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# Exploring the crime of identity theft: Prevalence, clearance rates, and victim/offender characteristics

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**Abstract**

Although the crime of identity theft has garnered a great deal of media attention, relatively little empirical research existed on the prevalence of the crime, its clearance rate by arrest, or the demographic characteristics of the victims and the identifiable offenders. The purpose of this article is to expand the knowledge of this growing crime. Using data from a large municipal police department located in Florida as a database, the findings suggested that the number of reported incidents of identity theft appeared to be growing at a greater rate than other theft-related offenses and the clearance rate for identity theft appeared to be declining. The typical apprehended offender was African American, female, unemployed, working alone, and was unknown to the victims, who tended to be White and male.


## Introduction

Many government officials argue that identity theft is one of the greatest threats to the U.S. economy. According to the U.S. General Accounting Office (USGAO), the actual losses associated with identity theft totaled $442 million in fiscal year 1995, $450 million in fiscal year 1996, and $745 million in fiscal year 1997 (U.S. General Accounting Office, 2002b). Others estimated that the cost from this crime would continue to grow, with losses expected to be in excess of $2.3 billion in the near future (Fichtman, 2001).

Identity theft is broadly defined as, "...the unlawful use of another's personal identifying information" (Bellah, 2001, p. 222). Personal identifying information can include the individual's name, address, social security number, date of birth, alien registration number, taxpayer identification number, government passport number, driver's license information, mother's maiden name, or biometric information such as a fingerprint, voice print, or retina image (U.S. Government Accounting Office, 2002c). Unlawful in this context constitutes the unauthorized use of another's personal information with criminal intent.

Identify thieves obtain personal information in a variety of ways. Their methods can be defined by the degree of technology employed-low technology versus high technology. Low technology methods tend to be the most common due to their relative ease. Some examples of low technology methods include theft of wallets or purses and dumpster diving. In dumpster diving, offenders obtain personal information by going through an individual's contrast to low technology methods, high methods require some skill and expertise. High methods include things like use of the Intern

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and pretext calling. Skimming is where offenders use computers to read and store the information encoded on the magnetic strip of an ATM or credit card. Once stored, that information can then be re-encoded onto any other card with a magnetic strip, instantly transforming a blank card into a machine-readable ATM or credit card identical to that of the victim (Federal Trade Commission, 2000b). Pretext calling is where offenders make contact with a victim under false pretenses, with the purposes of obtaining their personal information (Newman, 1999).

Identity thieves generally steal people's identities to commit an array of financial crimes from taking out loans, cash advances, and credit applications to more extreme cases such as taking control of entire financial accounts (Newman, 1999; Office of Inspector General, 1999). The list below describes some of the more common techniques that offenders use when their goal is to obtain financial reward:

- The imposter opens a new credit card account, using the victim's name, date of birth, and social security number. The offender then uses up the entire credit limit on the card and fails to pay any bills, which then leads to a delinquent account later being recorded on the victim's credit report.
- The imposter calls the victim's credit card issuer and, pretending to be the victim, changes the mailing address on the credit card account. The offender runs up charges on the account and, because the bills are being sent to the new address, the victim may not immediately realize any problem.
- The imposter establishes cellular phone service in a victim's name.
- The imposter opens a bank account in the victim's name and writes bad checks on that account.
- The imposter e-mails a request posing as the victim's Internet service provider (ISP), stating that the account information needs to be updated and/or that the credit card used to register is invalid or expired and that the information needs to be reentered to keep the account active.

## Purpose of the present study

Recently, there was intensive media coverage regarding identity theft, labeling it a serious and growing threat. Government and private organizations, such as the United States General Accounting Office (USGAO), Federal Trade Commission (FTC), Office of the Inspector General, Federal Bureau of Investigation (FBI), Postal Inspectors Office, United States Secret Service (USSS), Equifax, and Trans Union each stated that identity theft was a growing problem (U.S. General Accounting Office, 1998). The purpose of this study was to examine the magnitude and characteristics of identity theft. The objective was to determine if government officials' claims and the media's portrayal of the substantial rise in identity theft incidents were supported empirically.

## Literature review

### *Identity theft laws*

Laws protecting the rights of individuals whose identities were used to commit a crime have only been in existence for a few years. A federal law was created in October 1998, making the unauthorized possession of another's identity a federal crime under Title 18, United States Code 1028, the Identity Theft and Assumption Deterrence Act of 1998. Under this legislation, it is a federal offense when anyone:

> (3)(a) knowingly transfers or uses, without lawful authority, a means of identification of another person with the intent to commit, or to aid or abet, any unlawful activity that constitutes a violation of Federal law, or that constitutes a felony under any applicable State or local law.

State laws for identity theft tend to closely resemble the federal law, and were first established in Arizona (1996) and California (1997). Since the present study was based on a jurisdiction located within Florida, a cursory examination of this state's identity theft law was necessary. In 2001, Florida legislators passed the Fraudulent Practices Statute (ch. 817.567), which reads as follows:

> (2)(a) Any person who willfully and without authorization fraudulently uses, or possesses with intent to fraudulently use, personal identification information concerning an individual without first obtaining that individual's consent, commits the offense of fraudulent use of personal identification information, which is a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

Prior to this legislation, Florida law held that the only victims of identity theft were those who suffered actual financial loss, such as banks or insurance companies. Legislators considered individuals whose identities were used by criminals to merely be the vehicles for committing various forms of fraud. Persons whose identities were stolen were not recognized by the criminal justice system as victims, and thus were not granted control or protection over the fraudulent use of their identities. Current Florida laws acknowledged that individuals, along with the financial institutions, suffered adverse effects when their personal information was used illegally. Individuals whose

identity was used illegally could suffer numerous after-effects including problems obtaining credit, loan refusals, lease denials, employment denial, and attaining a criminal record (Higgins, 1998).

*Extent of identity theft*

The Federal Trade Commission (FTC) is the main agency that collects information pertaining to identity theft. Since passing the Identity Theft and Assumption Deterrence Act (1998), Congress required this agency to keep an accurate log of all complaints made by citizens regarding the illegal use of identities. The FTC currently had an online database that contained information from incoming phone calls made by the public inquiring about identity theft since November 1, 1999. This database provided the only national data on identity theft and thus could provide important information on regional variations.

According to the Federal Trade Commission (2003) there were 31,117 cases of reported identity theft complaints in 2001, 86,198 in 2001 (an increase of 177 percent) and 161,819 in 2002 (an increase of 87 percent). In comparison, the number of other fraud-related complaints went from 107,890 in 2000 to 133,891 in 2001 (an increase of 24 percent) and 218,384 in 2002 (an increase of 63 percent).

According to the FTC data there was regional variation in identity theft crime. The District of Columbia (123.1), California (90.7), Arizona (88.0), Nevada (85.3), and Texas (68.9) had the highest rate of victims of identity theft per 100,000 residents. West Virginia (19.9), Iowa (18.9), Vermont (17.6), South Dakota (16.4), and North Dakota (12.6) reported the fewest victims per 100,000 residents. Florida ranked sixth with 68.2 victims per 100,000 residents (Federal Trade Commission, 2003).

There was, however, some concern over the validity of the FTC complaint data. The FTC did not require reporting and only gathered data from individuals who filed forms with the organization. Thus, it was unlikely that the FTC database contained the universe of identity theft crimes. There was most likely under- and over-reporting of certain types of identity theft incidents to the FTC. At best, the FTC database was a proxy for the level of identity theft in the United States.

A second source of data on identity theft may be found with the Office of the Inspector General (OIG), which conducted an empirical investigation of misuse allegations made by victims to the Social Security Administration (SSA) regarding their social security numbers. One of the main reasons for the study was the OIG's fear that identity thieves were aggressively targeting elderly persons. This study collected data using a random probability sample (N = 400) of all allegations made to the agency between October 1, 1997 and March 31, 1999. It was found that identity theft represented the largest number of allegations (81.5 percent), which included such actions as obtaining illegal credit or unauthorized credit card use and using another's identity to obtain work or work permits (Office of the Inspector General, 1999).

Finally, the U.S. General Accounting Office (USGAO) attempted to synthesize all published data and reports regarding identity theft. The USGAO also conducted interviews with professionals who dealt with this type of crime. A number of publications by the USGAO highlighted that there was a distinct lack of research and general awareness about identity theft (U.S. General Accounting Office, 1998, 2002a, 2002b). One clear objective in each of these publications was an attempt to quantify the amount of identity theft nationally. The USGAO used a number of indicators to estimate the prevalence of identity theft including the number of criminal investigations conducted by Federal agencies (USSS, SSA, FBI, IRS, and Postal Inspection Service); the financial damage caused (based on data provided by Visa, MasterCard, American Express, and the American Bankers Association); and the number of complaints/inquiries made by citizens to relevant government and private agencies (Equifax Inc., Experian Corporation, Trans Union, and the FTC). While the different sources provided varying estimations, all indicated that identity theft was growing at a rapid rate.

*Clearance rates for identity theft*

The clearance rate for identity theft was believed to be very low for several reasons (Federal Trade Commission, 2000a, 2001b). First, the complexity of the crime made obtaining the elements necessary to get an arrest warrant more difficult to satisfy than for most of the other theft related offenses. Second, there might be jurisdictional problems, especially if the offense occurred over the Internet. Offenses, offenders, and victims could all be in different cities, states, or countries. This could make it difficult for a victim to even file a report of an act of identity theft with a law enforcement agency.

And last, it was argued that nonviolent crimes tended to receive insufficient attention from a criminal justice system that was preoccupied with more sensational crimes. According to the General Accounting Office, "...police departments are more inclined to use their limited resources for investigating violent crimes and drug offenses rather than handling complicated identity theft cases that, even if successfully prosecuted, often lead to relatively light sentences" (U.S. General Accounting Office, 2002c, p. 17). These sentiments were echoed by some of the officers working in the agency that provided data for the present study. In this particular agency, all fraud-related offenses were investigated by a unit of twenty people, a practice that several detectives described as "poor management." The average caseload for a detective was approximately forty cases per month, which included investigations of identity theft, credit card fraud, check offenses, and Internet fraud.

This high caseload often prevented officers from carrying out investigations in the timely manner they required for effective apprehension and prosecution. All of these factors might hinder the investigation process and increase the cost of arresting these suspects (U.S. General Accounting Office, 2002c).

*Victims and offenders*

The Federal Trade Commission (2000b, 2001b) and the Office of the Inspector General (1999) collected victim demographics including age distribution, type of association between victim and the offender, methods of victimization, reporting of the crime to the police or credit agencies, and the period between the incident and detection by victims. Overall, data indicated that the mean age for a victim of identity theft was forty-one years, the majority of victims did not know their offender, and the average time between the occurrence of the crime and the victim becoming aware of being victimized was twelve to fourteen months (Federal Trade Commission, 2000b, 2001b).

Newman (1999) created a typology for offenders by listing possible motives they adopted for their actions. For example, Newman described how certain offenders used identity theft to move through society uninhibited. Terrorists were a group that fell under this type, making use of this specific crime in order to carry out an agenda freely. The events of September 11, 2001 were a prime example of how terrorists used identity theft to obtain fraudulent drivers licenses, hiding their true identities and motives (Voegtlin & Horne, 2002). Unfortunately, Newman made no attempt to empirically test his typology.

In an exhaustive review of the literature, no research on the demographic composition of identity thieves was found. Data collected by the National Incident Based Reporting System (NIBRS) for 1997 through 1999, however, examined other economically motivated offenders. The offenses under economically motivated crime were fraud, bribery, counterfeiting, embezzlement, and property crime (U.S. Department of Justice, 2002).

It should be noted that any conclusions based on the NIBRS data should be viewed with caution due to the low level of reporting by law enforcement agencies. As of September 2003, only 27 percent of law enforcement agencies reported their crime statistics to the NIBRS system, which translated into coverage of only 19 percent of the population of the United States (SEARCH Uniform Crime Reporting, n.d.). While the coverage of the NIBRS data was still relatively poor, the strength of this data source was the amount of detail it provided with respect to information on the apprehended offenders, as well as a breakdown of the various categories of economically motivated crimes. A simple comparison between the offenders examined in this study and those examined by NIBRS would be useful in providing some context for the results found in this local study.

*Summary*

There were numerous gaps in the literature concerning the crime of identity theft. While research on this crime was in its infancy, there were many recurring questions that the literature posed but failed to adequately answer. Most information compiled on identity theft by government agencies stated that gaining a quantifiable estimation of the number of offenses and the associated damage was especially difficult. One of the main reasons for this was due to the fact that the crime of identity theft was oftentimes committed in conjunction with other financial crimes, such as bank or credit card fraud (U.S. General Accounting Office, 2002b). All of the literature examined indicated an increase in this type of offense, but none were able to accurately quantify it.

To date, there were no studies conducted that adequately examined the number of cases reported to the police and subsequent arrest rates. This study advanced the knowledge of identity theft by examining clearance rates for identity theft in one jurisdiction in order to evaluate whether they were significantly higher or lower when compared to other offenses.

Lastly, it appeared that there was room for expansion of the research already conducted on the offenders and victims of identity theft. With respect to offenders, however, this study placed restrictions on its scope to include only those motivated by economic gain. This study then made a comparison between identity thieves and offenders of other economically motivated crimes. It then examined the same demographic variables concerning the victims of identity theft as explored by previous research (Federal Trade Commission, 2000b, 2001b; Office of the Inspector General, 1999). The added advantage with this study's examination of identity theft victims was that since it also examined the offenders connected to those victims, useful comparisons were then made between the two groups.

Areas within identity theft that this study explored in detail were the numbers of incidents, clearance rates, and victim/offender characteristics. This study's review of current literature on identity theft suggested a dearth of empirical research conducted on *any* aspect of this problem. Other than the Office of the Inspector General (1999) study, the limited research conducted by the FTC, and the broad range of data collected by the USGAO, there was limited scientific data published on this crime.

*Research questions*

Given the lack of empirical research on the topic of identity theft, there were three basic questions addressed in this study:

1. Was the increase in identity theft similar to those of the other theft related offenses?

2. Was the clearance rate for identity theft similar to those of the other theft related offenses?
3. What were the predominant demographic characteristics associated with victims and offenders of identify theft?

Using data from a large municipal police department in Florida, comparisons between identity theft and other theft-orientated offenses (credit card fraud, check fraud, robbery, and motor vehicle theft) were made to produce a context against which the data on identity theft could be evaluated. Descriptions of the victims and offenders were provided for identity theft incidents that resulted in an arrest.

## Methodology and data

### *Methodology*

A case study methodology was selected for this project. A case study is a research methodology that involves the analysis and description of "real life" circumstances to advance knowledge (Yin, 1989). According to Yin (1989, p. 14), "as a research endeavor, the case study contributes uniquely to our knowledge of individual, organizational, social and political phenomena." While the limitations of the case study methodology were well documented, including threats to internal validity and generalizability, the advantages of this approach were that it facilitated the comparisons of different perspectives and explained views and experiences (Thomson, 1998). This design provided the broad exploration necessary to find and conceptualize important issues relevant to identity theft.

### *Data*

The data used in this study were derived from a large municipal police department's centralized database. Established on January 7, 1999, the database contained information concerning police matters within the agency's jurisdiction. The police database held all relevant crime information collected by the department, which included a log of all cases investigated, along with their outcomes. This study examined all the relevant cases (identity theft, credit card fraud, check fraud, robbery, and motor vehicle theft) investigated in the city over a two year and eleven month period between January 1, 2000 and December 3, 2002. For the purpose of analysis, two separate but related data sets were created from the database. The first data set included the number of calls for service and arrests for each of the different offense types of interest. The second data set cataloged the characteristics of both victims and offenders who were involved in identity theft cases that resulted in an arrest.

### *The city*

According to 2000 census figures, the city had an estimated population of just over 300,000 with a median age of 34.7 years. The racial/ethnic composition of the city was 51 percent White, 25 percent African American, 19 percent Hispanic, 2 percent Asian, and 3 percent other. The city was just over one hundred square miles and was home to over 22,500 business establishments. When compared to the statewide data, this particular city had a larger number of minority and younger residents. Census data for Florida indicated that 65 percent of the residents of the state were White, 16 percent African American, 17 percent Hispanic, and 2 percent from other races with a median age of 38.7 years.

### *Variables used in the present study*

#### *Theft-related offenses*

Consistent with previous literature, *identity theft* was defined as the illegal use or transfer of another's personal information with unlawful intent. In order to make comparisons between identity theft and other theft-related offenses, data was collected on four other offenses: credit card fraud, check fraud, robbery, and motor vehicle theft. *Credit card fraud* was defined as the illegal use of a credit card to obtain money, goods, or services without the cardholder's authorization. *Check fraud* was defined as the illegal use of a check to obtain money, goods, or services without the account holder's authorization. Credit card fraud and check fraud were selected for inclusion in this study because of the similarities between these types of crimes and identity theft. *Robbery* was defined as an event where an individual used force or threat of force to steal property from another individual. *Motor vehicle theft* was defined as the acquisition of a motor vehicle or parts of a motor vehicle without the owner's authorization. Motor vehicle theft could occur with or without the use of force. Robbery and motor vehicle theft were selected for inclusion in this study because of their relatively accurate representation of crime trends. That is, because of the severity of the crime (robbery) and insurance-related issues (motor vehicle theft), the crimes of robbery and motor vehicle theft were believed to be a more accurate representation of crime trends than other types of theft offenses.

#### *Victim and offender characteristics*

Various demographic characteristics from the victim and offender (when available) were also collected, including victim(s) gender, race, and age; offender(s) gender, race, age, and employment status; the number of offenders; and the victim-offender relationship. Victim and offender data were provided for only those individuals involved in cases that resulted in an arrest by detectives in this particular jurisdiction.

## Results

### *Incident counts of offenses*

The first research question explored in this analysis concerned the prevalence of identity theft. Specifically, was the increase in identity theft similar to those of the other theft-related offenses? As can be seen in Table 1, reports of identity theft increased over the study time period. From 2000 to 2001, reports of identity theft increased from 112 incidents to 230 incidents (an increase of 105 percent). Over the same time period, reports of credit card fraud increased by 43 percent, motor vehicle theft increased by 13 percent, robbery remained stable, and check fraud decreased by 32 percent. From 2001 to 2002, identity theft increased again from 230 incidents to 320, an increase of 39 percent. Over the same time period motor vehicle theft increased 2 percent, and robbery, credit card fraud, and check fraud all decreased by 12 percent, 14 percent, and 4 percent, respectively.

The Cochran-Armitage test (Armitage, 1955; Cochran, 1954) was conducted with SAS and used to test whether the increase in identity theft cases could be statistically characterized as an increasing trend in the proportion of theft-related offenses. The Cochran-Armitage test is a type of chi-square test that utilizes a z-score approximation and an associated p-value from the standard normal distribution. The Cochran-Armitage test is frequently used in medical research to evaluate dose-response models and trends in disease data with relatively few data points (for examples see Schillaci et al., 2004; Smith, Danielsen, Allen, & Cress, 2003).

The findings suggested statistically significant differences between identity theft and all other combinations of offense type categories listed (see Table 1). That is, the proportional changes in the number of identity theft cases was statistically different than the proportional changes for all crimes ($Z = 9.123$, $p < .001$), all fraud crimes ($Z = 9.945$, $p < .001$), and the proportional changes for each of the separated types of offenses. The results indicated that the number of identify theft cases was an increasing proportion of theft-related offenses. In other words, the results suggested an increasing trend for identity theft cases relative to other types of theft offenses.

Table 1
Contingency table for number of incidents by type of offense

| Categories | 2000 | 2001 | 2002 | Cochran-Armitage trend test | |
|---|---|---|---|---|---|
| | | | | Z | p |
| Identity theft | 112 | 230 | 320 | – | – |
| All other crimes | 8,006 | 8,732 | 8,605 | 9.123 | <.001 |
| All fraud crimes | 524 | 473 | 430 | 9.945 | <.001 |
| Credit card fraud | 157 | 225 | 193 | 5.730 | <.001 |
| Check fraud | 367 | 248 | 237 | 10.913 | <.001 |
| Robbery | 1,710 | 1,709 | 1,505 | 10.638 | <.001 |
| Motor vehicle theft | 5,772 | 6,550 | 6,670 | 8.362 | <.001 |

Table 2
Clearance rates (per 100) by type of offense

| Categories | 2000 | 2001 | 2002 | Cochran-Armitage trend test | |
|---|---|---|---|---|---|
| | | | | Z | p |
| Identity theft | 16 | 13 | 4 | – | – |
| All fraud crimes | 51 | 14 | 28 | −0.682 | .495 |
| Credit card fraud | 27 | 18 | 25 | −1.924 | .054 |
| Check fraud | 38 | 10 | 31 | −1.516 | .130 |
| Robbery | 13 | 16 | 16 | −2.394 | .017 |
| Motor vehicle theft | 10 | 7 | 7 | −1.168 | .243 |

### *Descriptive statistics for clearance rates*

The second research question to be explored in this analysis concerned the clearance rates for identity theft. Specifically, was the clearance rate for identity theft similar to those of the other theft-related offenses? The descriptive statistics for clearance by type of offense are presented in Table 2. The clearance rate for identity theft continually decreased from sixteen per one hundred in 2000 to thirteen per hundred in 2002, and finally, to four per hundred in 2002. When compared to the other theft-related offenses, identity theft had the third lowest clearance rate in 2000 and 2001, then the lowest clearance rate in 2002. Also, both credit card fraud and check fraud followed similar patterns of change with a large decrease in 2001, then later in 2002 returning to just under the previous clearance rates from 2000. Furthermore, the clearance rates for robbery were fairly stable with a slight increase from thirteen per one hundred in 2000 to sixteen per one hundred in 2001 and 2002. Motor vehicle theft followed a reverse pattern, with a mild decrease from ten per one hundred in 2000 to seven per one hundred in 2001 and 2002.

Tests of statistical significance tests (Cochran-Armitage test) were performed on the clearance rate data. With one exception, the differences between the clearance rate for identity theft and the other theft-related offenses were not statistically significant. That is, changes in the proportional clearance rate for identity theft was similar to proportional changes in all fraud crimes, credit card fraud, check fraud, and motor vehicle theft. The one exception was robbery ($Z = -2.394$, $p = .017$). The findings suggested that the proportional clearance rate for identity theft was declining relative to the clearance rate for robbery. That is, the results suggested a decreasing trend for identity theft clearance rates relative to robbery clearance rates.

*Descriptive statistics for victim and offender demographics*

*Gender, race/ethnicity, and age*

The third research question to be explored in this analysis concerned the demographic characteristics of the victims and perpetrators of identity theft. The gender, race, and age characteristics of victims and offenders are presented in Table 3. Interestingly, the majority of offenders were female, while the majority of victims were male. Data presented in Table 3 indicated that 63 percent of offenders were female, while only 37 percent of the offenders were male. In contrast, 54 percent of the victims were male, while only 46 percent were female.

The data clearly demonstrated a distinction between the race of victims and offenders. Victims were predominately White (72 percent), while offenders were predominately African American (69 percent). Asians and Hispanics had very low representation as either victims or offenders. Hispanics were underrepresented as both victims and as offenders, especially since they comprised 19 percent of the city's population. Given the demographics of the area, Whites were overrepresented among the victims and African Americans were overrepresented among the offenders.

There appeared to be a larger age range for victims than offenders, and the average victim was much older than the average offender. Victims ranged in age from five to eighty-one with a mean age of forty-one (SD = 13.97). In contrast, offenders ranged in age from twenty-eight to forty-nine with a mean age of thirty-two (SD = 7.11).

*Prior relationship*

Results of this study indicated that most victims did not know the offenders. While 41 percent of the victims and offenders did have some sort of prior relationship, 59 percent did not. The results from this study diverged from those published by the Federal Trade Commission (2000b, 2001b). According to the results of the present study, the percentage of victims that did not know their offenders was 59 percent, while for previous research it was 87 percent (Federal Trade Commission, 2001b) and 81 percent (Federal Trade Commission, 2000b).

Table 3
Characteristics of victims and offenders

| | Victims | Offenders |
|---|---|---|
| *Gender* | N = 54 | N = 52 |
| Percent male | 54 | 37 |
| Percent female | 46 | 63 |
| *Race* | N = 54 | N = 52 |
| Percent White | 72 | 27 |
| Percent African American | 20 | 69 |
| Percent Hispanic | 1 | 1 |
| Percent Asian | 6 | 1 |
| *Age* | N = 50 | N = 52 |
| Mean age in years (SD) | 40.56 (13.97) | 32.23 (7.11) |
| Range (min.-max.) | 5–81 | 21–49 |

Table 4
Comparison of different economically motivated offenders

| Data source | Offense types | % Male | % White | Age[a] |
|---|---|---|---|---|
| Current study 2000–2002 | Identity theft | 37 | 27 | 26–34 |
| NIBRS 1997–1999 | Property crime | 75 | 70 | 26–34 |
| NIBRS 1997–1999 | Embezzlement | 48 | 70 | 26–34 |
| NIBRS 1997–1999 | Counterfeiting | 59 | 76 | 26–34 |
| NIBRS 1997–1999 | Bribery | 80 | 85 | 26–34 |
| NIBRS 1997–1999 | Fraud | 64 | 70 | 26–34 |

Note: The demographic variables of gender and race were based on percentage male and White.

[a] For the variable of age, the NIBRS data only provided statistics for a range, so the comparison in this category was based on the ranges.

*Employment status of offenders*

The employment status of the offenders was determined for thirty-four of those arrested. The results indicated that only a slight majority was unemployed. While 53 percent were unemployed, 41 percent were employed, 3 percent retired, and 3 percent disabled. This supported the suggestion that economic gain might be a motivating factor for identity theft offenders, an assertion proposed by previous research on this crime (Federal Trade Commission, 2000b, 2001a, 2001b; Newman, 1999; Office of the Inspector General, 1999).

*Number of offenders*

The number of offenders involved was able to be determined for all of the identity theft cases. The majority of the crimes (64 percent) were committed by lone offenders. There were instances of group offending, but they were in smaller proportions, 33 percent involved two offenders and 3 percent involved three offenders. This result was a bit surprising, given the findings of previous research. An ethnographic study by Jackson (1994) examined a fraud ring, in which multiple offenders worked in collaboration to steal credit cards, identities, and to commit other financial crimes. There were also other publications which supported this notion that identity thieves worked in organized criminal groups (Newman, 1999).

*A comparison of descriptive statistics for economically motivated offenders*

A comparison of descriptive statistics for different economically motivated offenders is presented in Table 4. The results in Table 4 indicated that the identity thieves examined in this local study were not entirely typical of other economically motivated offenders. For example,

identity thieves tended to be African American while all other offenders listed tended to be White. In addition, identity thieves tended to be female, while all but the embezzlement offenders tended to be male. Finally, identity thieves did, however, tend to be between the ages of twenty-six to thirty-four similar to the other economically motivated offenders examined.

## Discussion

After having examined the results obtained from the data, it is now important to discuss these findings and by incorporating what little research had already been conducted to the results in this study, it might be possible to begin stating several interesting trends.

### *Percentage increase in incidents for identity theft*

Various government representatives, researchers, and law enforcement officials proposed that identity theft was on the rise. The empirical findings from this study supported their claims. From 2000 to 2001, identity theft increased by 105 percent, and between 2001 and 2002 identity theft increased by approximately 39 percent. While these figures did not exactly match the data reported by the Federal Trade Commission, the trend between the two data sources was very similar. That is, both data sources reported a large increase in identity theft between 2000 and 2001, and both reported a substantial, but smaller increase between 2001 and 2002.

The results also indicated that the identity theft trend was different than the trends for other theft-related offenses-credit card fraud, check fraud, robbery, and motor vehicle theft. The data suggested that identity theft was increasing more rapidly than the other theft-oriented offenses.

It was important to note, that even though identity theft appeared to be on the rise, it was still a relatively small percent of total theft-oriented crimes. In 2002, there were a total of 320 reported cases of identity theft, compared to 1,505 robberies and 6,670 motor vehicle thefts. The findings indicated that most individuals were at a much greater risk of having their vehicle stolen than becoming a victim of identity theft. While a stolen vehicle can cost the victim anywhere between a few hundred to a few thousand dollars, however, a stolen identity may cost a victim anywhere from a few thousand to tens of thousands of dollars (Federal Trade Commission, 2000a).

While it appeared that identity theft was increasing, the exact source and nature of the increase remained unknown. That is, there were several possible explanations for the findings in this study. First and foremost, identity theft might have, in fact, been on the increase. New technological advances increased the accessibility of personal information. Online accounts such as American Online and MSM, online banking and bill paying, and online shopping like Ebay and Amazon.com all exponentially increased the amount of personal information available on the Internet. A lesser-known fact is the increase in official documentation accessible via the Internet. County clerks all over the country are transforming official documents such as birth certificates, marriage licenses, death certificates, and land deed information into electronic documents that can be viewed on the Internet from the comfort of home.

These technological innovations have forever changed the way ordinary people do business and clearly have positive aspects. The new technological revolution, however, also has a down side. The increased accessibility to personal information has provided identity thieves with new opportunities to engage in criminal activity. This technological change may be viewed in terms of routine activities theory, which states that when the three elements of offenders, victims, and lack of capable guardianship meet in space and time, crime is likely to occur (for a discussion of routine activities theory, see Cohen & Felson, 1979; Lersch, 2004). It is reasonable to propose that advances in technology have altered two of the three elements in this theory, specifically victims and guardianship. With regard to victims, there may be a greater abundance of suitable targets due to greater amounts of accessible, personal information being stored on the Internet than ever before. With respect to guardianship, this element may have been reduced because of insufficient regulations formally protecting against personal information being abused. These changes to the elements of victims and guardianship from technological advances may have had the effect of increasing the number of identity theft incidents.

A second plausible explanation for the findings in this study was that the described increase in identity theft might have been an artifact of changes in reporting practices. That is, the finding of an increase in identity theft was a function of changes in citizen and police reporting. As stated earlier, the laws prohibiting identity theft were relatively new. In addition, the idea of identity theft in the public and police lexicon was also a relatively recent development. The increase in identity theft might have been more of a function of changes in reporting than changes in behavior. Future research should be conducted to help determine if the trend found in this study was more a reflection of criminal behavior than of changes in reporting.

The most influential contributor to the increase in identity theft offenses might be the current condition of instant credit in America today. Instant credit is a financial system that makes it possible for identity thefts instigated for economic gain to occur. Some of the available research suggested these offenders were generally motivated by economic gain (Federal Trade Commission, 2000a, 2001b; Newman, 1999; Office of the Inspector General, 1999). As a result, it seemed plausible to argue that not only did this current financial system create a motivating drive for potential offenders, but also it provided a means for

offenders to commit a crime in which there was relatively low risk and high reward. Determining the validity of any of these arguments, however, was beyond the scope of this study.

*Clearance rates for identity theft*

The available literature on identity theft suggested that attaining an arrest for identity theft was especially difficult. Detectives working in the area of study also reiterated this claim, giving reasons such as jurisdictional problems, problems with allocation of department resources, and obtaining cooperation from affected financial institutions. The empirical evidence on this point was mixed. The clearance rate for identity theft was sixteen per one hundred in 2000, thirteen per one hundred in 2001, and four per one hundred in 2002. The clearance rate for identity theft was clearly lower than the clearance rate for credit card fraud and check fraud. In 2000 and 2001, however, the clearance rate for motor vehicle theft was lower than that for identity theft (ten versus sixteen and seven versus thirteen). In 2002, the clearance rate for identity theft dropped below the clearance rate for motor vehicle theft (four versus seven).

Regarding the clearance rate trends, the only significant difference in clearance rates was between identity theft and robbery. The findings suggested that there was a relative decline in identity theft clearance rates relative to robbery clearance rates. These results should, however, be cautiously interpreted. There appeared to be a relatively large decline in the clearance rates for most types of offenses in the study area for 2001. The dip in clearance rates might be indicative of some other problem such as record keeping. A longer study period might be necessary to gain a more accurate picture of the trends in clearance rates.

*Victim and offender demographics*

At this stage, current research on identity theft was only beginning to assess the demographics of offenders and victims. An in-depth examination of the data collected in this study highlighted some interesting patterns. For example, African American female offenders made up a large proportion of offenders, while White males tended to make up the majority of victims. It also appeared that the age range for these different parties varied, with victims having a much greater age range than offenders. Furthermore, victims were less likely to know their offenders, who were probably acting alone. Determining the cause of these patterns would at this point be premature, but the existence of patterns warrants further research.

Also, this case study made a comparison of the demographics collected on identity thieves to demographics collected by NIBRS on other economically motivated offenders. This comparison indicated that the identity thieves examined were not typical in their composition of sex and race to other economically motivated offenders. This dissimilarity might have been due to a number of factors, perhaps even to validity issues of either data set. Since it was difficult to determine whether the NIBRS data was truly representative of the population of economically motivated offenders in the United States, it was difficult to ascertain whether the discrepancies found in this study truly existed. By the same token, this study presently had no way of determining whether the identity thieves examined in this study's data were truly representative of all identity thieves in the U.S. Therefore, this dissimilarity found between gender, race, and sex warrants further study.

*Limitations*

*Limitations with study*

Unfortunately, when using official data such as police records or citizen complaints, a researcher must appreciate that the information recorded was not always a true reflection of past events. This concept was covered in criminology under the label *the dark figure of crime*, which argued that there was a degree of crime that often went unreported. With identity theft, part of that dark figure came from the way this offense was viewed by federal and state law enforcement. For example, the United States Secret Service stated that there was an inherent inaccuracy in cases recorded as identity theft. The reason for this inaccuracy was that this crime tended to be an instrumental element in many financial crimes and therefore, was not always recorded as an offense in its own right (U.S. General Accounting Office, 1998). Also when examining the local data collected in this study, it was possible that the changes in the number of incidents for different offenses might have been due to a shift in reporting practices and not a true change in crime. As mentioned previously, another limitation with this study concerned the use of NIBRS data, which was a relatively new source of crime data that suffered from lack of cooperation from most law enforcement agencies. The validity of the NIBRS data used for the comparison could be debated.

Three additional problems were incorporated within this case study. First, since the law regarding identity theft was relatively new (enacted in 1999), there had only been a brief period of time for these cases to amass within the department's records. Second, the database utilized in this study had only been operational since January 7, 1999 and thus, had collected limited data for this city. Third, personnel in the records department, from which data was collected, stated that there was a time lag between their new database coming online and the police department's personnel switching over to it. This study attempted to compensate for this by delaying the data collection until

five months after the inception of the new database, but there might have been some error in the results due to this situation.

*Limitations of the design*

In his book, Senese (1997) stated that case studies were naturally limited in their sampling due to their narrow focus, which might translate into limited generalizability within a study that employed this design. Since there was such a distinct lack of scholarly research on this topic, however, an in-depth snapshot of identity theft offered through a case study provided a useful platform of additional investigation.

There were some concerns related to the generalizability of the results presented here that must be recognized. This city was located in the state of Florida. According to the data compiled on citizen complaints by the Federal Trade Commission (2003), Florida ranked sixth in the nation for complaints regarding identity theft. Furthermore, this particular city had a younger population with a higher concentration of minority residents than the rest of the state. It was difficult to say how these various demographic factors might have influenced the results. Since the purpose of this study was purely exploratory in nature, future research should be conducted in other jurisdictions on this important topic to see if similar trends emerge.

## Conclusion

In conclusion, this case study did find support for the expressed belief by media, private organizations, and government officials that identity theft was a growing crime. Additionally, the increases in reporting and recoding of identity theft appeared to be larger than those of other theft-oriented offenses-credit card fraud, check fraud, robbery, and motor vehicle theft.

The results also suggested that the clearance rate for identity theft was lower than for most other theft-oriented offenses-credit card fraud, check fraud, and motor vehicle theft. In addition, the results also indicated that the clearance rate trend for identity theft was decreasing. A declining clearance rate trend was a particularly interesting finding, because it might suggest more resources were needed to battle the crime of identity theft. Determining the causes behind these findings, however, is something that future researchers will have to undertake.

Identity theft is a complicated crime that investigators and victims have trouble dealing with. It is not as sensationalistic as crimes that involve violence, but it does have an impact on the lives of individuals whose identities are used illegally. Identity theft is a crime that deserves a greater amount of research, if not only to allow society to better prevent this crime from occurring.

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