

**Occupational Fraud: A Comparison of Perceptions of Law Enforcement Majors, Accounting Majors, and Other Business Majors**

*Jane E. Baird*

*Robert C. Zelin II*

*Kate C. Olson\**

**Introduction**

The Association of Certified Fraud Examiners 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 (ACFE, 2014, p. 6).” In the criminal justice literature, occupational fraud is consistently deemed less serious than other crimes, and yet its costs to society are substantial. In fact, the financial costs of white-collar crime may be as much as 40 times the costs resulting from “street crime” (Lynch et al., 2004). In the Report to the Nations on Occupational Fraud and Abuse- 2014 Global Fraud Survey (ACFE, 2014), it was reported that a typical organization may lose approximately five percent of its reported revenue to fraud each year. This loss, the ACFE states, could translate into a worldwide loss of \$3.7 trillion per year—and that only represents the costs of occupational fraud to the organizations themselves. While the perception may be that white collar crimes are less harmful than violent street crimes, white collar crimes can be both financially and emotionally devastating to the victims, which include not only businesses but the individual investors and taxpayers who suffer losses as a result (Price and Norris, 2009; Holtfreter et al., 2008).

In this study, we focus on perceptions of occupational fraud as compared to non-occupational theft. We expand on the literature by examining the perceptions of accounting majors, other business majors, and law enforcement majors to determine if the failure to recognize the significance of occupational frauds exists in those populations as it has been shown to exist in studies of the general population. Additionally, we look at whether occupational frauds are perceived as more serious by accounting students as compared to the other student participants. Since accountants, business managers, and law enforcement personnel all have roles in the prevention, detection, and prosecution of frauds, understanding their perceptions of these crimes is important in considering needs for policies and professional education within those fields.

**Theoretical Development**

*Crime Seriousness and Perceived Harm*

Numerous research articles have addressed the issue of the seriousness of crime. The seminal article about the perceptions of the seriousness of various crimes was authored by Sellin and Wolfgang (1964). The study examined 141 different crimes and found that the perceived seriousness of a crime is dependent upon the perceived consequences of the crime to the victims. The subjects involved in the study were students, law enforcement officers, and judges. Since the Sellin and Wolfgang seminal piece, research on the subject has taken place all over the world. Stylianou (2003) examined fifty-three different studies about the perceived seriousness of crimes and found that the number of subjects participating in the

---

\* The authors are respectively, Professor at Minnesota State University and Doctoral Student at University of Missouri-Columbia.

studies ranged from twenty-five to 2745; the number of criminal acts examined ranged from one to 204; and the participating subjects included students, law enforcement officers, judges, white collar workers, inmates, prison staff, military personnel, prosecutors, probation officers, church youth, crime victims and the general population. Despite methodological differences and limitations in these studies, Stylianou concludes that the results consistently show that the perceived seriousness of a crime is related to both the perceived ramifications of the crime for the victims and the perceived wrongfulness of the behavior.

An often cited study was conducted by Rossi et al., (1974). In this study, 200 subjects were asked to sort offenses listed on cards into one of nine slots (the first slot represented the least serious crimes and the last slot represented the most serious crimes). Each subject sorted eighty offenses (140 different offenses were examined in the study). The offenses that received the highest ratings were crimes against persons, followed by crimes against property, followed by “victimless crimes.” This typology ranking was also found by other authors (Cullen, Link and Polanzi, 1982; Douglas and Ogloff, 1997; Evans and Scott, 1984; McCleary et al., 1981; Rossi and Henry, 1980; Schragar and Short, 1980; Scott and Al-Thakeb, 1980; Sellin and Wolfgang, 1964; Warr, 1989; and Wolfgang et al., 1985). Crime seriousness ratings have been found to be generally consistent over time and across cultures (O’Connell and Whelan, 1996). However, Cullen et al., (1982) found that the perception of white-collar crime seriousness in the United States increased from the early 1970s to the early 1980s relative to perceptions of other crimes.

With regard to white-collar crimes, Rossi et al., (1974) found that the vast majority of white-collar crimes were ranked mainly in the bottom two quartiles, meaning they were viewed as less serious crimes. The white collar crimes and related rankings, which ranged from one (most serious) to 140 (least serious), were: cashing stolen payroll checks (55<sup>th</sup>), knowingly passing counterfeit money (69<sup>th</sup>), employee embezzling company funds (74<sup>th</sup>), knowingly selling stolen stocks and bonds (75<sup>th</sup>), printing counterfeit ten dollar bills (84<sup>th</sup>), knowingly selling worthless stocks as valuable investments (90<sup>th</sup>), using stolen credit cards (94<sup>th</sup>), lending money at illegal interest rates (97<sup>th</sup>), bribing a public official to obtain favors (103<sup>rd</sup>), under-reporting income on income tax return (106<sup>th</sup>), willfully neglecting to file income tax returns (107<sup>th</sup>), overcharging on repairs to automobiles (116<sup>th</sup>), fixing prices of a consumer product such as gasoline (126<sup>th</sup>) and fixing prices of machines sold to businesses (127<sup>th</sup>). Cullen et al., (1982) replicated the Rossi et al., (1974) study and placed an emphasis on white-collar crime. The authors found very similar results; offenses that did not involve physical harm were found to be less serious than offenses that involved physical harm.

Many of these studies were published before the establishment of the United States Sentencing Commission in 1984. The commission established sentencing policies to be applied to individuals convicted of Federal crimes. The guidelines were designed to take into account the seriousness of the crime and the perpetrator’s criminal record, with sentencing ranges from zero to six months for less serious crimes to thirty years to life for the most serious crimes. Base offense levels are assigned to different crimes and then these levels are adjusted for factors such as the monetary loss involved. As a result of the Sarbanes Oxley Act of 2002, the commission increased the penalties for white-collar crimes, particularly for those involving 250 or greater victims (United States Sentencing Commission, 2003). In some instances, the sentences were increased by nearly three times the previous sentencing level. Still, the guidelines reflect more perceived seriousness for non-occupational thefts as compared to occupational thefts. For example, a burglary of a residence has a base offence level of seventeen compared to a base level of twelve for the burglary of a business and a base level of six for larceny or embezzlement (United States Sentencing Commission, 2014)

The literature summarized above reveals that occupational fraud is often viewed as less serious than other crimes despite the significant costs that occupational frauds have on businesses, investors, taxpayers, employees, and society as a whole. Based on these consistent prior results, we hypothesize that occupational frauds will be perceived as less serious and less harmful than non-occupational thefts:

**Hypothesis One:** Mean composite scores for seriousness of occupational frauds will be

statistically lower than mean composite seriousness scores for non-occupational thefts.

**Hypothesis Two:** Mean composite scores for harm caused by occupational frauds will be statistically lower than mean composite scores for harm caused by non-occupational thefts.

Prior literature has shown that a majority of individuals in the general public may feel that perpetrators of violent crimes should receive stricter punishment than perpetrators of nonviolent crimes (Holtfreter et al., 2008). The higher the public's perception of victimization in a crime, the stricter the punishment desired (Holtfreter et al., 2008; Cullen et al., 1982; Costello et al., 2002). Rossi et al., (1985) found that the higher the perceived seriousness of a crime, the more respondents indicated a need for more severe punishments. Given an expectation that the occupational frauds will be considered less serious crimes than the non-occupational thefts, it would be consistent with prior research to expect a desire for greater punishment for the non-occupational thefts. Therefore, we hypothesize that individuals will feel stronger about prosecuting perpetrators of non-occupational thefts than those committing occupational frauds:

**Hypothesis Three:** Mean composite scores for prosecution of occupational frauds will be statistically lower than mean composite scores for prosecution of non-occupational thefts.

#### ***Willingness to Report***

Baird and Zelin (2008) found that, in general, the more students disapproved of a fraudulent act being committed, the more likely they were to report that fraud using an anonymous tip line. This finding was consistent with earlier studies showing a positive correlation between the perceived severity of wrongdoing and the willingness to be a whistleblower (Miceli and Near, 1985; Victor et al., 1993). Since the occupational frauds are expected to be deemed less serious and less harmful than the non-occupational thefts, we posit that participants will be more likely to report the non-occupational thefts than the occupational frauds.

**Hypothesis Four:** Mean scores for likeliness to report occupational frauds will be significantly lower than mean scores for likelihood to report non-occupational thefts.

#### ***Differences by Academic Major***

In the business ethics literature, many studies have examined individuals' perceptions of unethical actions taken by others, primarily by presenting participants with vignettes or scenarios depicting various actions (Borkowski and Ugras, 1998; Ford and Richardson, 1994; Low et al., 2000; and O'Fallon and Butterfield, 2005). Results have been mixed in terms of whether or not individuals choosing different career paths or different academic majors exhibit different perceptions of unethical actions. Many studies show significant differences across academic majors and professions (Arrington and Reckers, 1985; Baird et al., 2006; Beltramini et al., 1984; Fulmer and Cargile, 1987; Hawkins and Cocanougher, 1972; Knotts et al., 2000; Lopez et al., 2005; McNichols and Zimmerer, 1985) and others find no significant differences (Barnett et al., 1994; Curren and Harich, 1996; Giacomino, 1992; Goodman and Crawford, 1974; Laczniak and Inderrieden, 1987). There has been some evidence in this literature that business education may help to make individuals less tolerant of unethical behaviors (Lopez et al., 2005) or that business students may be less tolerant of others' unethical actions than students majoring in other subjects (Knotts et al., 2000; Beltramini et al., 1984). Within business majors, reactions to unethical actions of others can vary by major (Lopez et al., 2005). Accountants have been shown to exhibit more ethical reactions to ethical dilemmas than other business students (Fulmer and Cargile, 1987; Baird et al., 2006), although some studies have found no difference in ethical reactions of accounting majors versus other business majors (i.e., Giacomino, 1992). In recent years, accounting programs have placed an increased emphasis on anti-fraud efforts (see, for example, Buckhoff and Schrader, 2000; Peterson and Reider, 2001; Rezaee et al., 2004), while most law enforcement programs continue to focus primarily on "street crimes" (Lynch et al., 2004; Simpson, 2003; Cullen and Benson, 1993). Lynch et al., (2004) found that white-collar crime topics were covered in only 4.5% of the pages in a sample of criminology textbooks studied, and that only nine out of twenty doctoral programs in criminology or criminal justice offered a course in

white-collar crime. It stands to reason, then, that criminology or law enforcement students may not be exposed to as much information about occupational crimes as the accounting majors are, and, therefore, may not see those crimes as being as significant as other crimes. In this study, we posit that accounting majors will perceive the occupational frauds as more serious and more harmful than will the other students and, as a result, will feel more strongly that those crimes should be prosecuted and will be more willing to report those crimes. Therefore, we will test the following hypotheses:

**Hypothesis Five:** Mean seriousness ratings of accounting majors will be significantly higher than ratings of law enforcement or other business majors for the occupational frauds.

**Hypothesis Six:** Mean harm ratings of accounting majors will be significantly higher than ratings of law enforcement or other business majors for the occupational frauds.

**Hypothesis Seven:** Mean prosecution ratings of accounting majors will be significantly higher than ratings of law enforcement or other business majors for the occupational frauds.

**Hypothesis Eight:** Mean ratings of accounting majors for likelihood of reporting the crimes will be significantly higher than ratings of law enforcement or other business majors for the occupational frauds.

### **Methodology**

Participants were recruited from three courses at a medium-sized state university in the United States: Management Accounting, Advanced Topics in Accounting, and Policing in a Diverse Society. The Management Accounting course is a junior-level course required of all accounting majors and an elective for finance and management majors. The Advanced Topics class is a senior course for accounting majors. The Policing in a Diverse Society course is a sophomore level course required for all law enforcement majors, although students may take the course at any time during their college tenure.

Each participant was given a packet containing eight scenarios. All packets were identical, containing the same eight scenarios. In all eight scenarios, the perpetrator was a male named Jake who experienced financial problems due to the declining economy. In all eight scenarios, Jake committed a crime that costs the victim \$100,000. The nature of the crime varies from scenario to scenario. Four of the eight scenarios were occupational-related white-collar crimes (scenarios 1 through 4), while the others were non-occupational thefts (scenarios 5 through 8). The following is a brief description of the crimes committed in each scenario:

- a. **Scenario 1 (falsified financials):** Jake, the owner of a construction company, falsified financial statements submitted with a loan application to a local bank in order to improve his chances of getting a \$100,000 loan. Jake defaulted on the loan, resulting in a \$100,000 loss for the bank.
- b. **Scenario 2 (tax fraud):** Jake is the owner of a chain of restaurants. He significantly underreported sales from all his restaurants for both state sales tax purposes and federal income tax purposes, allowing him to pay \$100,000 less in total on taxes during the year than what he really would owe based on the restaurant's actual income.
- c. **Scenario 3 (cash embezzlement):** Jake is a management-level employee at a manufacturing company. Jake stole \$100,000 from his company by diverting a portion of the company's cash receipts for himself.
- d. **Scenario 4 (kickbacks):** Jake, a purchasing director, took kickbacks from his company's biggest supplier for purchases made. Over the past two years, Jake's kickbacks have totaled \$100,000.
- e. **Scenario 5 (home burglary):** Jake decided to break into homes and steal whatever cash and small but expensive items he can find. Over a period of several months, he has netted approximately \$100,000 worth of cash and property.
- f. **Scenario 6 (insurance fraud):** Jake had inherited some very expensive jewelry from his

- mother many years ago, which he had kept for sentimental reasons until he was forced to sell it to cover expenses. He also sold everything else of value in his house. All items were sold in untraceable transactions. He did not remove the items from his insurance policy, and instead faked a break-in at his home and reported the items stolen. Jake collected \$100,000 from his insurance company.
- g. **Scenario 7 (bar burglary/arson):** One night Jake was at a local bar until closing time, and noticed the owner putting the money from the cash register into the office. Jake went back to the bar the next Saturday night after closing, broke in through the back door and found the money. Angry that there was not as much money as he thought, he poured alcohol on the bar and set fire to it. The damage and theft combined totaled \$100,000.
  - h. **Scenario 8 (car theft):** Jake devised a plan to bring in income by going into affluent neighborhoods in the middle of the night and stealing high-end vehicles that are parked in driveways. He found a buyer for the vehicles who sells the cars overseas. Jake has brought in approximately \$100,000 from these stolen cars.

For each of the eight scenarios, participants read the scenario and were asked to provide their rating of the crime using a 7-point Likert scale for five different questions:

- a. The seriousness of Jake's crime (1=not at all serious, 7=extremely serious).
- b. How much harm they felt resulted from Jake's crime (1=no harm, 7=a lot of harm).
- c. How strongly they felt that Jake should be criminally prosecuted (1=he definitely should not be prosecuted, 7=he definitely should be prosecuted).
- d. The likelihood that they would report Jake's crime if they knew it was happening and could report it anonymously, assuming they are not related to Jake and are not personal friends with Jake (1=definitely would not report, 7=definitely would report).
- e. The likelihood that they would report Jake's crime if they knew it was happening and could report it anonymously, assuming they are either related to Jake or are personal friends with Jake (1=definitely would not report, 7=definitely would report).

Composite scores for each of the items measured were calculated by summing the scores for scenarios one through four (the occupational fraud scenarios) and summing the scores for scenarios five through eight (the non-occupational thefts). To determine whether the means for the entire sample differed between the occupational fraud scenarios and the non-occupational thefts, one-sample t-tests were used, with the means of the non-occupational theft composite scores as the test values.

Since each subject rated all eight scenarios based on the five questions above, five separate repeated measures ANOVAs were used to examine differences in ratings among law enforcement majors, accounting majors, and other (non-accounting) business majors. The between subjects factor in each ANOVA was the participants' major. In prior studies, demographic differences such as gender or age of the study participant have been found to be associated with participants' perceptions of others' unethical actions (Baldry, 1987; Barnett and Karson, 1987; Barnett et al., 1994; Borkowski and Ugras, 1998; Deshpande, 1997; Ford and Richardson, 1994; Gable and Topol, 1988; Hasseldine and Hite, 2003; Hetherington and Feldman, 1964; Hunt and Chonko, 1984; Jacobsen et al., 1970; Jones and Gautschi, 1988; Kelley et al., 1990; Knotts et al., 2000; Lane and Schaupp, 1989; Low et al., 2000; Miesing and Preble, 1985; O'Fallon and Butterfield, 2005; Roskens and Dizney, 1966; Ruegger and King, 1992 and Terpstra et al., 1993). For this reason, participant age, gender and class rank were used as covariates in the analysis to control for other differences between the groups. Each repeated measures ANOVA included a different dependent variable: rating of the seriousness of the crime (*seriousness*), harm done by the crime (*harm*), whether the perpetrator should be prosecuted (*prosecution*), likelihood that the participant would report the crime if he/she was not a relative or friend of the perpetrator (*report*), and the likelihood that the participant would report the crime if he/she was a relative or friend of the perpetrator (*report friend*).

## **Participants**

All 170 students in the three courses agreed to participate in the study, but twelve responses were omitted from the final analysis. Five responses were omitted because the participants were not majoring in one of the three targeted subjects and the other seven were omitted because the responses were not complete. There were a total of 158 usable responses. Based on self-reported demographic information, seventy-seven of the 158 respondents were accounting majors, twenty-four were other business majors, and fifty-seven were law enforcement majors. One hundred fourteen (72.2 percent) of the participants were male and forty-four were female (27.8 percent). Over half (eighty-five) were seniors, forty-four were juniors, seventeen were sophomores, eight were freshmen and four were either non-degree students or students working on a second degree. One hundred thirty four of the students were Caucasian, one was Hispanic, five were African American/black, fourteen were Asian, one was Native American, and three were other/mixed race.

## **Results**

Occupational fraud and non-occupational theft (theft) composite scores for seriousness, harm, prosecution, report, and report friends ratings were computed by summing each student's responses to scenarios one through four (Occupational Frauds) and scenarios five through eight (Thefts). The mean composite scores are shown in Table 1. For each of the five variables measured, the composite scores were lower for the occupational frauds, as predicted. To test Hypothesis One, the mean composite score for seriousness of occupational frauds was compared to the mean composite score for the seriousness of thefts using a single-sample t-test. Results were significant ( $p=.000$ ) and, therefore, Hypothesis One is supported. The students perceived the occupational frauds as less serious than the thefts, even though the dollar amount of loss was the same for all of the crimes. The crime considered the most serious by the students, on average, was the bar burglary (Scenario 7), followed by the home burglary (Scenario 5) and the car theft (Scenario 8). It is possible that Scenarios 7 and 5 were considered more serious because of a perceived risk of potential harm to individuals in the home or the bar, although the scenarios did not involve any physical injuries or contact with victims. The students may have rated these crimes as more serious because the victim of a non-occupational theft is more easily identifiable as an individual as compared to the occupational fraud scenarios in which the ultimate victims are shareholders or employees, for example. The challenge for professionals fighting occupational frauds is to educate the public about the very real and potentially devastating impact of these crimes on individuals, debunking the perception that the only victim is the corporation.

To test Hypothesis Two, a single-sample t-test was performed on the "harm" variable. Results were significant ( $p=.000$ ) and, therefore, Hypothesis Two is supported. Consistent with the results of Hypothesis One, the students perceived a greater amount of harm from the thefts than from the occupational frauds, even though the dollar amount of loss to the victims was the same in all cases.

Hypothesis Three posits that mean composite scores for prosecution of occupational frauds will be statistically lower than mean composite scores for prosecution of non-occupational thefts. A single-sample t-test was significant ( $p=.000$ ), indicating that students did feel more strongly about prosecuting the thefts. Therefore, Hypothesis Three is supported.

Hypothesis Four predicts that mean scores for likeliness to report occupational frauds will be significantly lower than mean scores for the likelihood to report non-occupational thefts. This was broken down into two measures: one in which the student was to assume he/she was not a friend or relative of the perpetrator (report), and one in which the student was to assume he/she was a relative or friend of the perpetrator (report friend). Single-sample t-tests for both the measures were significant ( $p=.000$  for both), and, therefore, Hypothesis Four is supported. Regardless of whether the perpetrator was a friend or relative, the students indicated they would be more likely to report the crime anonymously if it were in the theft category as compared to their likeliness to report an occupational fraud.

**Table 1: Mean Composite Scores by Crime Type**

	N	Minimum	Maximum	Mean	Std. Deviation
Seriousness: Occupational Frauds	164	9	28	21.92	3.912
Seriousness: Thefts	164	17	28	25.50	2.666
Harm: Occupational Frauds	164	4	28	19.00	5.160
Harm: Thefts	164	7	28	23.97	3.546
Prosecution: Occupational Frauds	164	7	28	21.04	4.921
Prosecution: Thefts	164	16	28	25.42	2.913
Report: Occupational Frauds	164	4	28	21.23	5.704
Report: Thefts	164	13	28	25.23	3.289
Report Friends: Occupational Frauds	164	4	28	15.20	6.575
Report Friends: Thefts	164	4	28	21.20	6.168

Next, we examined whether the law enforcement majors, accounting majors and other business majors differ in their views of the four occupational crimes (scenarios one through four). We first looked at whether the students' perceptions of the seriousness of each of the crimes differed based on the student's major (Hypothesis Five). A repeated measures ANOVA with the seriousness rankings for the four scenarios as dependent variables and with age, gender, class rank and race as covariates showed that major was significant at the .000 level. Univariate follow-up tests show significant differences on all four scenarios ( $p=.005$  for Scenario 1,  $p=.002$  for Scenario 2,  $p=.000$  for Scenario 3 and  $p=.003$  for Scenario 4). The mean seriousness ratings by major are shown in Table 2. For every scenario, the Accounting majors had the highest seriousness rankings compared to the other majors. Therefore, Hypothesis Five is supported. The law enforcement students rated the seriousness of all four white-collar frauds lower than both the accounting majors and the other business majors.

**Table 2: Mean Seriousness Ratings of Occupational Frauds: Comparisons by Major**

		Law Enforcement	Accounting	Other Business
Scenario 1	Falsified financials	5.21	5.83	5.75
Scenario 2	Tax fraud	4.75	5.49	5.13
Scenario 3	Cash embezzlement	5.79	6.34	6.33
Scenario 4	Kickbacks	4.54	5.36	5.04

Next, we looked at the students' assessments of how much harm would result from each of the occupational crimes (Hypothesis Six). Repeated measures ANOVA, with the demographic variables as covariates, shows a significant effect for major ( $p=.000$ ). Follow-up tests indicate that, like the seriousness ratings, the differences across majors were significant for all four scenarios ( $p=.000$  for Scenario 1,  $p=.006$  for Scenario 2,  $p=.000$  for Scenario 3 and  $p=.000$  for Scenario 4). Mean harm ratings by major are shown in Table 3. As with the seriousness ratings, the accounting majors rated all four crimes as causing more harm compared to the ratings of the other two groups. Also, similar to the seriousness results, the law enforcement students rated the harm caused by all four occupational frauds

lower than either of the other two groups. Thus, Hypothesis Six is supported.

**Table 3: Mean Harm Ratings for Occupational Frauds: Comparisons by Major**

		Law Enforcement	Accounting	Other Business
Scenario 1	Falsified financials	4.00	5.36	5.21
Scenario 2	Tax fraud	3.70	4.69	4.46
Scenario 3	Cash embezzlement	4.82	5.83	5.54
Scenario 4	Kickbacks	3.88	4.90	4.21

To test Hypothesis Seven, we examined how strongly the students felt that Jake, the perpetrator, should be prosecuted for the four occupational frauds. Mean prosecution ratings are shown in Table 4. The accounting majors' ratings were higher than both other majors for all four crimes. The effect of major on the students' opinions of whether Jake should be prosecuted was statistically significant ( $p=.015$ ). Therefore, Hypothesis Seven is supported. Tests on the individual scenarios, however, show significant results for Scenarios 3 ( $p=.003$ ) and 4 ( $p=.038$ ), but were insignificant for the two other scenarios. Therefore, the accountants felt more strongly than the others about prosecuting the embezzlement and kickback crimes, but the groups did not differ significantly on their attitudes toward prosecuting the financial statement fraud or tax fraud.

**Table 4: Mean Prosecution Ratings for Occupational Frauds: Comparisons by Major**

		Law Enforcement	Accounting	Other Business
Scenario 1	Falsified financials	5.37	5.70	5.63
Scenario 2	Tax fraud	4.74	5.27	5.00
Scenario 3	Cash embezzlement	5.51	5.99	5.83
Scenario 4	Kickbacks	4.47	4.92	4.17

Table 5 reports the mean scores reflecting the students' willingness to report the described crime, assuming they were not related to Jake and were not friends with Jake. The accounting majors indicated the highest propensity to report all four crimes. The repeated measures ANOVA results indicate that differences by major were statistically significant ( $p=.016$ ). All three groups indicated they would be least likely to report the kickback scheme and most likely to report the cash embezzlement.

**Table 5: Mean Report Ratings for Occupational Frauds: Comparisons by Major**

		Law Enforcement	Accounting	Other Business
Scenario 1	Falsified financials	5.19	5.61	5.58
Scenario 2	Tax fraud	4.68	5.23	5.00
Scenario 3	Cash embezzlement	5.54	6.13	5.75
Scenario 4	Kickbacks	4.65	5.17	4.71

When asked how likely they would be to report the crimes if Jake were their friend or relative, student responses appear consistently lower than when they were told they were not close to Jake. Mean responses are shown in Table 6. Once again, the accountants indicated a higher likelihood to report the



crime as compared to the other students. The repeated measures ANOVA shows the effect of academic major is statistically significant ( $p=.035$ ). Therefore, Hypothesis 8 is also supported. Individual tests by scenario show significant differences by major for Scenario 3 ( $p=.002$ ) and Scenario 4 ( $p=.017$ ). For both of these scenarios—the cash embezzlement fraud and the kickback scheme—the accountants were the most likely to report their friend or relative.

**Table 6: Mean Report Friends Ratings for Occupational Frauds: Comparisons by Major**

		Law Enforcement	Accounting	Other Business
Scenario 1	Falsified financials	3.63	3.87	3.54
Scenario 2	Tax fraud	3.35	3.84	3.17
Scenario 3	Cash embezzlement	4.00	4.91	3.79
Scenario 4	Kickbacks	3.32	3.87	2.79

### Discussion

Our results show that, consistent with prior studies, occupational fraud is deemed less serious than other crimes. In this study, in contrast to many previous studies, we focused exclusively on nonviolent financial crimes, and all of the depicted crimes resulted in the same dollar amount of loss. In spite of this, the students rated the non-occupational thefts as more serious than the occupational frauds and thought those crimes caused more harm. Additionally, compared to the non-occupational thefts, the participants indicated they would be less likely to report the occupational-related frauds. These findings cause concern, given that students in these fields (business, accounting, and law enforcement) will likely be in positions sometime in their careers that involve, to some extent, preventing, detecting, or prosecuting occupational fraud. Accountants appeared to take the occupational frauds more seriously than did the other two groups of students. This position could possibly be because the accounting curriculum includes exposure to the risks and ramifications of fraud, particularly corporate frauds. If the above statement is true, these results indicate that both undergraduate business programs (for all business majors) and law enforcement education programs could potentially benefit from more anti-fraud instruction and awareness. Perhaps accounting and law enforcement university programs could work together to develop courses that would benefit students in both majors. Additionally, professional education and professional certification in fraud examination could be encouraged for professionals in relevant business and law enforcement positions.

As with most studies, there are limitations of this research that should be noted. All student participants were from one university and were predominantly Caucasian males. While covariates were used to control for demographic differences between the groups, results from this study may not generalize to other populations. Additionally, perceptions of students may differ from perceptions of more experienced professionals. Future studies could utilize experienced law enforcement officers and experienced accountants as participants to determine if the findings of this study also hold true for professionals. Finally, this study does not examine the reasons why the occupational frauds are considered less serious than the non-occupational thefts. Future research exploring the causes of these differences would provide useful information to anti-fraud professionals.

**References**

- ACFE. (2014). *Report to the Nations on Occupational Fraud and Abuse*. Association of Certified Fraud Examiners.
- Arrington, C.E. & Reckers, P.M.J. (1985). A social-psychological investigation into perceptions of tax evasion. *Accounting & Business Research*, 15(59), 163-176.
- Baird, J.E., Zelin, R.C. & Brennan, P. (2006). Academic major, gender, personal values and reactions to an ethical dilemma. *Journal of Business Case Studies*, 2(2), 73-81.
- Baird, J. E. & Zelin, R. C. (2008). Understanding employee perceptions of fraudulent activities and their propensity to report those activities using anonymous tip lines: The influence of fraud type, perpetrator gender, and observer demographics. *Southern Business Review*, 33 (1), 1-14.
- Baldry, J.C. (1987), Income tax evasion and the tax schedule: Some experimental results. *Public Finance*, 42, 357-383.
- Barnett, J.H. & Karson, M.J. (1987). Personal values and business decisions: an exploratory investigation. *Journal of Business Ethics*, 6(5), 371-382.
- Barnett, T., Brown, G. & Bass, K. (1994). The ethical judgments of college students regarding business issues. *Journal of Education for Business*, 69(6), 333-338.
- Beltramini, R.F., Peterson, R.A. & Kozmetsky, G. (1984). Concerns of college students regarding business ethics. *Journal of Business Ethics*, 3(3), 195-200.
- Borkowski, S.C. & Ugras, Y.J. (1998). Business students and ethics: A meta-analysis. *Journal of Business Ethics*, 17 (11), 1117-1127.
- Buckhoff, T. & Schrader, R. (2000). The teaching of forensic accounting in the United States, *Journal of Forensic Accounting*, 1, p. 135.
- Costello, M.T., Chiricos, T., Burianek, J., Gertz, M. & Baier-Katkin, D. (2002). The social correlates of punitiveness toward criminals: A comparison of the Czech Republic and Florida. *Justice System Journal*, 23, 191-220.
- Cullen, F.T., & Benson, M. (1993). White collar crime: Holding a mirror to the core. *Journal of Criminal Justice Education*, 4, 328-348.
- Cullen, F. T., Link, B. G., & Polanzi, C. W. (1982). The seriousness of crime revisited: Have attitudes toward white-collar crime changed? *Criminology*, 20, 83- 102.
- Curren, M.T. & Harich, K.R. (1996). Business ethics: A comparison of business and humanities students and faculty. *Journal of Education for Business*, 72(1), 9-11.
- Deshpande, S.P. (1997). Managers' perception of proper ethical conduct: The effect of sex, age, and level of education. *Journal of Business Ethics*, 16(1), 79-85.
- Douglas, K. S. & Ogloff, J. R. P. (1997). Public opinion of statutory maximum sentences in the Canadian criminal code: Comparison of offenses against property and offenses against people. *Canadian Journal of Criminology*, 39, 433- 458.
- Evans, S. S. & Scott, J. E. (1984). The seriousness of crime cross-culturally: The impact of religiosity. *Criminology*, 22, 39- 59.
- Ford, R.C. & Richardson, W.D. (1994). Ethical decision making: A review of the empirical literature. *Journal of Business Ethics*, 13(3), 205-221.
- Fulmer, W.E. & Cargile, B.R. (1987). Ethical perceptions of accounting students: Does exposure to a code of professional ethics help? *Issues in Accounting Education*, 2 (2), 207-219.

- Gable, M. & Topol, M.T. (1988). Machiavellianism and the department store executive. *Journal of Retailing*, 64 (1), 68-84.
- Giacomino, D.E. (1992). Ethical perceptions of accounting majors and other business majors: An empirical study. *Accounting Educators' Journal*, 4(2), 1-26.
- Goodman, C. & Crawford, C.M. (1974). Young executives- A source of new ethics. *Personnel Journal*, 53(3), 180-187.
- Hasseldine, J. & Hite, P.A. (2003). Framing, gender, and tax compliance. *Journal of Economic Psychology*, 24(4), 517-533.
- Hawkins, D.I. & Cocanougher, A.B. (1972). Student evaluations of the ethics of marketing practices: The role of marketing education. *Journal of Marketing*, 36(2), 61-64.
- Hetherington, E.M. & Feldman, S.E. (1964). College cheating as a function of subject and situational variables. *Journal of Educational Psychology*, 55, 212-218.
- Holtfreter, K., Van Slyke, S., Bratton, J. & Gertz, M. (2008): Public perceptions of white-collar crime and punishment. *Journal of Criminal Justice*, 36, 50-60.
- Hunt, S.D. & Chonko, L.B. (1984). Marketing and Machiavellianism. *Journal of Marketing*, 48(3), 30-42.
- Jacobson, L.I., Berger, S.E., & Millham, J. (1970). Individual differences in cheating during a temptation period when confronting failure. *Journal of Personality and Social Psychology*, 15, 48-56.
- Jones, T.M. & Gaultschi, F.H. (1988). Will the ethics of business change? A survey of future executives. *Journal of Business Ethics*, 7(4), 231-248.
- Kelley, S.W., Ferrell, O.C., & Skinner, S.J. (1990). Ethical behavior among marketing researchers: An assessment of selected demographic characteristics. *Journal of Business Ethics*, 9(8), 681-688.
- Knotts, T.L., Lopez, T.B. & Mesak, H.I. (2000). Ethical judgments of college students: An empirical analysis. *Journal of Education for Business*, 75(3), 158-163.
- Laczniak, G. & Inderrieden, E.J. (1987). The influence of stated organizational concern upon ethical decision making. *Journal of Business Ethics*, 6(4), 297-307.
- Lane, M.S. & Schaupp, D. (1989). Ethics in education: A comparative study. *Journal of Business Ethics*, 8(12), 943-949.
- 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.
- Low, T.W., Ferrell, L. & Mansfield, P. (2000). A review of empirical studies assessing ethical decision making in business. *Journal of Business Ethics*, 25(3), 185-204.
- Lopez, Y., Rechner, P.L. & Olson-Buchanan, J.B. (2005). Shaping ethical perceptions: An empirical assessment of the influence of business education, culture, and demographic factors. *Journal of Business Ethics*, 60(4), 341-358.
- McCleary, R., O'Neil, M. J., Epperlein, T., Jones, C., & Gray, R. H. (1981). Effects of legal education and work experience on perceptions of crime seriousness. *Social Problems*, 28, 276-289.
- McNichols, C.W. & Zimmerer, T.W. (1985). Situational ethics: An empirical study of differentiators of student attitudes. *Journal of Business Ethics*, 4(3), 175-180.
- Miceli, M.P. and Near, J.P. (1985). Characteristics of organizational climate and perceived wrongdoing associated with whistle-blowing decisions. *Personnel Psychology*, 38, 524-544.
- Miesing, P. & Preble, J.F. (1985). A comparison of five business philosophies. *Journal of Business*

- Ethics*, 4(6), 465-476.
- O'Connell, M. and A. Whelan (1996). Taking Wrongs Seriously: Public Perceptions of Crime Seriousness. *British Journal of Criminology*, 36 (2), 299-318.
- O'Fallon, M.J. & Butterfield, K.D. (2005). A review of the empirical ethical decision-making literature: 1996-2003. *Journal of Business Ethics*, 59(4), 375-414.
- Peterson, B., & Reider, B. (2001). An examination of forensic accounting courses: Content and learning activities. *Journal of Forensic Accounting*, 2, 25.
- Price, M. & Norris, D.M. (2009). White-collar crime: Corporate and securities and commodities fraud, *The Journal of the American Academy of Psychiatry and the Law*, 37, 538-544.
- Rezaee, Z., Crumbley, D., & Elmore, R. (2004). Forensic accounting education: A survey of academicians and practitioners. *Advances in Accounting Education Teaching and Curriculum Development*, 6, 193.
- Roskens, R.W., & Dizney, H.F. (1966). A study of unethical behavior in high school and college. *The Journal of Educational Research*, 59, 321-324.
- Rossi, P. H., & Henry, J. P. (1980). Seriousness: A measure for all purposes? In M. W. Klein & K. S. Teilmann (Eds.), *Handbook of criminal justice evaluation*, Newbury Park: Sage, 489– 505.
- Rossi, P., Waite, E., Bose, C., & Berk, R. (1974). The seriousness of crimes: Normative structure and individual differences. *American Sociological Review*, 39(2), 224-237.
- Rossi, P.H., Simpson, J.E. & Miller, J.L. (1985). Beyond crime seriousness: Fitting the punishment to the crime. *Journal of Quantitative Criminology*, 1(11), 59-90.
- Ruegger, D. & King, E.W. (1992). A study of the effect of age and gender upon student business ethics. *Journal of Business Ethics*, 11(3), 179-186.
- Schrager, L. S., & Short, J. F., Jr. (1980). How serious a crime? Perceptions of organizational and common crimes. In G. Stotland & E. Stotland (Eds.), *White-collar crime*, Beverly Hills, CA: Sage, 14–31.
- Scott, J. E., & Al-Thakeb, F. (1980). Perceptions of deviance cross-culturally. In G. Newman (Ed.), *Deviance: A Comparative Perspective*, Beverly Hills, CA: Sage, 42-67.
- Sellin, T., & Wolfgang, M. (1964). *The Measurement of Delinquency*. Montclair: Patterson Smith (Reprinted, 1978, with an introduction by S. Turner).
- Simpson, S. (2003). The criminological enterprise and corporate crime. *Criminologist*, 28 (4), 1-5.
- Stylianou, S. (2003). Measuring crime seriousness perceptions: What have we learned and what else do we want to know. *Journal of Criminal Justice*, 31, 37-56.
- Terpstra, D.E., Rozell, E.J., & Robinson, R.K. (1993). The influence of personality and demographic variables on ethical decisions related to insider trading. *The Journal of Psychology*, 127, 375-389.
- United States Sentencing Commission. (2003). Reporting to Congress: Increased Penalties Under the Sarbanes-Oxley Act of 2002. Downloaded from [http://www.ussc.gov/sites/default/files/pdf/news/congressional-testimony-and-reports/corporate-crime-and-fraud/200301\\_RtC\\_Sarbanes\\_Oxley.pdf](http://www.ussc.gov/sites/default/files/pdf/news/congressional-testimony-and-reports/corporate-crime-and-fraud/200301_RtC_Sarbanes_Oxley.pdf). Downloaded June 2015.
- United States Sentencing Commission. (2014) Guidelines Manual, §3E1.1 Downloaded from <http://www.ussc.gov/sites/default/files/pdf/guidelines-manual/2014/GLMFull.pdf>. Downloaded June 2015.
- Victor, B., Trevino, L. & Shapiro, D. (1993). Peer reporting of unethical behavior: The influence of

justice evaluations and social context factors. *Journal of Business Ethics*, 12, 253-263.

Warr, M. (1989). What is the perceived seriousness of crimes? *Criminology*, 27, 795– 814.

Wolfgang, M. E., Figlio, R. M., Tracy, P. E., & Singer, S. I. (1985). *The National Survey of Crime Severity*. Washington, DC: U.S. Government Printing Office.