAIF Fraud News Daily stories, it was searched for on the Internet.

Sex composition of group member(s) in cases involving two or more offenders (i.e. a conspiracy) refers to whether the defendant(s) worked by him/herself or worked with others to commit the fraud, and whether his/her accomplices were male or female. The stories were read closely to see if one or more defendants were involved. Six categories were used for the coding: (1) solo male, (2) all males, (3) solo females, (4) all females, (5) mixed sex – males and females working together, or (6) unknown.

² The codebook used for this analysis was developed by Darrell Steffensmeier and Daniel McCarthy. A full copy of the codebook is included in Appendix A.

Co-offender Relationship Type is coded when a case involves more than one offender. It refers to the type of relationship among the co-offenders in the insurance fraud. The six categories applied in the coding are: (1) romantic-husband/wife, partners (as if or close to being married); (2) romantic-boyfriend/girlfriend, dating; (3) kin/family only (e.g. parent-child, siblings, relatives); (4) business relationship/partnership only; (5) other; or (6) unknown.

Monetary loss or profit refers to the amount of money an individual, agency, government, company, or other lost due to the crime committed or the amount of money the defendant profited through the crime.

Punishment of a Fine or Restitution means that the defendant was ordered to pay back a certain amount of money for having committed a crime.

Punishment of Probation, Jail/Prison, and Sentence Length pertains to the sentencing decision in the case. Information was available for two sentence outcomes: first, whether the defendant(s) received a punishment of probation or jail/prison; when the defendant(s) received jail or prison time, the length of the sentence was also noted in months.

Analysis Methods

The data that were coded from the Fraud News Daily stories were analyzed through STATA. Basic frequency distributions were used. Gender differences were measured in two ways: the *gender gap* and the profile percentages. The gender gap is a between-sex comparison that shows the female share of a certain crime. It demonstrates a comparison between sexes and is necessary to determine the share out of each individual type of fraud that were female, as opposed to male. It answers the question, “*What share out of each individual type of fraud were female as opposed to male?*” The following is an example of the formula used to calculate it:

$$\text{Gender Gap} = \frac{\text{Female N for “Medical”}}{\text{Total N of offenses for “Medical”}} \times 100$$

Profile percentage is within-sex comparison. For example, it shows what percentage of all cases involving females are for a certain type of insurance fraud. It answers the question, “*What percent of all cases involving females were for a certain type of insurance fraud?*” The following is an example of the formula used to calculate it:

$$\text{Profile Percentage} = \frac{\text{Female N for “Medical”}}{\text{Total Female Cases}} \times 100$$

Chapter 3

FINDINGS

In this section, the defendant and case characteristics discussed previously are presented and analyzed for purpose of answering the three main research questions of this study: (1) Are women as involved in insurance fraud as much as men? (2) Which types of insurance frauds are women more likely to be involved in? (3) Do women tend to commit insurance fraud alone, in mixed sex groups, or with other females?

The presentation of the findings in this study proceeds as follows: First, an overview of findings as regards to the association between defendant characteristics and insurance fraud is provided. Then, the information collected on case characteristics is evaluated. Next, gender gaps and profile percentages across varied forms of insurance fraud are presented and discussed. Lastly, qualitative information is provided through an interview with a fraud enforcement expert.

Data on Defendant Characteristics

Being that the main focus of this study is to explore female involvement in crime, gender was the most significant defendant characteristic considered. In total, a sample size of 864 defendants were analyzed. Of the total 864 defendants, 579 were males and 285 were females.

Table 3. Gender of Defendant

Gender	Frequency	Percent
Males	579	67.0
Females	285	33.0
Total	864	100.0

As Table 3 indicates, of the 864 defendants in the dataset, the majority of offenders were male (67%) as compared to females, who comprise a fairly sizable minority of offenders (33%). As predicted by the first hypothesis of this study, more males were involved in insurance fraud than females.

A second variable considered in this study was age. The following two tables show age ranges and averages for all the defendants whose ages were indicated in the *CAIF Fraud News Daily* stories or found through further researching on the Internet. The first table includes age imputations for defendants whose ages could be identified (682) both overall and by gender. Overall, the youngest offender in the dataset was 18 years old, whereas the oldest was 83 years old. The mean age of the sample was 45 years old. Of the 579 males in the sample, 451 male defendant ages were provided. The youngest male defendant was 19 years old, while the oldest male was 83 years old. The average age of male defendants was 46 years old. Of the 285 female defendants in the sample, 231 female ages were provided. The youngest female defendant was 18 years old, while the oldest was 70 years old. The average age of female defendants was 44

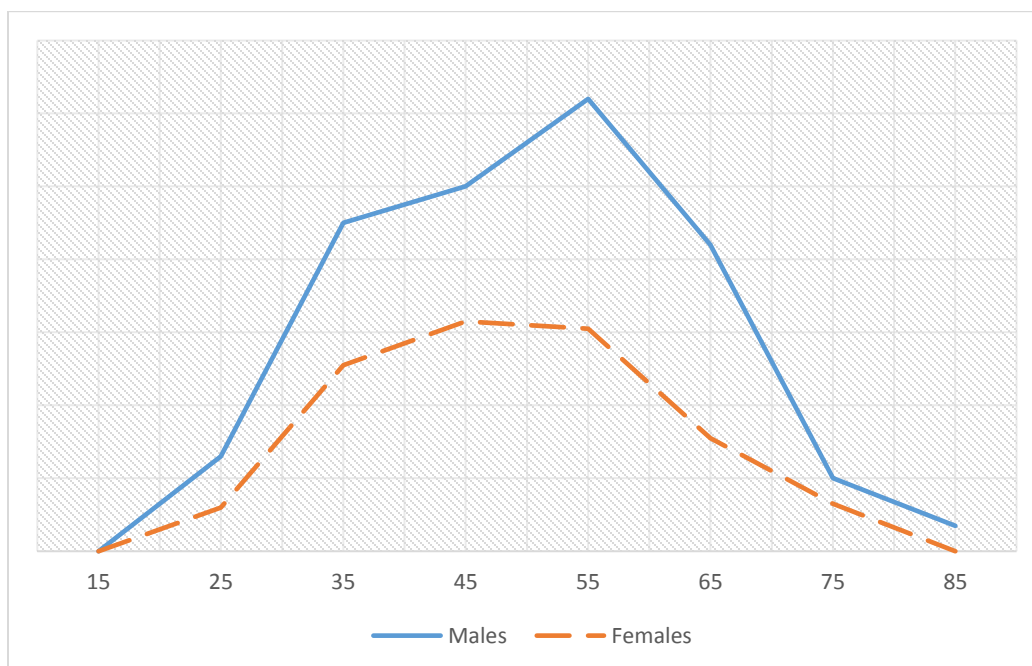
years old. Thus, there is similarity in the age profiles of women and men convicted of insurance fraud.

Table 4. Age of Defendant in Years with Mean Imputation

Age (in years)	N	Minimum	Maximum	Mean	Std. Deviation
Total	682	18	83	45	12.9
Male Age	451	19	83	46	13.1
Female Age	231	18	70	44	12.3

The findings also show that, while most defendants were in their mid-40s, insurance fraud is a type of crime that could be committed by a wide range of the U.S. population. The difference between the youngest and the oldest age in this sample is 65 years, a substantially vast range. Although the findings reveal that offenders are most often 45 years old, a spectrum this broad indicates that insurance fraud perpetrators could potentially be of any age.

Figure 1. Age by Gender



The figure above further shows the similarities between male and female offenders when it comes to the age variable. For both genders, the youngest defendant was below 20 years old. On the other hand, the oldest male offender was 83 and the oldest female offender was 70. This shows that while females may stop involving themselves in acts of fraud by the time they turn 70, males continue to commit crime for at least 10 more years. Also, as seen in Figure 1, the highest peak occurs in the mid-50s for males and in the mid-40s for females. This shows that insurance fraud is primarily committed by an older generation of offenders, that are well past their adolescent years.

The following three tables consider gender distributions of offenders in the sample. First, they break down the composition of offenders, indicating whether they committed fraud alone, with others of the same gender, or with others of the opposite gender. Second, they break down the connection between offenders who committed fraud with others. The relationship between

those offenders who committed fraud in a group were then further broken into romantic, familial, and business relations.

Table 5. Sex Composition of Group Member(s)

Sex Composition	Frequency	Percent
Solo Male	261	30.2
All Males	106	12.3
Solo Female	97	11.2
All Females	21	2.4
Mixed Sex	362	41.9
Unknown	17	2.0
Total	864	100.0

Table 5 decomposes the sample of 864 into the sex composition of all defendants. Overall, the majority of defendants conspired in a group of mixed sex (41.9%). The second largest category of offenders was solo males (30.2%). Being that males make up the majority of the sample (67%), this finding is expected. The third largest category was all males, comprising 12.3% of the sample. The solo female group made up 11.2% of all offenders in the sample, while the all female group made up 2.4% of all offenders in the sample. It is also worth noting that 2% of defendants could not be categorized due to insufficient information in the CAIF news stories or online.

The third hypothesis in this study assumed that when women are involved in insurance fraud, they most often will commit fraud with male co-offenders. Of the total 285 females in the sample, 278 females' sex compositions were known. Of those 278 females, 160 females were known to have committed in a mixed sex group (57.6%). Thus, the majority of females most

often committed fraud with male co-offenders to commit insurance fraud. Only 97 and 21 of the 278 females committed fraud either alone (34.9%) or in an all female group (7.6%), respectively. Therefore, the third hypothesis of this study is supported.

The table below shows the relationship between the defendants that committed fraud in collaboration with one or more co-offenders to commit fraud. The total number of defendants that are known to have committed fraud with others was 489. The percentages shown below are only for cases in which the co-offender relationship is known or is not a solo case.

Table 6. Co-offender Relationship Type

Sex Composition	Total		Male		Female	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Husband/Wife	50	16.6	26	13.8	24	21.2
Boyfriend/Girlfriend	12	4.0	6	3.2	6	5.3
Kin/Family only	74	24.5	42	22.2	32	28.3
Business Relationship	166	55.0	115	60.8	51	45.1
Total	302	100.0	189	100.0	113	100.0

Note: The kin/ family category includes 2 cases in which offenders were stated to have been friends.

Table 6 indicates the relationship type in all cases where a group was involved in committing fraud. The co-offender relationships were separated by total, male, and female and classified by husband/wife relationships, boyfriend/girlfriend relationships, kin/family relationships, Business Relationship only, and other. Unfortunately, many of the co-offender relationships were unknown, due to a lack of information available. This point is further discussed in the “Limitations” section of Chapter 4.

The largest category shown above is business relationship. This finding holds true for both males and female co-offender relationships. Approximately 61% of males and 45% of females whose co-offender relationships were known, committed fraud with others in a business affiliation only. This indicates that more offenders in this sample chose to commit crime with business partners, co-workers, or colleagues, than with their significant others. The co-offender relationship findings were very similar for both genders in the sample. Of the defendants whose co-offender relationship is known, 26 males and 24 females committed fraud with their spouses. Proportionally, 6 males and 6 females chose to commit fraud with their boyfriend or girlfriend. Lastly, 40 males and 32 females committed fraud with their kin.

The following table combines the first three categories listed in Table 6 above (husband/wife, boyfriend/girlfriend, and kin/family) and compares it to the Business relationship only category. The combining of these three categories was done to show how many females were involved in insurance fraud with a romantic partner or family member, as opposed to a colleague or associate.

Table 7. Gender by Type of Relationship

Sex Composition	Total		Male		Female	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Romantic & Family	134	44.7	72	38.5	62	54.9
Business Relationship	166	55.3	115	61.5	51	45.1
Total	300	100.0	187	100.0	113	100.0

As shown in Table 7, the findings in Table 6. are held consistent for males. However, when the first three categories were combined, it shows that females committed a crime with a romantic partner or family member slightly more than with a business partner. It can then be inferred that of all the known female co-offender relationships, female defendants are more

likely to commit fraud with their romantic partners and family members than is the case for male defendants. If the role or position offenders played in committing insurance fraud had been investigated in this study, inferences could be drawn on whether the female offender was involved due to the involvement of their spouse. This point is further considered in the “Limitations” section of Chapter 4.

Data on Case Characteristics

The following is an overview of data collected on *case characteristics*. The subsequent three tables discuss the consequences of insurance fraud. The first of the tables calculates the overall monetary losses associated with the fifteen types of insurance frauds by gender. The succeeding tables report the punishments the offenders received due to committing fraud. Many of the defendants in the sample committed more offenses than one count of insurance fraud. The seriousness of other offenses committed ranged from attempt of obtaining a controlled dangerous substance to grand theft to homicide. For that reason, a wide range of monetary amounts and sentences were ordered as punishments in this sample.

Table 8. Monetary Loss/Profit in Dollars with Mean Imputation

Monetary Loss/ Profit (in \$)	Total			Male			Female		
	N	%	Mean	N	%	Mean	N	%	Mean
Less than \$999	3	1.1	904	1	0.5	800	2	2.2	955
\$1,000 to \$24,999	41	14.5	9,825	25	13.0	10,980	16	18.0	8,956
\$25,000 to \$99,999	39	13.8	52,603	26	13.5	51,900	13	14.6	54,007
\$100,000 to \$999,999	78	27.7	313,833	54	28.0	316,551	24	27.0	307,717
More than \$1,000,000	121	42.9	37,143,619	87	45.1	39,544,332	34	38.2	31,000,616
Total	282	100	16,033,081	193	100	17,922,671	89	100	11,935,432

As mentioned in the “Defendant and Case Characteristics” section of Chapter 2, monetary loss or profit refers to the amount of money an individual, agency, government, company, or other lost due to the crime committed, or the amount of money the defendant profited through the crime. As Table 8 shows, of the 282 cases that listed the monetary loss or profit, the majority committed fraud that was worth over \$1 million. The table shows the average amount insurance fraud stole from taxpayers, government programs, and companies in this sample is \$16,033,081. The center of the table shows that 45% of male offenders committed fraud over \$1 million, with losses/ profits ranging from \$800 to \$1,000,000,000. The right hand of the table shows that the majority of women committed frauds that ranged in averages between \$955 to \$307,717. A considerable percentage of female offenders committed fraud that was over \$1 million (38%), but when compared to male offenders, they on average committed less lucrative frauds. Hence, Table 8 both attests to how serious of a crime insurance fraud is in present-day society and also shows that male defendants, on average, were involved in more lucrative frauds than women.

Table 9. Fine & Restitution in Dollars with Mean Imputation

Fine (in \$)	Total			Male			Female		
	N	%	Mean	N	%	Mean	N	%	Mean
Less than \$4,999	15	39.5	867	10	35.7	1,001	5	50	599
\$5,000 to \$34,999	14	36.8	12,152	11	39.3	12,273	3	30	11,710
\$35,000 to \$99,999	2	5.3	80,000	2	7.1	80,000	0	0	0
More than \$100,000	7	18.4	338,089	5	17.9	253,325	2	20	550,000
Total	38	100	71,309	28	100	56,130	10	100	113,813
Restitution (in \$)	N	%	Mean	N	%	Mean	N	%	Mean
Less than \$24,999	32	21.3	12,510	19	18.4	14,016	13	27.7	10,309
\$25,000 to \$99,999	25	16.7	45,966	17	16.5	43,975	8	17.0	53,796
\$100,000 to \$499,999	36	24.0	220,188	24	23.3	218,592	12	25.5	223,380
\$500,000 to \$999,999	12	8.0	645,595	10	9.7	651,884	2	4.3	614,150
\$1,000,000 to \$9,999,999	28	18.7	3,121,435	22	21.4	3,139,150	6	12.8	3,056,480
Higher than \$10,000,000	17	11.3	39,591,747	11	10.7	42,621,706	6	12.8	34,036,822
Total	150	100	5,184,555	103	100	5,346,398	47	100	4,829,878

Table 9 refers to all cases in which the defendant was known to have paid a fine or restitution as punishment for having committed a crime. The top left-hand side of the table indicates that of the total 38 cases that listed the offender as having to pay a fine, the mean amount was \$71,309. The range of averages was from \$867 to \$338,089. The largest overall percentage of defendants paid a fine of \$4,999 or less (39.5%). The gender differences in fine payment amounts can be seen by the break-down of genders by fine amounts. The top center of the table shows that the majority of men paid fines of more than \$5,000. However, as seen by the top right-hand side of the table, the majority (50%) of female defendants paid fines less than \$4,999.

Of the 150 cases that listed the offender as having to pay restitution, the mean amount was \$5,184,555, while the range of averages was \$12,510 to \$39,591,747. The bottom center of the table shows the male averages for each distribution of restitution amounts. The largest percentage of male offenders paid restitution amounts between \$100,000 to \$499,999. The

largest percentage of female offenders paid restitution amounts of \$24,999 or less. Both sections of Table 9 (fines and restitution), show that women overall were ordered to pay less money than men were ordered to pay. This further attests that they women were less involved in lucrative forms of frauds than men, being that they had to pay back less restitution.

Aside from fines and restitution, punishments of probation, jail, and prison were also considered. Of all the Fraud News Daily stories in this sample, 30 defendants were explicitly stated to have received a punishment of probation (3.5%) for their crime. Of the total 864 defendants, 224 defendants were explicitly stated to have received a punishment of jail or prison time (26%). More defendants in the overall sample size are likely to have received a punishment of probation or jail/prison, however that information was not available at the time of data collection. The “Limitations” section of Chapter 4 details the reasons for which this information may have been unavailable.

Table 10 shows the sentence lengths in months of all defendants known to have received jail or prison time. Out of the 224 defendants sentenced to jail or prison, 208 defendants had a specified amount of time in the CAIF news story.

Table 10. Sentence Length in Months with Mean Imputation

Sentence Length (in months)	N	Minimum	Maximum	Mean	Std. Deviation
Total	210	1	life	73	83.40
Male	153	1	660	78	89.57
Female	57	1	300	61	62.79

Of those that received jail prison time, the mean sentence length was 72 months. The maximum length was life without parole, while the minimum length was 1 month. Six

defendants of the 208 with specified sentence lengths received a punishment of life in prison. Five men received a life sentence and 1 woman received a life sentence. However, Table 10 shows the second maximum sentence for men and women in order to see more variation. Men and women received a similar average sentence length, men with 78 months and females with 61 months. As mentioned previously, sentence lengths varied so drastically due to all of the offenses committed by an offender in addition to insurance fraud.

Elaboration of Gender Differences in Involvement in Insurance Fraud

The following tables revisit the main concern of this study, analyzing the gender difference in varieties of insurance frauds within the broad category types analyzed so far. Gender differences were calculated in two ways: gender gap (between-sex) and profile percent (within-sex). Table 11. “Defendant Gender by Fraud Type” depicts all fifteen categories of insurance fraud as categorized by the CAIF, along with the female gender gap and male and female profile percentages. The gender gap and profile percentage formulas are noted in the ledger of the table.

Table 11. Offender Gender by Fraud Type

Fraud Type	N			Gap/Share	Profile Percent		
	Total	M	F	%F	%Total	%M	%F
Total	864	579	285	33.0	100.0	100.0	100.0
Medicare/Medicaid	172	114	58	33.7	19.9	19.7	20.4
Workers Comp	116	77	39	33.6	13.4	13.3	13.7
Drug Diversion	109	78	31	28.4	12.6	13.5	10.9
Staged Crashes	77	46	31	40.3	8.9	7.9	10.9
Medical	75	55	20	26.7	8.7	9.5	7.0
Arson	72	46	26	36.1	8.3	7.9	9.1
Auto Give-Ups	53	37	16	30.2	6.1	6.4	5.6
Auto	46	31	15	32.6	5.3	5.4	5.3
Agent	43	30	13	30.2	5.0	5.2	4.6
False Claim	27	16	11	40.7	3.1	2.8	3.9
Life Insurance	27	22	5	18.5	3.1	3.8	1.8
Disability	22	11	11	50.0	2.5	1.9	3.9
Insider	11	5	6	54.5	1.3	0.9	2.1
Contractor	8	6	2	25.0	0.9	1.0	0.7
Crop Insurance	6	5	1	16.7	0.7	0.9	0.4

Source: Coalition Against Insurance Fraud
Formulas: Gap = Female Category/ Category Total x 100
Profile Percent = F or M Category Total/ Overall F or M Total x 100
Notes: Gap is equivalent to female share. Percentages are out of total number of offenses.

The center of the table shows the female gender gap. Recall, the gender gap denotes the differences between sexes in extent of involvement both overall and by type of fraud. It answers the question, “*What share out of each individual type of fraud were female as compared to male?*” Hence, the higher the gender gap percentage, the larger the female share in the crime. As indicated by the table, the gender gap varies from 16.7% to 54.5%. Of all of the coded fraud types, Insider Fraud has the smallest gender gap. This shows that Insider Fraud has the largest female share in the crime as a result of females being slightly more involved in this type of fraud as males. Insider fraud consists of falsifying of company documents and statements to receive

money not entitled to them³. The second smallest gender gap was Disability Fraud, in which females were as proportionately involved as males. The third smallest gender gap was for False Claims, at 40.7%. These three types of frauds represent some of the least lucrative insurance frauds in the sample. Consequently, females may be more involved in these types of fraud for that reason. Crop insurance has the largest gender gap (16.7%), which can be explained by the occupation of those committing this type of fraud. As observed through the Fraud News Daily articles by the CAIF, farmers are the usual perpetrators of this crime. Considering that this occupation is more male dominated, it is expected that less females would be involved. Life Insurance hold the second largest gender gap (18.5%), which could be due to the fact that this category of fraud is the most lucrative of the fifteen insurance frauds considered in the study.

The right-hand side of Table 11 shows the profile percentages by gender. Profile percentages are a comparison of findings within the same sex. It answers the question, “*What percent of all cases involving females were for a certain type of insurance fraud?*” As shown in Table 11, there is a lot of overlap between male and female offenders. Both males and females were more involved in three types of insurance fraud, Medicare/Medicaid, Workers Compensation, and Drug Diversion, than any other kind. These three types of fraud constitute 45% of the total fifteen frauds in the dataset. The largest of them was Medicare/Medicaid, being committed by 172 of the 864 defendants in the sample. Both males and females were most largely involved in Medicare/ Medicaid fraud, with 19.7% of all males and 20.4% of all females. As previously stated, the largest profile percentages for both males and females were for Medicare/Medicaid, Workers Compensation, and Drug Diversion, respectively. This indicates a

³ An elaboration on the fifteen different types of insurance frauds, including examples of each, can be found in Chapter 2, under “Dataset Characteristics”.

great deal of similarity between genders at the types of insurance frauds they both choose to commit.

As previously stated in this study, the fifteen types of insurance fraud were collapsed into five categories.⁴ Recall, fraud types were grouped based on their substantive similarities. Table 12. “Female Gap by Collapsed Fraud Type” shows the five collapsed forms of insurance fraud and the gender gap for each. The ledger of the table notes which frauds are contained within the five collapsed categories.

Table 12. Female Gap by Collapsed Fraud Type

Fraud Type	N			Gap/Share
	Total	M	F	%F
Total	864	579	285	33.0
Medical	378	258	120	31.7
Auto	176	114	62	35.2
Workers Comp	116	77	39	33.6
Miscellaneous	151	100	51	33.8
Agent	43	30	13	30.2

Source: Coalition Against Insurance Fraud
 Formula: Gap = Female Category/ Category Total x 100
 Medical: Medical, Medicare/Medicaid, Drug Diversion, Disability
 Auto: Auto, Auto Give-Ups, Staged Crashes
 Misc.: Life, Contractor, Crop, Arson, False Claim, Insider Fraud
Notes: Gap is equivalent to female share

As previously described, the Medical category encompasses the majority of fraud committed by both males and females. The female gender gap is very similar for all five collapsed categories. The gender gap ranges from 30.2% to 35.2%, a much narrower range as compared to Table 11. Second, the gender gap was the smallest for Auto Frauds (30.2%). Also,

⁴ Collapsed fraud types are reviewed in greater detail in Chapter 2, under the “Dataset Characteristics” section of this study.

when combining similar frauds, it is clearer that the majority of frauds committed by both genders are in the medical field. This point is further analyzed following Table 13.

The following table also shows the five collapsed fraud categories of insurance fraud. Table 13. “Offender Profile Percentages by Collapsed Fraud Type”, however, compares the female vs. male profiles. Once again, the collapsed categories are noted in the ledger.

Table 13. Offender Profile Percentage by Collapsed Fraud Type

Fraud Type	N			Profile Percent		
	Total	M	F	%Total	%M	%F
Total	864	579	285	100.0	100.0	100.0
Medical	378	258	120	43.8	44.6	42.1
Auto	176	114	62	20.4	19.7	21.8
Workers Comp	116	77	39	13.4	13.3	13.7
Miscellaneous	151	100	51	17.5	17.3	17.9
Agent	43	30	13	5.0	5.2	4.6

Source: Coalition Against Insurance Fraud
 Formula: $PP = \frac{F \text{ or } M \text{ Category Total}}{\text{Overall F or M Total}} \times 100$
 Medical: Medical, Medicare/Medicaid, Drug Diversion, Disability
 Auto: Auto, Auto Give-Ups, Staged Crashes
 Misc.: Life, Contractor, Crop, Arson, False Claim, Insider Fraud
 Notes: Percentages out of total number of offenses

Repeatedly, it is evident that both males (44.6%) and females (42.1%) are committing more health related frauds than the four other categories of fraud. This can be seen through Medical having the largest profile percentages. Auto fraud, Workers Compensation, Miscellaneous profile percentages for both males and females are very similar in size. The profile percentages range from 13.3% to 19.7% for males and 13.7% to 21.8% for females in these three types of collapsed fraud categories.

Interview

In addition to using data from the Coalition Against Insurance Fraud, I also conducted an interview with Special Agent Stephen Collins. This informational interview is included to deliver first-hand knowledge of typical fraud offender characteristics, from an experienced agent in the field of financial fraud. Furthermore, it serves to indicate how significant fraud is in our present-day and to shed some insight on how agencies work to detect and deter fraud.

Special Agent Stephen Collins is a certified fraud examiner currently working for the Federal Bureau of Investigation in State College, PA. He started his career against fraud when he joined the Salt Lake City Police Department as a financial crimes investigator, specifically dealing with white-collar crimes. When asked how he defines fraud, he stated, “A lot of what we term fraud is larceny, stolen property. It involves lies to get to the money.” Agent Collins began with an overview of how the FBI obtains and handles cases of fraud. The FBI receives cases from various leads, such as victims of fraud, other law enforcement agencies, and bank suspicious activity reports. Agencies such as banks have an obligation to report embezzlement theft, while other companies choose not to report it. Agent Collins revealed that many law enforcement agencies are more than happy to pass over white-collar crime cases to the FBI. Nevertheless, specific factors decide whether or not the FBI resolves to investigate a claim (e.g. the amount of financial loss caused by the crime). As a result, the FBI tends to limit its investigative involvement to more serious and more lucrative forms of fraud. Once they determine that a case is worth pursuing, a primary question they ask is whether or not the spouse of the offender was involved in the crime. According to Collins, many times the spouse of the perpetrator either facilitates the fraud or benefits from it. They ask this question regardless of the offender’s gender.

Through Collins' years of experience with cases of fraud, he has noticed some common characteristics. He has seen an increase in healthcare and Medicare related frauds. Collins explained that those working in the medical field, especially male doctors, have the means to easily commit health related fraud. According to Collins, "It is easy to do with a license and with larceny in your heart." Furthermore, he has noticed a trend in female involvement. "Women are less likely to get involved in all crimes. However, when it comes to embezzlement or larceny, women are just as likely to get involved as men," according to Collins. "A lot of times these crimes are committed by women in a position of trust, such as office managers or bookkeepers, abusing that position." He also sees a theme of less-educated women committing these types of crimes. Women higher up the ladder with more education are rarely involved, but women with money problems (usually self-imposed) with lower levels of education commit fraud. "Women are usually involved because their significant other was involved," Collins commented on what he has observed. When it comes to male perpetrators, though, Collins states that they are most likely to work with other males because of the "all boys network of trust."

Considering that Agent Collins has worked mainly with lucrative, white-collar crimes, direct comparisons cannot be made between his expertise and the findings of this study. However, some of his observations do coincide with the data collected from the CAIF and should be acknowledged. Collins' observation on the present increase in healthcare and Medicare related frauds can also be seen in this study, specifically in Table 1. "All Fraud Types" and Table 2. "Collapsed Fraud Types", found in Chapter 2. Table 1 shows that nearly 20% of all defendants in the sample committed a Medicare/Medicaid fraud. When all health related frauds were combined in Table 2 (Medical, Medicare/Medicaid, Drug Diversion, and Disability), "Medical" frauds made up about 44% of the dataset. Medical related frauds were therefore

largest fraud committed in this sample, which could be due to a rise in healthcare related frauds, as Collins observed.

Agent Collins also spoke on the subject of defendant gender and co-offender relationships. He stated that women are less likely to be involved in all crimes. As Table 3. “Gender of Defendant” shows, 67% of the sample were males and 33% were females. Women were less involved in the 15 types of insurance frauds included in this study. He also stated that males are likely to work with other males in committing a crime. In this study, there are very few all female groups (2.4%) and considerably more all male groups (12.3%), as seen in Table 5. “Sex Composition OF Group Member(s). Furthermore, he observed that women are usually involved due to their significant other. Table. 7 “Gender by type of Relationship” shows that of the 113 females whose relationship to their co-offender was stated, 55% committed fraud with their significant other or family members. While it is difficult to draw any conclusions from the small sample gathered, we can recognize that it is possible that females were involved in insurance fraud due to their romantic or familial relationships.

Review of the Hypotheses

Hypothesis 1: Overall, more men will be involved in insurance fraud than women.

The first hypothesis was supported by the data obtained from the Coalition Against Insurance Fraud. As Table 3. “Gender of Defendant” indicates, of the 864 defendants in the dataset, the majority of offenders were male (67%). Females made up 33% of the defendants who committed insurance fraud.

Hypothesis 2: If women are involved, they are more likely to be proportionately involved in less lucrative forms of insurance fraud as compared to men (i.e. the gender gap will be smaller for frauds with small monetary gain as compared to more lucrative frauds).

The second hypothesis was also supported. Out of all fifteen coded fraud types, Insider Fraud, Disability Fraud, and False Claim had the smallest gender gaps as shown by Table 14. “Offender Gender by Fraud Type”. Recall, the higher the gender gap percentage, the larger the female share in the crime. All three of these crimes are seen as lower-level, less lucrative forms of fraud. The gender involvement in Insider Fraud is slightly higher for females, containing 5 males and 6 females and a gender gap of 54.5%. Second, the gender involvement in Disability Fraud is proportional with a female gender gap of 50%, containing 11 males and 11 females. Lastly, False Claims contains the third smallest female gender, at 40.7%, with 16 male defendants and 11 female defendants.

Furthermore, the most lucrative type of insurance fraud – involving life insurance – had one of largest gender gaps in the sample. Of the 27 defendants who committed life insurance

fraud, 22 were males and only 5 were females. This finding then suggests that females are less likely to be involved in costlier and perilous types of fraud.

Hypothesis 3: When women are involved in insurance fraud, they most often will commit fraud with male co-offenders.

Finally, the third hypothesis was also supported. Of the 278 females whose sex composition in the sample was known, 160 were known to have committed crime in a mixed sex group (57.6%). Thus, the majority of females most often committed fraud with male co-offenders to commit insurance fraud. Only 97 and 21 of the 278 females committed fraud either alone (34.9%) or in an all female group (7.6%), respectively. The solo female category made up 11.2% of all offenders in the sample, while the all female group made up 2.4% of all offenders in the sample. These statistics are shown in Table 5. “Sex Composition of Group Members and Table 7. “Gender by Type of Relationship” of the findings section. Therefore, more females – in cases where the sex composition of the group is known – worked with males, rather than working alone or with other females.

Chapter 4

CONCLUSION

Through this study, I set out to make contributions to the literature on female crime and to also contribute to research on insurance fraud, which could be presently viewed as a serious crime problem. My main source of data came from *Fraud News Daily* articles published by the Coalition Against Insurance Fraud. Supplemental information on fraud and gender differences was collected through an interview with Special Agent Stephen Collins.

Overall, this study has shown that there is a great deal of similarity between male and female offenders of lower-level, conventional fraud, but some important differences as well. When analyzing the fifteen types of insurance fraud considered in this dataset, both genders had the most involvement in health related frauds. In general, Medical frauds constituted 45% of all insurance frauds. More specifically, of the 285 females in the sample, nearly 42% were involved in Medical fraud. As previously considered by the literature, there are inferences that can be made as to why female involvement in this category is so high. An explanation could be that frauds of Medicare/Medicaid, Medical, Drug Diversion, and Disability are most closely related to female skills, opportunities, and routine activities (Schwartz & Steffensmeier, 2013). Females are usually the ones most likely to seek medical attention and to pay medical bills. They most often hold positions as nurses or secretaries in medical facilities and are thus trusted with medical forms. Therefore, they may have more of an opportunity to commit this type of insurance fraud as compared to other frauds in the dataset (Steffensmeier & Allan, 1996).

The largest difference between genders was evident when looking at the sex composition of group members. A larger percentage of males either committed fraud alone or in an all male network of offenders than females who committed fraud alone or with other females. As

discussed earlier, males choosing to work with co-offenders of the same gender could be due to institutional sexism (Steffensmeier & Terry, 1986). In the underworld crime network, feminine stereotypes are seen as incompatible with male criminal values. More serious criminals, then, would rather commit fraud solo or with male accomplices because they may perceive females as lacking the qualities for being good thieves (Steffensmeier & Terry, 1986). However, males may choose to commit fraud with females when conducting less serious crimes. As found through the CAIF data, females most often committed fraud in a mixed sex group of offenders and committed the least lucrative forms of insurance fraud. Steffensmeier, Schwartz, & Roche, indicate that females tend to commit fraud with co-conspirators with whom they share close, personal relational ties (2013). When working with co-offenders, females in the sample most often committed fraud with a romantic partner or kin than a business partner.

The main findings of this study were consistent with the literature cited on gender differences in crime, specifically, both the LFEE Exegesis and the “Gender and Twenty-first Century Corporate Crime” discussed in the review of prior literature. The findings are similar in that females seem to be more involved in less lucrative forms of fraud and most often commit fraud with male co-conspirators with whom they have a close relationship. This study finds that the insurance frauds most committed by female offenders (e.g. medical frauds) are closer to more ordinary, conventional crimes. Furthermore, all three hypotheses set forth in the beginning of my thesis were also supported. The following is a discussion on the limitations of the dataset, and what can be done to further the research in this area.

Limitations

The central shortcomings in this study derive from the Coalition Against Insurance Fraud dataset. The first limitation pertains to missing information on co-offender relationships. Being that the defendant and case characteristics were limited to the available information in the news stories and online, roughly 38% of co-offender relationships were unknown. The information would have been beneficial in providing a fuller accounting of defendants who committed fraud with their significant other, family members, or business partners to commit fraud. If the relationship types had been provided in the case reports, a more definitive pattern could have been drawn on mixed sex groups and co-offender relationship types.

A second limitation of the dataset used in this study relates to the role that defendants played in committing fraud. There was not enough substantial information available on the position that males and females had when executing the crime. For instance, knowing whether the female defendant was the ringleader or a minor accomplice would have helped in further examining gender differences in fraud.

Lastly, a third limitation of the dataset pertains to case verdicts. Since all the coded cases from the Coalition Against Insurance Fraud were current (beginning in December 2015 and ending with July 2016), data on case convictions and sentencing were many times not accessible. The lack of information could be due to the case still pending, or the case not yet being updated online. If the cases analyzed had been from an earlier year, perhaps more data on case conclusions would have been available. However, a reason for which this study is important is because it uses relevant and current information.

Future Research

The research in this study should be built on by addressing the gaps of information described in “Limitations”. The gaps could be filled by extending the research to other areas of fraud. Some examples of lower-level, common frauds that should be researched are check fraud, credit card fraud, debt elimination scams, and charities fraud. Also, frauds that are due to technology could be further investigated to build on the findings of this study. Some common electronic frauds in the present-day are Internet sales, online misrepresentation, website misdirection, and work-at-home scams (National Fraud & Cyber Crime Reporting Centre, n.d.). By looking into these mundane frauds, greater inferences can be made on typical characteristics of female involvement in crime and fraud in particular.

Additionally, further research is needed that looks at serious forms of lucrative, white collar crimes. If more research were done in this field, clearer patterns could be drawn between gender, age, co-offender relationships, and occupations of those involved in lucrative crimes as compared to the types of insurance fraud described in this thesis. Ultimately, more efforts need to be taken to differentiate the types of frauds included in Uniform Crime Report statistics. A distinction in the category of fraud should be made between common, less lucrative frauds and white collar crimes. This would assist in providing more accurate data on varieties of fraud and aid in further understanding gender differences in crime.

Appendix A

Codebook

1. Date of release (year-month-day-story number)
2. Week # (in year)
3. Case # of day
4. Town/City/County of Press Release
5. State of press release
6. Coder ID/Name
7. Sex of Defendant:
 0. Male
 1. Female
8. Age (#)
9. Sex composition of group member(s) in conspiracy:
 1. Solo Male
 2. All Males
 3. Solo Female
 4. All Females
 5. Mixed Sex
 6. Unknown
10. Co-offender Relationship Type: **(If the case does not involve more than one offender, leave blank). Copy and paste explanation of relationship in Column 25.**
 1. Romantic-husband/wife; partners (as if or close to being married)
 2. Romantic-boyfriend/girlfriend; dating
 3. Kin/family only (e.g. parent-child; siblings; relatives)
 4. Business relationship/partnership only
 5. Other
 6. Not specified
11. Primary Fraud Offense **(also “copy & paste” description of fraud conspiracy into column 25. Also be sure to “copy & paste” actual charges in column 25).**
 1. Workers Compensation

2. Medical Fraud (other than Medicare/Medicaid)
 3. Medicare/Medicaid
 4. Crop Insurance Fraud
 5. Arson
 6. Agent Fraud
 7. False Claim
 8. Drug Diversion
 9. Auto Fraud
 10. Auto Give-ups
 11. Staged Crashes
 12. Disability Fraud
 13. Life Insurance Fraud
 14. Insider Fraud
 15. Contractor Fraud
12. Other Offense(s):
1. No other offense
 2. Other offense
 3. "Red Flag" Offense (e.g. homicide)
13. Monetary Loss or Profit – copy and paste details in columns
14. Arrest or Conviction
1. Arrest
 2. Pled Guilty
 3. Found Guilty
15. Punishment - Fine - Insert Amount (if no information, leave blank)
16. Punishment- Restitution - Insert Amount (if no information, leave blank)
17. Punishment (if no information, leave blank)
1. Probation
 2. Jail/Prison
18. Sentence Length if jail or prison - Insert # of months (if no information, leave blank)
19. Employment status specified in article/story?
0. No
 1. Yes

20. If answer yes on #20 above, what is employment status?

0. Unemployed

1. Employed

21. Occupation specified in article?

0. No

1. Yes

22. Insert name of occupation (If yes to Q#22)

23. Added information about main or specific offenses and **charge(s)**, main or specific offenses (e.g. cybercrime, “contract” killing, type of hate crime)

24. Other Info. Copy any **other relevant information** here (e.g., role in crime, sentencing outcome).

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ACADEMIC VITA

Academic Vita of Natalia Ruggiero

nataliaruggiero95@gmail.com

EDUCATION

The Pennsylvania State University, University Park, PA
Bachelor of Arts, Criminology; Bachelor of Arts, International Politics
Italian Minor
Area of Honors: Criminology

Study Abroad in Todi, Italy (2015)

Thesis Title: Gender Differences In Varieties Of Insurance Fraud
Thesis Supervisor: Dr. Darrell Steffensmeier

Honors: Schreyer Honors College; Paterno Fellow; Pi Sigma Alpha Political Science Honors Society; Gamma Kappa Alpha Italian Honors Society; Josephine Rhea Award for Excellence in Italian; Penn State Liberal Arts Undergraduate Scholarship; Penn State Provost's Award; Emergency Aid of Pennsylvania Founder's Award

Languages: Fluent in Spanish, Proficient in Italian

WORK EXPERIENCE

Social Science Research Institute, University Park, PA September 2016-May 2017
ARDA Project Research Assistant

- Collect data and collaborate with graduate students on labels files, website projects, and other various tasks.

East Food District, University Park, PA February 2014-December 2016
Student Manager

- Managed food business establishment under high-pressured situations.
- Directed and designated tasks to student employees according to their skills.
- Supervised 5+ student employees on each shift and trained new workers.

Penn State University, University Park, PA August-December 2016
Teaching Assistant

- Assisted professor in teaching upper-level course entitled "Age, Gender, and Crime" by managing ANGEL account, grading quizzes, directing student questions, and keeping attendance.

Esperanza Immigration Legal Services, Philadelphia, PA

June-August 2016

Legal Intern

- Screened and translated for new clients and compiled relevant legal case information.
- Completed USCIS applications with clients, in Spanish, and sent out for submission.
- Accompanied clients to USCIS Naturalization interviews as a Spanish translator.

Sachs Law Group, LLC, Philadelphia, PA

May-August, December 2014

Legal Intern

- Met legal deadlines by prioritizing tasks and adapting to unforeseen changes.
- Translated confidential documents and conducted affidavits for clients.
- Collaborated on and finalized court submissions and USCIS Citizenship forms with attorneys.
- Accepted and processed client payments via telephone and in person.

EXTRACURRICULAR ACTIVITIES

Hearts for Homeless

January 2017

Volunteer

Penn State IFC/Panhellenic Dance Marathon (THON)

September 2014 – February 2016

Dancer Relations Committee Member, Commonwealth Campus Chair

- Responsible for planning for the health, safety, and enjoyment of all 700 dancers during the academic year to better prepare for THON Weekend.

Gospel Roads Community Service Retreat

July 2012 – 2015

Core Team

- Led and coordinated retreat events and oversaw the safety and wellbeing of participants while at community service sites (such as soup kitchens, homeless shelters, and special needs homes).