

ABSTRACT

Title of Thesis: SOCIAL SUPPORT AND HELP-SEEKING:
WHEN DO ELDERLY VICTIMS OF
CONSUMER FRAUD NOTIFY
AUTHORITIES?

Ziyue Gu, Master of Arts, 2021

Thesis Directed By: Interim Chair and Distinguished University
Professor, Sally S. Simpson, Department of
Criminology and Criminal Justice

Research on victim help-seeking behavior examines factors that could encourage victim's crime reporting behavior. While most studies focus on the incident and victim demographic characteristics of traditional street crimes, the reporting patterns of fraud victims have been overlooked. The research question of this thesis assesses how different types of social support affect the decisions of reporting their fraud victimization incidents to the police and to other government agencies among the elderly fraud victims. Using data from a 2010-2011 Consumer Financial Exploitation survey of 2,000 randomly selected elderly individuals who were 60 years and older, the current study analyzes the impact of social support on victim reporting with logistic regression models. The findings suggest that although there are nuances based on the types of reporting behavior, in general, when elderly fraud victims receive higher levels of social support, they are more likely to report their victimizations to authorities.

SOCIAL SUPPORT AND HELP-SEEKING:
WHEN DO ELDERLY VICTIMS OF CONSUMER FRAUD NOTIFY AUTHORITIES?

by

Ziyue Gu

Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Master of Arts
2021

Advisory Committee:

Distinguished University Professor Sally S. Simpson, Chair
Assistant Professor Greg Midgette
Professor Min Xie

© Copyright by
Ziyue Gu
2021

Dedication

我要将这篇硕士文献给我的姥爷，戴富文。他在 2021 年 3 月 29 日归回天家。他生前是一名优秀的教育家和终身的学者，他对教育和知识的热情不仅影响了几代的学生，也在我身上留下了长远的影响。从我出生的那一刻到他在永生中安息，我的姥爷一直是我教育道路上最坚定的支持者。没有他，就不会有今天的我。姥爷，我知道你会为我每一步的成绩感到自豪。我会跟随你的脚步，用爱 and 知识将世界变得更加美好，我也会铭记你的教导和你对我的爱。我们深深的思念你。我爱你，姥爷。

[English Translation]

This thesis is dedicated to the loving memory of my grandpa, Dai Fuwen, who went to be with the Lord on March 29th, 2021. He was an extraordinary educator and a life-long learner. His passion for education and knowledge has not only influenced generations of students but also had and will continue to have a tremendous impact on me. From the moment I was born till the moment he rested in eternal peace, my grandpa has always been the firmest supporter of my education journey. Without him, I would be who I am today. To my grandpa: I know you are proud of me for every step I make. I will remember your teachings and your love for me as I follow your passion and commitment to make the world a better place through education. You are deeply missed. I love you, grandpa.

Acknowledgements

I would like to express my sincere gratitude to my thesis chair and advisor, Professor Sally Simpson, for guiding me through the thesis process with her invaluable expertise on the field of white-collar crime and her incredible patience with me. This thesis would have not reached this point without her support. I also want to thank my committee members, Professor Greg Midgette and Professor Min Xie, for their insightful comments about my thesis. Their graduate courses have been especially beneficial to this project. Moreover, I am grateful for my colleagues and friends in the program as we go through this process together. Lastly, I would like to say thank you to my family—my loving parents for showing me constant support, my wonderful brother for always cheering me up when I was stressed, and my amazing husband for feeding me great food and loving me unconditionally.

Table of Contents

Dedication	ii
Acknowledgements	iii
List of Tables	v
List of Figures	vi
Chapter 1: Introduction	1
Chapter 2: Literature Review	5
Chapter 3: Data and Methods	20
Chapter 4: Results	26
Chapter 5: Discussion and Conclusion	35
Appendices.....	52
References.....	60

List of Tables

Table 1. Types of Consumer Fraud Incidents.....	52
Table 2. Descriptive Statistics of Dependent, Independent, and Control Variables...	53
Table 3. Bivariate Correlations	54
Table 4. Logistic Regressions of General Fraud Reporting by Social Support.....	55
Table 5. Logistic Regressions of Reporting Fraud to the Police by Social Support...	56
Table 6. Logistic Regressions of Reporting Fraud to Other Organizations by Social Support.....	57
Table 7: Sensitivity Test: Reporting Fraud to the Police w/o Organization Reporting Variable.....	58
Table 8: Sensitivity Test: Reporting Fraud to the Organization w/o Police Reporting Variable.....	59

List of Figures

Figure 1. Incident Counts and Percentage of Reporting by Types of Fraud	27
Figure 2. Incident Counts and Percentage of Reporting by Victim Characteristics: Race	28
Figure 3. Incident Counts and Percentage of Reporting by Victim Characteristics: Sex	28
Figure 4. Incident Counts and Percentage of Reporting by Victim Characteristics: Age Group.....	29
Figure 5. Incident Counts and Percentage of Reporting by Victim Characteristics: Education	30

Chapter 1: Introduction

Consumer fraud is a prominent social issue all over the world, especially as technology makes potential victims easier to access for fraudsters. The definition of consumer fraud is described as the intentional or attempted “deception of an individual with the promise of goods, services, or things of value that do not exist or in other ways are misrepresented” (Titus, 2001, p. 57). Common types of consumer fraud include shopping fraud, mortgage fraud, prize and lottery fraud, investment fraud, and charity or religious organization fraud, using credit card, debit card, cashier’s checks, or personal financial information. As the overall crime rates in the U.S. have been declining in the past decades, the consumer fraud rate has been increasing (Deevy et al., 2012; Kerley & Copes, 2002; Ross et al., 2014). A report by the Federal Trade Commission revealed that over 2.1 million consumer fraud cases were reported with a total loss of over \$3.3 billion in the year of 2020 (FTC, 2021). In the U.S., more than 10% of households become victims of consumer fraud every year (Anderson, 2013). In general, consumers with risky purchasing behaviors and are more willing to take risks in daily life are most likely to be victimized by fraud, and the perpetrators of consumer frauds are typically strangers who strictly aim for financial gain (Anderson, 2013; Ross et al., 2014).

The elderly population rank among the most vulnerable of financial exploitation victims due to the potential of diminished capacity to make financial decisions and higher levels of social isolation (Holtfreter et al., 2013; Mears et al., 2016; Nguyen et al., 2013). While one eighth of the U.S. population is constituted of the elderly who are 65 years and older, the elderly also constitutes nearly one third of consumer fraud victims (Kirchheimer, 2011). The negative impact of personal fraud has been suggested to be as

detrimental to the victims as the effects of street crimes, since fraud victimization often results in not only financial loss but also shame, self-blaming, and other mental health issues (Shichor et al., 2000; Schoepfer & Piquero, 2009). Sadly, consumer fraud victimization may cause more psychological harm to the elderly victims more than the younger victims—on top of the negative emotions from being duped, older people may also fear to be viewed as the stereotypical “the gullible elderly” (Ross et al., 2014; Schichor et al., 1996). As a result, the elderly victims can be more inclined to deny their victimization experiences and fail to seek help from family and friends or to report to authorities (Ross et al., 2014). The FTC report (2021) suggests that most consumer fraud victims do not report their victimizations to the authorities—the reporting rates range from 20% to 30% for the past several decades without any significant increase, and the elderly consumer fraud victims are found to be less likely to report fraud to authorities than younger victims (FTC, 2021; Titus et al., 1995).

The decision to report a crime victimization event to law enforcement and other authorities is important at several levels. From a criminal justice perspective, the involvement of the system is highly dependent on how crime victims use their discretion of reporting or nonreporting, especially for victims of personal crimes and financial crimes (Black, 1976; Skogan, 1984; Reyns & Randa, 2017). From a victimization perspective, research has come to a consensus on not only the legal and practical benefits of reporting behavior, but also the psychological and physical advantages of victim help-seeking (Greenberg & Ruback, 1992; Burnes et al., 2019; Gottfredson & Gottfredson, 1988; Skogan, 1984). Theories view reporting behavior as a strategy to alleviate distress from a traumatic experience, and the help-seeking decision-making process is under the

influence of social support (Cohen, 1992; Mason & Benson, 1996; Greenburg & Ruback, 1992). Therefore, a critical aspect to consider when developing victim assistance programs is the victim help-seeking decision-making process.

The goal of this thesis is to examine factors that influence elderly victim reporting behavior to the police or other authorities and government agencies, the “formal” reporting of victimization. One of the main research interests of victim reporting behavior research is to understand what factors are more likely to influence victims seeking help from authorities. The current study builds on the existing studies of fraud victimization and victim reporting behavior and adds to the literature by focusing on the most vulnerable population—the elderly victims. A growing body of research examines the impact of consumer fraud on the physical and mental well-being of elderly victims and suggests ways to prevent future victimization (Holtefreter et al., 2016; Shao et al., 2019; Van Wilsem, 2011). One concept often referenced is the critical role of social support during the help-seeking process, since the elderly victims of fraud tend to be more socially isolated than younger victims (Cohen, 1992; Kirchheimer, 2011; Titus et al., 2001). However, very little research has drawn empirical connections between social support and victim help-seeking behaviors.

The current study adopts Lin’s (1984) definition of social support, stating that social support is “the perceived or actual instrumental and/or expressive provisions supplied by the community, social networks, and confiding partners” for the benefits of crime victims. While there are several classifications of the concept of social support, this study focuses on the type of social support provided by victims’ friends, family, and acquaintances in their community and networks. Although the common perception and

intuition of the public often regard social support as a positive and encouraging factor for victim assistance and advocacy, the specific role and impact of social support on victim reporting behaviors remain unclear. The present study aims to assess if and how social support affects victim reporting decisions among the elderly who have been victimized by consumer fraud.

Chapter 2: Literature Review

Theoretical Background of Victim Help-Seeking

Victim reporting behavior has been an inseparable part of victimization theoretical development and research, as it links individual victimization experiences to the criminal justice system or other relevant organizations in society. The major victim reporting theories have focused on victims' decisions to report crime to law enforcement agencies, explaining victim reporting decisions with situational, social, psychological, and structural factors (Xie & Baumer. 2019).

The theory of criminal justice decision making proposed by Gottfredson and Gottfredson (1988) is one of the most well-known situational theories of victim reporting from a rational choice approach. Gottfredson and Gottfredson (1988) posit that reporting decisions are primarily affected by the seriousness of the offense, the victim-offender relationship, and whether the victim knows the prior record of the offender. The positive relationship between crime seriousness and crime reporting in this theory actually was built on the conceptual developments 20 years prior. In 1964, Sellin and Wolfgang created the first formalized index measure of crime seriousness using subjective perceptions, which has set the foundation for the theoretical advancement of understanding victim reporting behaviors. Victims experience negative consequences of crime, such as financial loss, physical injury, and emotional distress, and each victim experiences different degrees of these factors, comprising different levels of crime seriousness (Gottfredson & Hindelang, 1979; Xie & Baumer. 2019). Gottfredson & Hindelang (1979) argue that a victim's decision to report crime to the police was largely dependent on these situational factors about the specific crime incident rather than the

sociodemographic factors of the victim. Gottfredson and Gottfredson's (1988) theory also suggests that a victim would be more reluctant to report the crime if they know the offender, and a victim would be more likely to report the crime if they know the offender has a prior criminal record as it might make the offender appear to be more threatening (Reyns & Englebrecht, 2010). Their explanation of victim reporting predictors also indicates that reporting decision was made through a rational decision-making process that evaluated the pros and cons of reporting, but a major criticism is that a simple rational choice process might not fully explain victim reporting decision-making process (Gottfredson & Gottfredson, 1988; Xie & Baumer, 2019). It also overlooks the potential impact of other variables that are not directly related to the specific crime incident itself, such as victims' attitudes towards the police and criminal justice system, the level of concentrated disadvantage from where victims live, and victims' perceptions of crime and punishment (Sampson, 2013; Gavin & Safer-Lichtenstein, 2018; Xie & Baumer, 2019).

Another important theory of victim reporting is Black's (1976) theory of mobilization of law, which emphasizes the roles of structural factors in an individual's decision to utilize the legal system. Black (1976) argues that one's mobilization of law is under the influence of several dimensions: stratification, morphology, culture, organization, and social control. Empirical studies tested Black's theory by viewing victim police reporting behavior as enacting more law than non-reporting decision (Golladay, 2017; Holtfreter, 2008; Xie & Lauritsen, 2012). Black (1976) explains these dimensions by hypothesizing that victims of certain characteristics are more likely to enact the law based on his classification. His theory suggests that older white males with

higher education, victims who do not know their offenders, married victims, victims who have greater understanding of their rights and can tell right from wrong, victims who have greater participation in social organizations and receive more social support, and victims who have fewer other reporting options will enact the law more than their counterparts (Black, 1976; Copes et al., 2001; Golladay, 2017). While Gottfredson and Gottfredson's theory focuses on the incident characteristics, Black's (1976) theory pays attention to the victim characteristics and their social context.

Among these theories, Greenberg and Ruback's (1992) crime-victim decision making model stands out for two reasons. First, it is most applicable for studying victims of unconventional crimes, such as consumer fraud. Most theories on victim reporting focus on the decision to report to law enforcement—as mentioned, Black's (1976) general theory of law that emphasizes the utilization of the legal system; however, Greenberg and Ruback's (1992) theory includes several forms of responses to crime in addition to police reporting help-seeking. For victims of fraud, help-seeking is not limited to the law enforcement agencies, as there are other non-criminal justice-related authorities where victims can get the help they need. Second, it is most appropriate for the victim advocacy purpose of this study. When developing strategies to encourage victim help-seeking, it is crucial to explore not only sociodemographic or incident-specific predictors but also other factors that could be translated into victim assistance policies or programs. In comparison to Gottfredson and Gottfredson's (1988) theory of criminal justice decision making that proposes situational factors as the primary indicators of reporting from a rational choice approach, Greenberg and Ruback's (1992)

theory views victim reporting decision making as a collective process under social contexts rather than an individual decision, and it highlights the role of social influence.

Crime-Victim Decision Making Model and Social Support Theories

Greenberg and Ruback's (1992) crime-victim decision making suggests that there are three stages in the decision-making process in response to crime victimization: event labeling, seriousness determination of crime, and decision making (Greenberg & Ruback, 1992). To reach the final stage of decision making, victims must first label the event as a crime and then determine how serious the crime is based on their perceptions of harm of the current victimization, vulnerability of future victimization, and blameworthiness of the offender. Eventually, victims may choose one or several available options as a final decision. Throughout the three-staged process, victims are socially influenced by others who provide extra information, apply normative pressure, and provide socio-emotional support (Greenberg & Ruback, 1992). Greenber and Ruback (1992) discuss the social influence of others as advice and information received from family, friends, and acquaintances through social interactions (Greenberg & Ruback, 1992). When this social influence of others is meant to be helpful and for the good of the victim, it is regarded as social support.

Social support often refers to the emotional and material support from family, friends, and acquaintances (Bowker, 1988; Cohen, 1992). Although some scholars have included support by actors in institutional settings, such as police officers, social workers, and fraud investigators, as part of social support and categorized them as "formal social support" as opposed to "informal social support" (Liang et al., 2005), majority of social support research has not adopted this typology; instead, most studies used the term

“social support” to exclusively refer to support from family, friends, and acquaintances. Most theories and empirical studies of social support focus on three broad types: social embeddedness, perceived support, and enacted support (Barrera, 1981). Social embeddedness refers to direct or indirect connections with people, and these connections indicate potential social resources and lack of social isolation (Streeter & Franklin, 1992). However, the existence of social connections does not automatically generate social support, unless it is perceived as available, adequate, and beneficial to meet the needs (Barrera, 1986; Cohen & Hoberman, 1983); therefore, perceived support is a belief in the availability of support (Cohen, 1992). The actual actions, behaviors, and expressions of social support received by the intended receiver belong to the category of enacted support (Barrera, 1986).

The major mechanisms of how social support affects victim decision making is through information giving (Barrera, 1986). Information giving is pertinent to the victim decision making process as it provides forgotten information, new information, advice, or arguments to crime victims in all three stages of decision making (Greenberg & Ruback, 1992; Streeter & Franklin, 1992). It is not limited to enacted social support where victims actually receive the information. Social embeddedness indicates the network through which information flows—for example, an elderly victim’s social network may be older than a college victim’s network, suggesting that if given, the information received by the elderly victim is under the influence of social connections with more life experiences (Barrera, 1986). In addition to directly relevant information about crime and victim reporting, Cobb (1976) also points out that perceived support can provide information

that make people believe or know of the availability of social support—the information that they are loved, cared for, connected, and esteemed as part of a social network.

Another proposed mechanism of social support is stress buffering. Several social support theorists (Cassel, 1976; Cobb, 1976; Cohen, 1992) suggest that social support buffers the physical and psychological effects of stress as a result of crisis events (Cullen, 1994; Mason & Benson, 1996), and crime victimization is no doubt one of the most stressful types of crises in one's lifetime. Greenberg and Ruback (1992) point out that stress relief is a core motivation for victim decision-making. Supporting the general coping function of social support, Cohen (1992) adds that different types of social support also affect stress processing differently: while perceived support reduces the negative effect of stress by influencing one's appraisals of stressful events, received support reduces the negative effect of stress by enhancing coping (Lakey & Cohen, 2000).

Theories have consistently suggested that victim help-seeking decision is under the impact of social support through information giving and stress buffering; nevertheless, there is no theoretical explanation of how social support influences which decision crime victims decide to make. Information provided by others may encourage victims to seek formal help from law enforcement and other authorities, but it may also discourage victims from reporting to the police and turn to other responses. Similarly, through stress reduction, social support can help victims better evaluate the situation and ultimately lead to law enforcement notification, but it may also decrease the victim's motivation to report to formal authorities as a coping strategy, since social support has already provided stress relief.

Greenberg and Ruback's (1992) crime-victim decision making model listed four major options that crime victims eventually choose to take, including (1) cognitive reassessment of the situation, (2) private solutions, such as seeking compensation directly from the offender or moving, (3) doing nothing, and (4) reporting to law enforcement or other relevant authorities. This study focuses on how victims can reach the last option—formal help-seeking behavior, as the official response to crime victimizations. Formal help-seeking behavior refers to when a crime victim reports the incident to official agencies, including authorities in the criminal justice system and other agencies that could provide institutional help to crime victims (Reyns & Englebrecht, 2014; Holtfreter et al., 2014).

The types of reporting methods for consumer fraud victims have mainly concentrated on police reporting and organization reporting, such as reporting fraud to social services, Better Business Bureau, Federal Trade Commission, credit bureaus, credit unions, bank fraud protection and prevention divisions, and local organizations that specialize in fraud investigations. The National Public Survey on White Collar Crime (Huff et al., 2010) indicates that most white-collar crime victims report the incidents to relevant organizations without notifying the police first. Black's (1976) theory also argues that if a victim has other institutions to discuss or report crime incidents, then they are less likely to utilize law enforcement agencies. However, the proposed competitive relationship between police reporting and organization reporting methods may be challenged by a potential escalation effect where reporting to one institution may encourage reporting behaviors to another or other institutions based on practical

considerations of real-life scenarios. Therefore, the effect of one reporting method on the other is not clearly established from a theoretical perspective.

Based on the theoretical conceptual arguments discussed above, several hypotheses are proposed below for empirical testing:

Hypothesis 1: The level of perceived support will be significantly associated with general fraud reporting.

Hypothesis 1.a: The level of perceived support will be significantly associated with fraud police reporting.

Hypothesis 1.b: The level of perceived support will be significantly associated with fraud organization reporting.

Hypothesis 2: The level of social activities will be significantly associated with general fraud reporting.

Hypothesis 2.a: The level of social activities will be significantly associated with fraud police reporting.

Hypothesis 2.b: The level of social activities will be significantly associated with fraud organization reporting.

Hypothesis 3: The indicators of social relationships will be significantly associated with general fraud reporting.

Hypothesis 3.a: The indicators of social relationships will be significantly associated with fraud police reporting.

Hypothesis 3.b: The indicators of social relationships will be significantly associated with fraud organization reporting.

Hypothesis 4: The decision to report fraud to the police and the decision to report fraud to other organizations will be significantly related.

Empirical Studies on Victim Reporting Behavior and Social Support

Victim reporting theories have highlighted several factors that impact a crime victim's decision to report (e.g., Black, 1976; Gottfredson & Gottfredson, 1988; Greenberg & Ruback, 1992). Empirical research has found situational factors to be indispensable in victim help-seeking decision-making processes (Skogan, 1984). Among various incident characteristics, seriousness of crime has been consistently found to influence victim reporting behavior (Tarling & Morris, 2010; Reyns & Englebrecht, 2014; Burnes et al., 2019). Several empirical studies found that the amount lost in the fraud was the strongest consistent predictor of contacting the law enforcement and other formal organizations (Copes et al., 2001; Kerley & Copes, 2002; Mason & Benson, 1996). Another incident characteristic often found to be significant among violent crime victims is the victim-offender relationship; however, most empirical studies on fraud victims did not find it to be a significant factor for reporting behavior (Reyns & Randa, 2017; Kerley & Copes, 2002), with one exception where Copes et al. (2001) discovered that fraud victims who were victimized by a stranger were nearly twice as likely to seek formal help from authorities. The unestablished impact of victim-offender relationship on reporting behavior may be related to the fact that the majority of fraudulent crimes, especially financial fraud, were committed by complete strangers or those barely known by the victims.

For example, Copes et al. (2001) discovered that similar to the findings for conventional crimes, personal fraud victims who were married and had graduate degrees

were more likely to report. They also found that those 55 and older were more likely to report fraud than younger individuals; however, race and gender were not significant (Copes et al., 2001). Conversely, the study of Kerley and Copes (2002) examined reporting behaviors for first-time, second-time, and repeated personal fraud victimizations, and found that none of the demographics had an impact on fraud reporting. Schoepfer and Piquero (2009) looked at victims of a wide range of fraud types and suggested that victims with a bachelor's degree were more likely to report. Analyzing victims by fraud types, Reyns and Randa (2017) found that victims of credit card fraud and existing account fraud with higher incomes were less likely to report, and male victims of new account fraud were more likely to contact law enforcement.

Another correlate of victim reporting behavior includes variables pertinent to victim characteristics. For conventional crimes, victims who are female, black, older, married, and highly educated, are more likely to report to the law enforcement than their counterparts (Gottfredson, 1986; Bosick et al., 2012). While research has established relationships between victim demographic characteristics and formal help-seeking behavior for conventional crimes, the empirical relationships between victim characteristics and victim reporting behavior have not been consistent for fraudulent crimes. The inconsistent findings regarding fraud victims indicate a gap in victim reporting behavior literature. Although it is still premature to assume relationships between victim and incident characteristics and fraud victim reporting behavior, the existing studies along with victim reporting theories still suggest that both victim characteristics and incident characteristics are important in understanding fraud victim reporting decisions and should be further tested in future research.

The concept of social support originated in the field of psychology and has been widely applied in psychological studies that are interested in crime victims' mental health (e.g., Scarpa et al., 2006; Have et al., 2013; Pouwelse et al., 2011). In psychology research, social support is normally measured by the Multidimensional Scale of Perceived Social Support (Zimet et al., 1988) that identifies perceptions of support from family, friends, and significant others. Studies have found that perceived support had a significant impact in reducing depressive symptoms and PTSD symptoms post-victimization, especially for younger victims (Scarpa et al, 2006; Boza & Perry, 2014).

Although social support is not as popular in criminology studies as in psychology, there are still a number of empirical studies that examined the role of social support in adolescent delinquency participation (e.g., Johnson et al., 2016; Martinez & Abrams, 2013; Cochran, 2014) and victimization (e.g., Rigby, 2000; Turner et al., 2017) with a diverse range of social support measurements from perceived or received support from family and friends to network and socialization assessment. In a presidential address to the academy of criminal justice sciences, Cullen (1994) points out that social support is key to understanding the causes and consequences of crime, and crime research should be encouraged to pay more attention to social support rather than social non-support. It is by no surprise that an extensive amount of research in criminology emphasized the lack of social support or negative social influences as factors associated with delinquency and other outcomes—for example, negative peer influence and delinquency (e.g., Dipietro & McGloin, 2012) and the impact of parental absence due to incarceration (e.g., Jacobsen, 2019).

Among research that did focus on the presence of social support, most studies were more interested in violent crimes and understanding likelihood of crime offending or crime victimization instead of victim reporting behavior. In the existing body of literature, only two studies have directly examined the relationship between social support and help-seeking behavior for victims of fraud.

One study was conducted by Mason and Benson (1996), using data collected from a telephone survey of a random sample of 400 Knox County residents in Tennessee in 1994. In this study, the authors conceptualized social support as the actual information received by the victim, including any advice or guidelines given by others regarding the victim's decision to report or not report the crime to authorities (Mason & Benson, 1996). They not only measured whether informational social support was received by the victims, but also captured the direction of the support—pro-reporting, anti-reporting, or no advice about reporting (Mason & Benson, 1996). Results showed that victims who received social support in the form of information were more likely to report to authorities, and that those who were discouraged to report were less likely to report than those who were encouraged to report (Mason & Benson, 1996).

Besides the contribution being the first criminal justice study that drew empirical association between social support and victim reporting behavior, another unique contribution of this study is that it measured a very specific type of enacted social support: information. As mentioned above, a major mechanism through which social support influences reporting decisions is information giving (Barrera, 1986). By using received information as its key independent variable, this study also validated the mechanism of how other types of social support (mainly social embeddedness and

perceived support) influence victim reporting decisions. Nevertheless, a limitation of this study is its small sample size—when giving a list of 13 types of fraud and asked whether they were targeted or victimized via any type of fraud in the past 5 years, only 227 respondents answered yes and were included in the analysis (Mason & Benson, 1996).

The second study was conducted by Van Wyk and Mason (2001) using the same data as the first study. This study criticized the first study for failing to account for the impact of “socialization” and predicted that “socialization” could be key to access to information and thus influences reporting behavior (Van Wyk & Mason, 2001). It is important to note that Van Wyk and Mason’s operationalization of (2001) “socialization” refers to the activities of interacting with others socially instead of the process of acquiring norms and values of society. Consequently, “socialization” was measured with questions regarding respondents’ social functions attendance. The authors also argued that older people attended fewer social functions and therefore were less likely to receive information from others and less likely to report fraud to proper official channels (Van Wyk & Mason, 2001). After analyzing the data, they didn’t find any significant relationship between social activities participation and reporting behavior or evidence to support the age argument (Van Wyk & Mason, 2001). Although no significant association was found, this study is still valuable for its examination on the availability of social support rather than the actual support received by victims, which is in accordance with the theoretical argument that social embeddedness is one type of social support that can influence victim reporting decision (Barrera, 1986; Greenberg & Ruback, 1992; Lakey & Cohen, 2000).

These two studies have set a foundation for assessing the effects of social support on reporting behavior of fraud victims, even though they adopted different conceptualizations of social support in their analyses; nevertheless, there is still not enough empirical evidence to support any associations between different types of social support and fraud victim reporting behavior. There is a need for more research to examine the role of social support in victim help-seeking behavior in general and more urgently for victims of nonviolence crimes, such as consumer fraud.

Current Study

Building on previous literature of victim help-seeking behaviors and social support, the current study aims to address gaps in existing empirical studies by first, focusing on a type of crime that has received little attention in victimization research: consumer fraud; second, drawing attention to elderly crime victims—a largely overlooked population; third, assessing several reporting methods in accordance with the patterns of fraud reporting and exploring the connections between them; and last, examining the effects of various types of social support rather than just one general concept. The research question of this study asks: what aspects of social support may affect consumer fraud reporting? The hypothesized relationship between social support and crime reporting is motivated by the theoretical propositions of Greenberg and Ruback's (1992) crime-victim decision making model. The measurements of the core concepts are also theoretically relevant, although this study does not intend to conduct a full test of theory. The primary concern of the research question is to identify types of social support that can potentially increase the reporting behaviors of fraud victims and

shed light on how organizations and programs may encourage victim help-seeking in the future.

Chapter 3: Data and Methods

Sample

Data for the present study were collected by Holtfreter et al. (2016) from telephone survey interviews conducted with elderly residents (age 60 years and older) from Arizona and Florida in 2011. The data sample was generated by the random selection of landline household numbers from a White Pages database of directory-listed households (Holtfreter et al., 2014). In total, 4,130 eligible interviewees were contacted for data collection. The response rate of the survey is 48.43%, which is comparable to the average response rate telephone survey. The study also has a high completion rate of 82.90%. This sampling method excluded those who only used cell phones, but since the current sample targets the senior population who were significantly more likely to use landline phones, using the White Pages is an appropriate approach to select a sample of elderly individuals for telephone surveys (Blumberg & Luke, 2007; Holtfreter et al., 2014). Over a four-week period (June-July) in 2011, 1,000 Arizona residents and 1,000 Florida residents have completed the interview via Computer Assisted Telephone Interviewing (CATI) with survey questions regarding their consumer fraud and financial exploitation victimization experiences (Holtfreter et al., 2014).

The sample of this study consists of a total of 4,124 consumer fraud victimization incidents that have targeted 1,474 elderly respondents over the past two years. The incidents include both fraud targeting (87.32%) and fraud victimization (12.68%). A fraud targeting incident is when the victim acknowledges that someone has tried to defraud them, but they did not end up paying the money per “request” by the fraudsters. A fraud victimization incident is when the victim actually paid the money. Out of the 359

fraud victimization incidents, 283 incidents resulted in financial loss that ranged from \$1 to \$5,5000. The average amount of loss is \$1168. Each respondent may have experienced multiple types of fraud incidents, and each incident was recorded separately. Any victimization incident occurred more than two years before the interview was removed from the sample in order to minimize the influence of memory decay due to old age.

The survey asked 10 questions to capture 6 different types of consumer fraud. Table 1 lists shopping/purchasing fraud, financial fraud, charity scam, prize notification fraud, mortgage rescue fraud, and identity theft. Financial fraud that aimed to trick respondents into revealing financial information and paying money to improve their financial situations, to invest in phone business opportunities (Holtfreter et al., 2014) appears to be the most prevalent type of consumer fraud (29.61%), followed by shopping and purchasing fraud that includes unkept promises of services, products, or subscriptions (24.61%). Prize notification fraud happens when the victim is asked to pay some money in order to claim a fake prize, such as a lottery, free home appliances, or vacation (18.65%). 14.86% of the incidents in the data are charity scam where the victim is asked to donate money to a phony charity and religious organization. The broader definition of identity theft is the stealing and unauthorized use of personal information, but in this survey, identity theft is recorded as when someone “tried to steal your personal information so they could use it to get a credit card or a loan” (Holtfreter et al., 2014), which constitutes 8% of all incidents. The least prevalent type of fraud in this data is mortgage rescue fraud (4.27%), which is when the victim is asked to pay some money in advance to reduce their mortgage payments.

Dependent Variable

The dependent variable in this study is victim formal help-seeking behavior. Formal help-seeking behavior has been operationalized as reporting to police when studying conventional crimes (e.g., Reyns & Englebrecht, 2010); however, fraud research suggested to expand the concept from reporting to police to reporting to law enforcement/government agencies, administrative agencies, and other authorities, such as the Better Business Bureau. (e.g., Copes et al., 2001; Reyns & Randa, 2017; Van Wyk & Mason, 2001; Mason & Benson, 1996) Formal help-seeking of fraud is not limited to involving the criminal justice system, as there are other organizations that can provide professional support and meet the needs of fraud victims.

Reporting behavior is measured as a binary variable (0=no, 1=yes) with two survey items asking: “Was the incident reported to the police?” and “Was the incident reported to other authorities, like the Better business Bureau or a government agency?” If the incident victim answered yes to either or both questions, the answer is coded as reported; if no was answered to both questions, the incident is coded as not reported. Table 2 shows that a total of 512 consumer fraud incidents were reported to authorities in the sample.

Independent Variables

The independent variables for the current study measures two types of social support: perceived support and social embeddedness. Based on Greenberg and Ruback’s (1992) crime-victim decision making model and Cohen’s social support theory (1992), both perceived support and social embeddedness influence victim reporting behavior through information giving and stress buffering. This study aims to examine the effects of the availability and perceived availability of social support rather than the impact of

specific advice directly related to crime reporting that have been received by the victim as measured in the Mason and Benson (1996) study.

Perceived support. Cohen et al. (2000) pointed out that perceived level of support could be measured with a large variety of items and suggested a general direction when measuring perceived level of support: respondents' judgement of "availability or quality of social support from their social network" (pp.38). Following this general instruction of measurement, a total of 6 survey items are used to measure perceived level of support in this study—3 statements for feelings of social connectedness/absence of social isolation("I often feel isolated from others", "I often feel that I lack companionship", "I often feel helpless") and 3 statements for perceived interpersonal support ("I know people who would help me if I were confined to bed", "I have people who I can talk to about my problems", "I know people who I can turn to if I need good advice about a crisis"). For each item, respondents responded with the extent to which they agree with the statement (1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree). The three items for social connectedness are coded with reverse score to indicate social connectedness. The subscale of perceived support is the sum of victim responses to the six statements about feelings of social connectedness and perceived interpersonal support, ranging from 1 to 24 with sufficient internal consistency ($\alpha = 0.66$).

Social Embeddedness-Social Activities. Social activities have been proposed as an important aspect of social support. The present study builds on Van Wyk and Mason's (2001) 3-item "socialization" index and measures the frequencies 6 types of social activities with 4 closed-ended answers (1=frequently, 2=sometimes, 3=rarely, 4=never). The responses are reversely scored in coding, so that a highly score represents higher

level of social activity involvement. For each activity, responses of “frequently” and “sometimes” are coded as 1, and responses of “rarely” and “never” are coded as 0. A sum scale of 6 items about whether victims participate social activities is employed, ranging from 0 to 6 ($\alpha = 0.52$). These social activities include “participating in social activities away from home”, “getting together socially with people who DO NOT live with you, such as neighbors, and relatives”, “going shopping at grocery, drug, hardware, department or convenience stores”, “going to church, temple, or another place of worship for services or other activities”, “going to a movie, restaurant, club meeting, or other group event”, “exercising or participating in leisure sports”.

Social Embeddedness-Relationships. Another aspect of social embeddedness is the presence of social relationships or social ties that link individuals with other individuals. The present study directly measures two types of familial ties—spouse and children, and indirectly measures two other forms of social relationships —people who live with the respondents and colleagues—through household living situation and employment status. All four measurements of social ties are coded as dichotomous variables (0=no, 1=yes). A scale ranging from 0 to 4 is created to measure relationships by adding the four dichotomous variables described above ($\alpha = 0.50$). Because the Cronbach’s alpha for this variable is not high, the effect of each component of social embeddedness-relations on fraud reporting is examined.

Control Variables

Sociodemographic and incident characteristic variables found to be empirically associated with consumer fraud reporting behavior are controlled in the analyses: *age* (age in years), *white* (0=non-Hispanic white, 1=nonwhite), *male* (0=female, 1=male),

college education (1=some college and above, 0=high school graduate and the equivalence or below), and the seriousness of crime (0=did not pay for the fraud, 1= paid for the fraud). As shown in Table 2., the incident victim's age ranges from 60 to 97; 88.7% of consumer fraud incidents had white victims; 44.3% of incidents had male victims; 72.8% incident victims received some college education or more; and 12.7% victims paid for the fraudulent services or goods.

Analytic Strategy

Logistic regression models are estimated to understand the effects of social support on consumer fraud victim formal help-seeking decisions. Given the binary nature of the dependent variable, it is most appropriate to use logistic regression.

First of all, descriptive statistics are provided to analyze patterns of fraud reporting based on types of consumer fraud and victim characteristics. The present study then uses logistic regression models to examine how perceived support and social embeddedness influence consumer fraud victim's decision to report. Another regression model is used to assess the potential impact of each individual item under perceived support, social activities, and social relationships on reporting in order to explore the nuances of support. The effects of different types of social support on reporting fraud to the police and reporting fraud to other agencies separately are examined separately. Moreover, because the decision and process of reporting fraud to the police and to other organizations may influence each other, the models also assess if and to what extent one type of reporting affects the other. Additional sensitivity analysis is performed to strengthen the models.

Chapter 4: Results

Descriptive Analysis

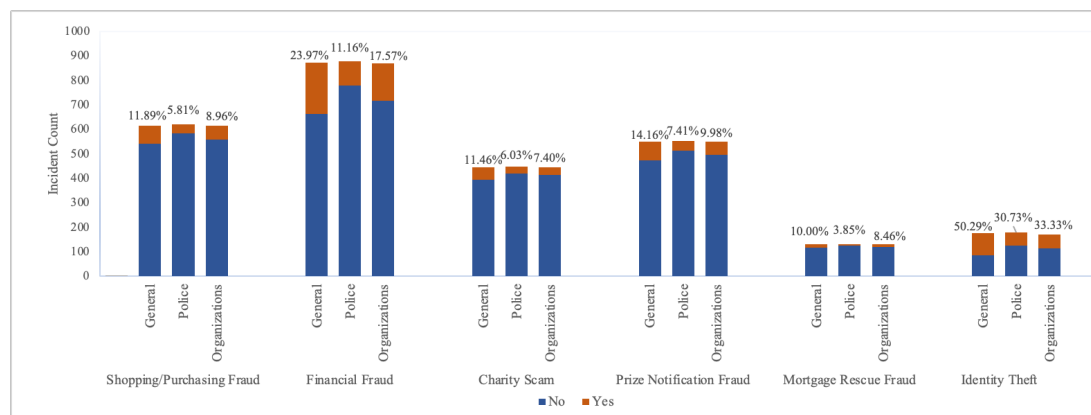
Table 1 lists 6 different types of consumer fraud that have been captured in the survey. As mentioned, while they are all categorized as consumer fraud, each specific type has its own method of operation and may target a different group of people with unique vulnerabilities and needs. This likely leads to gaps in the percentage of reporting. Figure 1 presents the contrasts between the reported and unreported fraud incident counts for general reporting (to either the police or an organization/agency), reporting to the police, and reporting to the other organizations by different types of consumer fraud. It also shows comparisons of the percentages of reported incidents within each type of fraud for all three reporting measurements.

First, comparing the reported incident count across all fraud types, for all three types of reporting methods, financial fraud has the highest counts of incidents, and mortgage fraud has the lowest incident count. Although identity theft has the highest percentage of reported incidents for all three types of reporting methods –50.29% of identity theft incidents either reported to the police or organizations, 30.73% reported to the police, and 33.33% reported to organizations, the overall number of identity theft incidents in the data is a lot lower than of financial fraud. For financial fraud, 23.97% of the incidents were reported to either the police or organizations, 11.16% reported to the police, and 17.57% reported to an organization or an agency. The type of consumer fraud that has the lowest general percentage of reporting (10.00%) and the lowest percentage of police reporting (3.85%) is mortgage rescue fraud, which is consistent with its low number of reported incident counts. In addition, charity scam has the lowest percentage

of organization reporting of 7.40%, although the number of charity scam incidents reported to organizations is the second lowest after mortgage rescue fraud.

When comparing the reporting behaviors within each fraud type, it is important to note that the number of incidents reported to organizations and agencies appears to be higher than the number of incidents reported to the police consistently for all types of fraud. Moreover, the percentages of reporting to other organizations are also higher than the percentage of police reporting, and the gap ranges from 6.41% for financial fraud to 1.37% for charity fraud. This finding indicates that the preference to report fraud victimization to organizations and agencies other than the police is not unique to a particular type of crime, and that this trend applies to all types of consumer fraud.

Figure 1. Incident Counts and Percentage of Reporting by Types of Fraud



In addition to fraud type, victim characteristics are also important to understand reporting patterns. The incident counts and percentages of reporting for overall fraud are presented by the race, sex, age group, and education level of the victim. Figure 2 shows that although a higher percentage of incidents with nonwhite victims than white victims were reported for all three reporting methods, the count of reported incidents are a lot higher for white victims than nonwhite victims, since 88.7% of the incidents had white victims.

Figure 2. Incident Counts and Percentage of Reporting by Victim Characteristics: Race

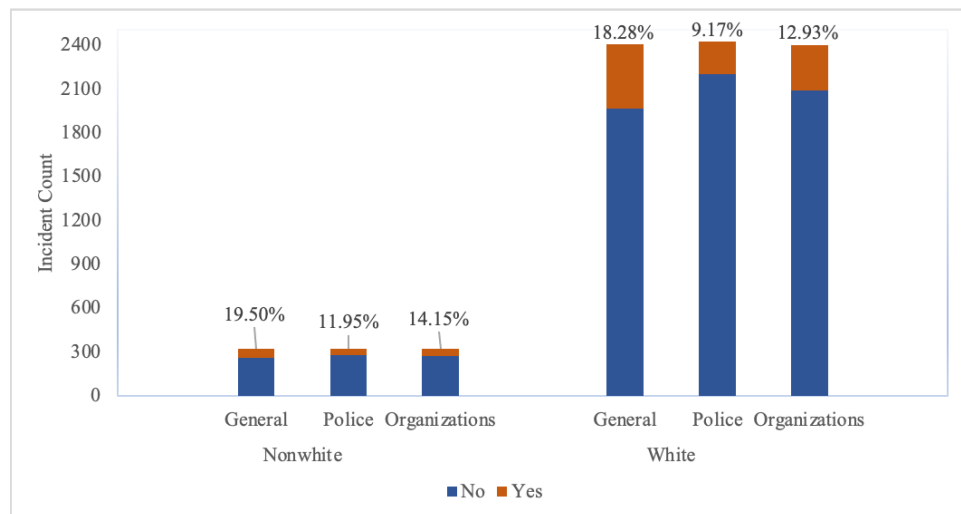


Figure 3 indicates that compared to male victims, female victims have a higher percentage of general reporting of 20.18% and higher police and organization percentage of reporting. While the overall number of fraud incidents with female victims is higher than those with male victims, females still have a higher number of reported incidents than males for all three reporting methods.

Figure 3. Incident Counts and Percentage of Reporting by Victim Characteristics: Sex

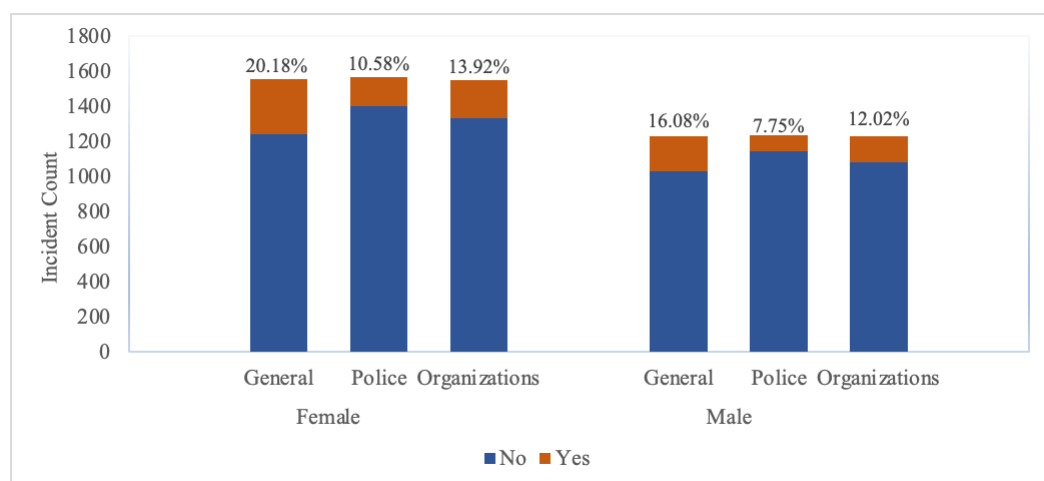
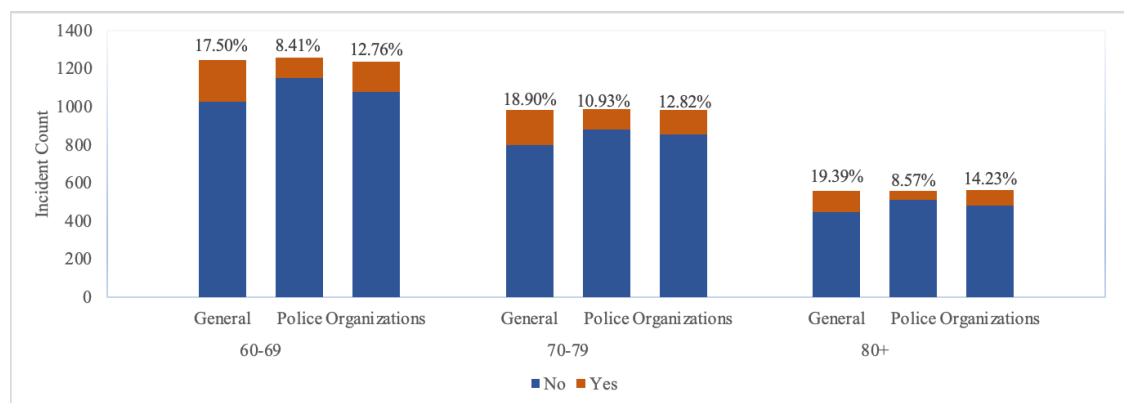


Figure 4 presents three age groups: 60-69, 70-79, and 80 and older. Because the survey was conducted among the elderly respondents, no respondent was younger than 60 years old. The age group of 60-69 has the highest number of fraud victimization incidents, and the age group of 80 and older has the lowest number of incidents. In terms of the number of reported incidents, the age group of 60-69 also has the highest number of reported incidents, while the age group of 80 and older has the lowest number of reported incidents for all three reporting methods. However, if looking at the percentage of reported incidents, the age group of 80 and older has the highest general reporting percentage and organization reporting percentage, and the age group of 70-79 has the highest percentage of police reporting.

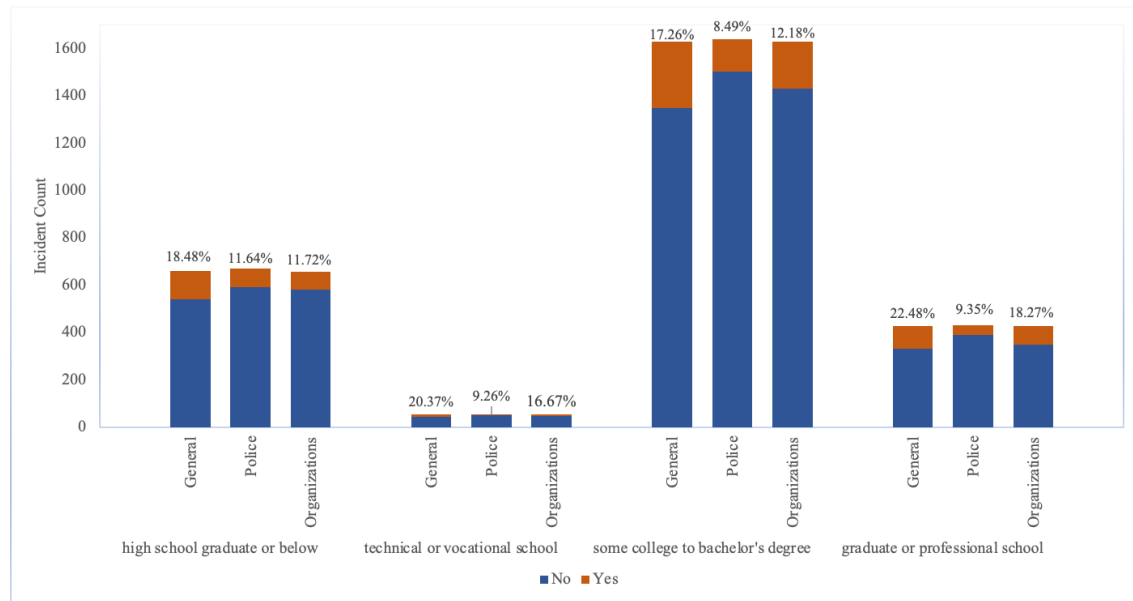
Figure 4. Incident Counts and Percentage of Reporting by Victim Characteristics: Age Group



Last, Figure 5 shows that a large number of fraud incidents had victims with some college education to bachelor's degree, and a very small number of incidents had victims with technical or vocational school education. The number of incidents with victims who were high school graduates or below is slightly higher than with victims who received graduate or professional school education. Overall, the number of reported incidents is the highest for all three reporting methods when victims had some college or a bachelor's

degree, and lowest for those with technical or vocational school training. In addition, victims who attended graduate or professional school have the highest general percentage of reporting of 22.48% and organization percentage of reporting of 18.27%, and victims who are high school graduates or below have the highest police percentage of reporting of 11.64%.

Figure 5. Incident Counts and Percentage of Reporting by Victim Characteristics: Education



The bivariate correlations for all the variables are presented in Table 3. General fraud reporting is weakly associated with sex, indicating that females are more likely to report than males ($r = -.05, p < .05$); however, none of the independent variables are significant correlates of general reporting. Crime seriousness is also weakly associated with general reporting ($r = .10, p < .05$). Reporting to the police is significantly associated with a key variable: *perceived support* ($r = .05, p < .05$), although the relationship is very weak. Neither *social activities* or *social relationships* influences police reporting. Fraud seriousness is weakly associated with general reporting ($r = .09, p < .05$). Reporting to the police is also weakly associated with being female ($r = -.05, p$

< .05). As for reporting to the organizations and agencies, none of the social support indicators are significant correlators, but the control variables of *college education* ($r = .04, p < .05$) and *fraud seriousness* ($r = .10, p < .05$) are positive correlated with reporting. The bivariate correlation findings in table 3 suggest that different reporting methods may be affected by different types of social support. In order to assess the associations more rigorously, the current study also conducts multivariate regression analyses.

Regression Analysis

Table 4 provides results of the logistic regression analyses on different types of social support and general fraud reporting—whether a fraud has been reported or not regardless of the methods of reporting. Model 1 only includes the three key independent variables—*perceived support*, *social activities*, and *social relationships*, and none of them appears to be an important indicator of general reporting in these data. This is true even after including the five control variables in the model (Model 2). The victim characteristics variable of sex is significantly associated with general fraud reporting ($\beta = -.287, \text{Exp}(\beta) = .751, p < .01$), suggesting that female victims of fraud are generally more likely to report fraud than male victims. The seriousness of fraud is another significant indicator of reporting—incidents in which the victim has paid for the fraudulent products or services are 1.94 times as likely to report fraud than when the victim did not fall for the scam ($\beta = .660, \text{Exp}(\beta) = 1.934, p < .01$). Model 3 reports the effect of each component of the three independent variables on general fraud reporting and finds that marital status under social relationships significantly increases the likelihood of reporting ($\beta = .477, \text{Exp}(\beta) = 1.61, p < .01$). Consumer fraud victims who were married are 1.61

times more likely to report fraud than those who were not married, divorced, or widowed. Victim's gender ($\beta = -.291$, $\text{Exp}(\beta) = .747$, $p < .01$) and the seriousness of fraud ($\beta = .677$, $\text{Exp}(\beta) = 1.97$, $p < .01$) remain significant in this model

Now examining two types of reporting behaviors separately, Table 5 presents the effects of social support of police reporting behavior by the elderly fraud victims. When only including the key predictors in Model 1, *perceived support* significantly affects the police reporting decision. For every one-point increase in the scale of *perceived support*, the likelihood of police reporting increases by 8.7% ($\beta = .083$, $\text{Exp}(\beta) = 1.087$, $p < .05$). Model 2 shows that after including control variables, perceived support loses its significant effects. The control variable of fraud seriousness shows significant effect on police reporting by increasing the likelihood of reporting by 56% ($\beta = .447$, $\text{Exp}(\beta) = 1.56$, $p < .05$). However, when analyzing the effects of each of the components of social support on police reporting in Model 3, one component of *perceived support*—*social connectedness*—is significantly and positively associated with police reporting. Fraud victims who feel less social isolation and more social connectedness (one point increase in scale) are 8.7% more likely to report fraud to the police ($\beta = .083$, $\text{Exp}(\beta) = 1.087$, $p < .05$). Three components of *social activities* are significant predictors of police reporting behavior. First, those who attend *religious services* are 53% more likely to report fraud to the police than those who rarely or never participate ($\beta = .424$, $\text{Exp}(\beta) = 1.53$, $p < .05$). Second, incidents are 42% less likely to be reported to the police when victims frequently or occasionally participate in health entertainment activities outside of home ($\beta = -.545$, $\text{Exp}(\beta) = .580$, $p < .01$). Third, fraud incidents are 34% less like to be reported to the police when victims do leisure sports ($\beta = -.417$, $\text{Exp}(\beta) = .660$, $p < .05$).

As for *social relationships*, none of the components show significant effects on police reporting. Crime seriousness remains significant in Model 3 ($\beta = .469$, $\text{Exp}(\beta) = 1.598$, $p < .05$). It is also important to note that *reporting fraud to other organizations* remains significantly and positively associated with *reporting fraud to the police* in all three logistic regression models. On average, the odds for victims who have reported fraud to other organizations to report fraud to the police are 8 times as large as the odds for those who have not reported fraud to other organizations.

The logistic regression results for reporting to official organizations are presented in Table 6. In the restricted model which includes no controls (Model 1), *social activities* can significantly influence victim's decisions to report to organizations and agencies. For every one more social activity victims participate, the likelihood of reporting fraud to other agencies increases by 12.7% ($\beta = .120$, $\text{Exp}(\beta) = 1.127$, $p < .01$). After controlling for victim and incident characteristics, *social activities* is still a significant and positive indicator of organization reporting decision, increasing organization reporting by 14.1% ($\beta = .132$, $\text{Exp}(\beta) = 1.141$, $p < .05$). Also, incidents that are more seriousness are 78.9% more likely to be reported than incidents that are less serious ($\beta = .582$, $\text{Exp}(\beta) = 1.789$, $p < .01$). In Model 3 where the aggregated items are broken down into individual components, none of the *social activities* component is found to be significant indicators of organization reporting. As for *social relationships*, marital status is significantly associated with organization reporting. Married victims are almost 1.54 times as likely to report to organizations as unmarried/divorced/widowed victims ($\beta = .440$, $\text{Exp}(\beta) = 1.552$, $p < .05$). Crime seriousness remains significant ($\beta = .579$, $\text{Exp}(\beta) = 1.784$, $p < .01$). In addition, reporting fraud to the police has a consistent significant relationship with

reporting fraud to other organizations across all three models. On average, in incidents where victims have reported fraud to the police, the odds for fraud to be reported to other organizations are 8.1 times as large as in the incidents where fraud was not reported to the police.

When analyzing one reporting method, the goal of including the other reporting method in the model is to control for the propensity of reporting; however, because both reporting methods are conceptualized as outcome variables that are predicted by the same set of independent variables, there is the potential problem of multicollinearity.

Therefore, I performed logistic regression analysis without including the other reporting method when examining reporting fraud to the police and reporting fraud to the organizations. Comparing Table 5 and Table 7 for reporting fraud to the police, the significance, direction, and magnitude of the relationships do not show major differences that yield any concern, although victims' marital status and living situations become nonsignificant after including *reporting fraud to other organizations* in the model.

Comparing Table 6 and Table 8 for reporting fraud to other organizations, variables that are significant in one model are still significant in other model, and both the direction and strength of the effects show almost no difference across both tables. Additionally, the variance inflation factors (VIF) of the models are examined, and the VIF values of all variables are below 2. Although the above sensitivity analysis results cannot completely rule out the possibility of multicollinearity, they can suggest a high level of robustness of the results.

Chapter 5: Discussion and Conclusion

Fraud victimization is a crime context that has received little attention in the existing body of criminological research, and its empirical examinations are often atheoretical (Holtfreter et al., 2008). The present study adopted the theory of crime-victim decision making model—which has been commonly used in criminological studies of violent crime, and social support theories—which have been mostly utilized in psychological research, to examine the roles that social support have played in the help-seeking decisions of fraud victims. The specific categories of social support were highlighted for detailed analyses. For the purpose of this study, which was to understand how to encourage fraud reporting behavior, different reporting methods were examined and compared. Four main hypotheses derived from theories were tested, and the results yielded important insights on the hypothesized relationships. In this chapter, each of the hypotheses are first addressed to answer the research question of this study: how do different types of social support affect victim reporting behaviors? The implications of the findings are then discussed in relation to the broader literature of fraud victimization. Finally, the limitations of this thesis are presented alongside suggestions for future research.

Summary and Discussion of Findings

Perceived support is the respondent's general self-perceptions and evaluations of how supported they have felt (Cohen et al., 2000). It was hypothesized that fraud victim's perceived level of support has an impact on their reporting decisions, although the direction of relationship is unclear. Social support theories suggest that when crime victims believe in the availability of support from their surroundings, they are more likely

to feel esteemed and valued, and their decisions of whether to report fraud are influenced. This still holds true even if they have not yet received any substantive support or when their perceptions of support were not consistent with the realities—they might have overestimated or underestimated the amount of support they could actually receive. Our findings on the relationship between victim reporting behaviors and the level of perceived support partially support the theoretical arguments. The perceived level of support had a significant relationship with the victim's police reporting behaviors, although it did not predict overall reporting behavior and a victim's decision to report fraud to other authorities such as different government agencies and credit unions.

Moreover, this relationship is found to be positive, meaning that a higher level of perceived support not only affects but also increases the likelihood of police reporting behaviors. Specifically, when victims feel less isolated from others, feel like they have an adequate amount of companionship, and feel more competent rather than helpless, there is a higher chance for them to report fraud to the police. An explanation for this encouraging effect of perceived support is that when the elderly fraud victims perceived themselves as loved and cared for, they experienced less shame and fear to be associated with the “gullible elderly” (Ross et al., 2014) stereotype if they were to report the fraud and seek help from others. From the theoretical point of view, perceived support encourages victims to report fraud to the police through the stress reduction mechanism where victims can better evaluate the situation without the negative impact of stress and make the decision to seek help from the police.

Social embeddedness is another important concept in social support theories that measures the actual connections with people, both direct and indirect (Barrera, 1981;

Cohen et al., 2000). While perceived support focuses on the perceptions of available resources, social embeddedness emphasizes the existing opportunities to access these resources (Barrera, 1986; Cohen, 1992). In the analysis, social embeddedness was divided into two different categories: the frequency of social activities attendance and the number of existing relations with others. The current study hypothesized that the level of social activities participation and the level of social relationships are related to fraud victim reporting behaviors, since connections and interactions with the society can provide more opportunities to collect relevant information regarding crime reporting. The results showed general support of these hypotheses with nuances based on the reporting method. The level of social activities participation frequency increased the victim's decision to report fraud to authorities and organizations other than the police.

These findings stressed the importance of social interactions in fraud victim's help-seeking process, which is consistent with the findings about the positive impact of human interactions outside of the house on the help-seeking decisions of domestic violence victims but for different reasons (Fanslow & Robinson, 2010; Leone et al., 2007). Social support theories emphasize that information giving is a critical mechanism through which victims receive targeted advice or general information (Van Wyk & Mason, 2001). For fraud victims, the information might be more than a nudge to report—they may also get advice on which organizations to go to, how to report a fraud, and other information that is more up to date. For police reporting, participating in religious services can increase the reporting. This positive effect of attending religious services could be attributed to the community and social network aspect of religious institutions, where victims can have easier access to information as well as emotional and spiritual

support from the congregates. The results also suggested that living with a spouse encouraged victims to report fraud in general and also specifically to organizations other than the police. This finding accords with the theoretical argument that advice given by family and close friends are particularly impactful to the crime victim's help-seeking decision (Greenberg & Ruback, 1992).

Different from the positive connections mentioned above, participation in healthy entertainment activities, leisure sports, and living with someone other than a spouse appeared to discourage police reporting behavior for fraud victims. There are two possible explanations. First, theories have suggested that an increasing level of social embeddedness can have both positive and negative influences on reporting, since victims might receive advice to not report fraud to the police but to other organizations instead, or they might have received comfort and care from others and feel less motivated to use fraud reporting as a way of stress reduction (Cassel, 1976; Cohen, 1992; Cullen, 1994; Mason & Benson, 1996). The negative effects of healthy entertainment and leisure sports participation and living with someone might also be a reflection of social embeddedness. Second, these discouraging effects could be specific to entertainments and leisure sports participation and living with someone rather than social embeddedness as a whole, since the aggregated social activities and social relationships showed no connection to police reporting behaviors. The negative effects of these indicators might reflect certain characteristics of the victims that are associated with lower likelihood of police reporting behavior. One aspect to consider regarding participation in entertainment activities and leisure sports is the physical mobility of the victim. Since the sample focused on the elderly victims at the age of 60 and older, it is reasonable to suggest that their

participation in entertainments and leisure sports is more likely to be under the impact of their physician health conditions and level of mobility compared to younger people. It is likely that when the victim is more mobile and capable of tasks, they tend to rely on themselves or people they socialize with rather than the police. Another aspect is the level of stability that is related to one's living arrangements. Although living with someone other than a spouse could indicate one's preference of not living in isolation, it may also reflect elements of unstable lifestyle, as roommates might come and go. As a result, the lack of life stability could make one hesitate about reporting fraud to the police. However, there has not been enough theoretical or empirical evidence to interpret these specific effects.

The last hypothesis of this study proposed an association between the two reporting methods that was captured in the data: reporting fraud to the police and reporting fraud to other organizations. Greenberg and Ruback (1992) asserted that reporting a crime to the police was not the only form of help-seeking, as there are other authorities and organizations that could provide professional assistance to crime victims, and a study would be incomplete without considering how different help-seeking methods impact one another. The current study found that victims who have used one method of reporting were prone to utilize the other method of reporting as well. There is a concurrent relationship between these two reporting methods instead of a competitive relationship.

Based on the characteristics of these agencies, four potential scenarios may help to make sense of this concurrent relationship. First, victims only knew about or only wanted to report the fraud incidents to the police. After they reported to the police, they

were suggested or given the options to also report it to other government agencies (e.g., Consumer Protection Division in the State Attorney General office, Federal Trade Commission) or non-governmental organizations (e.g., Better Business Bureau; fraud investigation agencies) in order to seek justice. Second, victims only or first reported fraud to these organizations, and the organizations recommended or required them to file a police report first. This practice is more common among smaller sized consumer protection agencies (Holtfreter et al., 2014; Schoepfer & Piquero, 2009; usa.gov, 2021). This scenario also shares commonality with scenarios of crime being reported to the police by a third party in that a third party might have different concerns and utilize different information from the victims, and in the case of fraud reporting, relevant organizations may encourage or help victims to report an incident to the police due to the severity of the case or bureaucratic necessities (Gavin & Safer-Lichtenstein, 2018). Third, victims reported fraud to the police first, but they were not satisfied with the service and saw the need to report it to other organizations. Fourth, victims reported fraud to other organizations first, and they were unsatisfied with the help they received, so they decided to report it to the police as well. There is one additional scenario that's related to the characteristics of the victims and the fraud incidents: some fraud victims might just intrinsically more motivated to report the incidents to any possible agencies, including both the police and other relevant organizations; other fraud victims might be more motivated to employ both reporting methods based on the perceived seriousness of crime, which was not measured and controlled in this study (Gottfredson & Gottfredson, 1988; Greenberg & Ruback, 1992). This will be further discussed in the later section.

Comparing the three regression models that had different measurements of fraud reporting as outcome variables (Table 4, Table 5, and Table 6), the importance for fraud studies to categorize reporting methods and conduct analysis separately was emphasized. This study first examined the relationship between social support and whether victims had reported fraud at all regardless of the reporting agency. In this sample, social support did not appear to be influential to general fraud reporting. However, when the two reporting methods were examined separately, they were found to be affected by different types of social support. Consistent with the empirical results in previous studies, this finding highlights the role of practical considerations in fraud reporting (Reyns & Randa, 2017).

Several theories have discussed the motivations behind reporting or nonreporting behaviors and pointed out that victims utilized different help-seeking approaches based on a number of factors, including their practical needs and the possible outcomes of reporting (e.g., Gottfredson & Gottfredson theory of criminal justice decision, 1988; Black's general theory of law, 1976; Steffensmeier and colleagues' focal concerns theory, 1998) On the one hand, fraud victims may initially choose one reporting method over the other, because they have different goals. For example, victims who contact the Better Business Bureau are more likely to aim for settling disputes with known businesses that actually exist, while victims who report fraud to the police may need help to trace down the offenders or look for a phony organization. On the other hand, fraud victims may also evaluate the foreseeable outcomes regarding different types of reporting. Parallel to the victim help-seeking decision-making process in research of sexual victimization, fraud victims are also concerned about whether they have proof of

the incident and enough information to aid the police if they report it to the police (Fisher et al., 2003; Reyns & Randa, 2017). If victims cannot predict a positive outcome, they may view this type of reporting as unnecessary.

An additional aspect to consider is the motivation behind victim reporting behavior based on the seriousness of fraud. White-collar crime literature pointed out that one of the major challenges for fraud reporting was that fraud victims did not even know they were victims (Huff et al., 2010). The sample of this study comprised fraud victims who self-reported their victimization experiences in the survey, which means that they were well aware of the fraud incident. However, some victims claimed that they did not fall for the scam, some victims reported that they did fall for the scam but did not end up losing money, while others fell for it and also lost money. For those who were targeted by fraud but not victimized in the sense that not going through with what the offenders asked for, or those who were victimized but did not end up losing money, they might have not reported fraud to the police but to relevant organizations for future fraud prevention. When they report it to the police, it's less likely to be motivated by restitution or justice seeking, but more likely to make sure other people won't be scammed by the same type of fraud. But for those who have lost money, their reporting motivations can be a lot more directly related to their own victimization experiences in comparison to the goal of fraud prevention. When victims have various concerns regarding different reporting methods, different types of social support may be needed to encourage the corresponding method of reporting—as suggested by findings mentioned above.

In the broad context of fraud victimization research, three major implications emerged from these findings. First, previous studies on social support and crime reporting

have only considered a single dimension of social support; however, social support theorists have underlined that the different types of social support have their unique functions in different contexts. This study follows the theoretical framework and distinguishes the general concept of social support into perceived level of support, frequency of social activities participation, and the number of existing social relationships in order to understand the specific effects of different types of social support. Second, traditional victim help-seeking research has mainly focused on victim police reporting behavior. Only a few studies paid attention to fraud reporting, but they were unable to acknowledge different reporting methods that are unique to the needs of fraud victims and were prone to measure police reporting only or a general reporting behavior to either official or unofficial agencies. The current study fills this gap in the fraud reporting literature by investigating not only the general reporting behavior—whether victims report fraud to any institutions, but also the distinguished methods of reporting to the police and reporting to other organizations. Third, in the criminological literature, both the theoretical and empirical assessments of white-collar crimes (e.g., consumer fraud, healthcare fraud, corporate crime) have stayed marginal in comparison to those of traditional street crime (Shover, 1998). And in the victimization literature, the elderly population is often neglected (Reisig & Holtfreter, 2013). By examining the consumer fraud victimization experiences of the elderly population, this empirical study adds to both the white-collar crime literature and the fraud victimization literature.

Limitations and Future Research

There are several notable limitations to the present study that also shed light on the directions for future research. First, the mechanisms of how different types of social

support influence fraud reporting behaviors were not measured and tested. Theories have proposed two main mechanisms through which social support affects crime reporting: information giving and stress buffering. In the previous section, both mechanisms were adopted to interpret the discoveries from the statistical analysis; however, these interpretations surrounding the mechanisms are not empirically tested by the current study due to the restrictions in the data. A proper examination of social support mechanisms requires additional measurements beyond the scope of the present data. To test the information giving mechanism, future research can capture some forms of enacted social support—the actual tangible support that was received by the victims, including advice, actions, affections, and other expressions (Barrera, 1986). For example, in order to understand whether social embeddedness encourages victims to report fraud to organizations other than the police through the information giving mechanism, questions regarding the kinds of information and advice received by the victims and the identity of the information provider should be asked. As for the stress buffering questions, future studies may include more detailed questions on victims' appraisals of the crime, their coping strategies, and their emotional responses and views to both the crime and the idea of reporting. Although the goal of this study is to explore the associations between social support and fraud reporting rather than empirically testing various mechanisms, it is still critical for future research to collect additional data and carefully examine these mechanisms, especially because the findings may provide valuable insights on creating more effective policies and programs to help the elderly fraud victims.

The second limitation is the inability to take temporal ordering into account. The missing information on temporal orders affect the analysis and findings in several ways.

First, fraud victimization and social isolation can influence one another, but without indicators of time—which one happens first, and what comes next—it is impossible to disentangle the nexus. Previous victimization literature suggests that while social isolation can increase the likelihood of some types of victimization, the victimization experience itself may also lead to one’s social isolation (Barchia & Bussey, 2010; Spano & Nagy, 2005). Second, perceived support was measured by the respondents’ answers to a set of subjective questions, and social embeddedness was measured with objective questions, but neither sets of questions were given a specific time frame, indicating that the respondents might have answered the questions based on their current life status. Even though the data only captured fraud incidents that happened two years before the interview, two years could still be a significant amount of time during which one’s perceptions of social support and level of social embeddedness could change significantly, especially for the elderly population. Thus, the link between social support and reporting is harder to establish. Third, the concurrent relationship between the two reporting methods cannot be fully explained or tested without the orders of reporting. While several scenarios were speculated based on the operationalization of the reporting agencies, the current study is insufficient to provide definitive reasons on why there is a positive relationship rather than a competitive one.

Temporal order is critical in understanding any causal effect one reporting method might have on the other, but the data did not contain this information. Therefore, future studies should recognize the necessity of placing time marks of specific measures as part of the data collection and research analysis. Specifically, researchers need to retain temporal orders of victimization and social isolation, victimization and evaluations of

social support, and the order of reporting if multiple reporting methods have been employed.

Third, the limited types of fraud reporting methods analyzed in this study can be further improved. The dataset used in this study conducted interviews in 2011, which was 10 years ago. While the reporting methods for traditional crimes have not changed much in these 10 years, fraud reporting, especially fraud reporting to organizations other than the police, have had some new additions. For example, the Consumer Financial Protection Bureau, a U.S. government agency developed for consumer protection on financial products and services, was founded in July 2011, which was beyond the timeframe of the data in this study (Consumer Financial Protection Bureau, 2021). Additionally, in the past decade, an increasing number of government and non-government organizations have started to accept complaints online. The technological changes on reporting might be more challenging for the elderly fraud victims and affect their willingness and ability to utilize certain reporting methods.

From a theoretical perspective, the research of the help-seeking behaviors of fraud victims is in need of an updated version of victim help-seeking theory with a stronger emphasis on the practical needs and constraints of fraud victims. Traditional victim help-seeking theories have proposed multiple ways to categorize help-seeking methods, from informal and formal help-seeking to private solutions and reporting crimes to authorities (Reyns & Englebrecht, 2014). These help-seeking methods are still applicable for fraud victims, but the uniqueness of fraud victim help-seeking is in its practical considerations—for some, catching the offender might be viewed as sufficient justice, but

for most consumer fraud victims, reducing financial harm and getting restitution are their primary needs (Copes et al, 2001; Galvin et al., 2018; Schoepfer & Piquero, 2009).

Fourth, victims of different types of consumer fraud may also be more restrained to certain reporting methods. For instance, victims of phony charity or church fraud may not choose to report fraud to the Better Business Bureau as the organization is intended to regulate unethical businesses. Unfortunately, this study was not able to analyze reporting methods according to fraud types because of constraints brought by the small sample size, but the findings suggest that it is important to examine predictors of fraud reporting by the types of reporting methods. A recommendation for future research on fraud reporting is to shift the theoretical focus of help-seeking from the nature of reporting agencies to the needs and motivations of the fraud victims. Possible ways to categorize reporting methods can be based on the types of fraud victimization experienced by the victims, such as existing account fraud, new account fraud, shopping fraud, mortgage fraud, etc., or according to the goals of reporting, such as damage control, restitution seeking, investigation, future fraud prevention, and so on.

Another future step is to use a different type of consumer fraud classification. The data adopted by the current study categorized consumer fraud by the type of goods or services the victims were promised to get, but an additional way to categorize fraud is by the type of payment methods, such as cash, personal check, cashier's check, credit card, debit card, mobile payments, and wire transfers. For example, victims of credit card fraud may be more likely to contact a credit union and their bank for damage control before reporting it to the police, if at all. Victims who have paid cash to the scammers do not need to get the bank's anti-fraud department involved; rather, the most efficient way to

get the money back would be going to the police and opening an investigation. And victims of mobile payments may contact the mobile app business's anti-fraud department to terminate the payment. Including the payment methods in the data can help to account for practice motivations and needs of the victims when choosing their reporting methods.

Fifth, the limited measurements of victim and incident-specific characteristics in the current data should be improved in future research. While many empirical studies of help-seeking behavior emphasized the role of crime seriousness in the decision-making process of crime victims, this study was not able to include this factor in the analytical model, because there was lots of missing data on how much money the victim has lost due to the fraud incident. In addition, the survey did not capture aspects of crime seriousness other than financial loss. Future studies should provide more comprehensive measurements that not only include monetary loss but also mental health impact, emotional trauma, collateral loss such as missing work to deal with the fraud and legal or investigative service fee. Another interesting characteristic to measure would be how the victims discovered they've been targeted by fraud. Some victims might have figured it out on their own, while others might be unaware of it until they were contacted by the bank or other organizations. There might be critical differences in their motivations of reporting depending on their fraud victimization discovery process, because if the victim was notified by the police or organizations, there might be less pressure or motivation for the victim to initiate reporting behavior. As for victim characteristics, the sample of the current study was only limited to the elderly victims 60 years of age or older. Although this age limitation serves the main interest of this study, it lacks the ability to understand how older ages might affect the role of social support on reporting behavior or reporting

behavior itself differently from the way younger ages do. Since no significant effect was found between age and reporting behavior in this study among the elderly victims, more research could be done by extending the sample to all ages, thus capable of examining whether age is an important correlate of consumer fraud reporting.

In addition to the suggestions for future academic research, this study also sheds light on policy making and program planning in relation to consumer fraud victimization. If law enforcement agencies are aiming to increase consumer fraud reporting, the common fraud educational programs for the elderly population and fraud reporting posters in community centers might not be enough. The findings of this study indicate that for police reporting behavior, perceived level of support is especially impactful, which means that even if victims know what fraud is and to whom they should report it, if they don't perceive themselves as being supported, loved, socially connected, and cared for, they most likely will not utilize that information. Therefore, law enforcement agencies can distribute some resources from educational programs and work with nonprofit or other government organizations to implement programs that reduce elderly people's social isolation and build their self-esteem. For example, the Arizona Area Agency on Aging facilitates programs such as home-delivered meals, shopping services, and older adults counseling and support groups. Moreover, police should seek help and collaborations with organizations that consumer fraud victims often report incidents to. The 2010 National Public Survey on White Collar Crime suggested that the majority of white-collar crime victims made a complaint to an organization without criminal authority to receive "assistance in redress" (Huff et al., 2010). The descriptive analysis of this study showed support of this observation. Therefore, in order for criminal justice

agencies to more accurately understand the scope of consumer fraud victimization, organizations may also develop policies that encourage police reporting.

There is also a need to increase victims to report to organizations, as these agencies could usually provide practical assistance or direct victims to useful resources and proper channels. The current study suggests that the key to increase this type of reporting behavior is through helping the elderly to stay connected in society and with their significant others and family members. Family members, especially the caregivers, are important sources of support and most likely advice givers. Organizations should educate family members of the elderly on fraud prevention and fraud reporting. It is also critical to ensure that the caregivers are supported by various programs and family members. On a societal level, policymakers should consider developing more facilities that are elderly friendly, such as pickleball court and community gardens, or modifying existing public facilities, such as using non-slip floor tiles in restaurants and shopping malls and giving the options to use paper menus as tablets became the trend. Although the elderly person can decide how connected he or she wants to be in society, it is the society's responsibility to create environments that at least will not impede the social life of the elderly.

In conclusion, the present study contributes to the fraud victimization literature and white-collar crime research and yields valuable insights for future research. The role of perceived level of support is critical in encouraging the elderly victim's decision to report fraud to the police, and social embeddedness has a positive impact on the decision of reporting fraud to other authorities. Social support is a complex concept that needs to be understood and examined in multiple dimensions. Similarly, fraud reporting is not

limited to the involvement of the criminal justice system; instead, numerous organizations have been established to address the practical concerns of fraud victims. The core of help-seeking research should consider what the victims need and how to make sure they can get the help they need. The findings of this study speak to the specific group of elderly fraud victims, who are more likely to seek help if they perceive themselves as loved and cared for and when they are connected in the society. Besides making fraud reporting more accessible for the elderly victims, policymakers and program developers could also provide mental health services, group activities, and fraud awareness programs that target this population. Moreover, researchers could pay more attention to the marginalized types of crime victimization. A large amount of theory-driven data updated with the fast-changing world of fraudulent crimes is also needed in order to better understand the empirical relationships surrounding fraud victimization.

Appendices

Table 1. Types of Consumer Fraud Incidents

Types of Consumer Fraud (N=4,124)	Percentage (%)
Shopping/Purchasing Fraud <i>(Repairs, products, subscription to magazines)</i>	24.61
Financial Fraud <i>(Improving financial situation, business opportunity, financial information)</i>	29.61
Charity Scam <i>(Donations to charity or religious organization)</i>	14.86
Prize Notification Fraud <i>(Claiming a prize-sweepstakes/vacation)</i>	18.65
Mortgage Rescue Fraud <i>(Reducing mortgage payment)</i>	4.27
Identity Theft <i>(Stealing personal information for credit card/loan)</i>	8.00

Table 2. Descriptive Statistics of Dependent, Independent, and Control Variables

	Mean (SD)	Min.	Max.
Dependent Variable			
<i>Reporting (n=2,787)</i>	.184 (.387)	0	1
<i>Reporting to the police (n=2,808)</i>	.093 (.291)	0	1
<i>Reporting to other organizations (n=2,783)</i>	.131 (.337)	0	1
Independent Variables			
<i>Perceived Support ($\alpha = 0.66$)</i>	15.677 (1.806)	6	24
<i>Social connectedness ($\alpha = 0.52$)</i>	5.972 (1.626)	3	12
<i>Interpersonal Support ($\alpha = 0.72$)</i>	9.724 (1.484)	3	12
<i>Social Activities ($\alpha = 0.52$)</i>	4.84 (1.23)	0	6
<i>Activities away from home</i>	.814 (.389)	0	1
<i>Social get-togethers</i>	.924 (.265)	0	1
<i>Street-side shopping</i>	.965 (.185)	0	1
<i>Religious Services</i>	.631 (.482)	0	1
<i>Healthy Entertainment</i>	.816 (.387)	0	1
<i>Leisure Sports</i>	.681 (.466)	0	1
<i>Social Relationships ($\alpha = 0.50$)</i>	2.470 (1.086)	0	4
<i>Married</i>	.607 (.489)	0	1
<i>Children</i>	.892 (.311)	0	1
<i>Living with Someone</i>	.699 (.459)	0	1
<i>Working</i>	.265 (.441)	0	1
Control Variables			
<i>Age</i>	71.555 (7.746)	60	97
<i>White</i>	.887 (.317)	0	1
<i>Male</i>	.443 (.495)	0	1
<i>Education</i>	.728 (.445)	0	1
<i>Seriousness of Fraud</i>	.127 (.333)	0	1

Table 3. Bivariate Correlations

	Y2	Y3	X1	X2	X3
Y1 Reporting	.68*	.83*	.02	.02	.01
Y2 Reporting to the Police	----	.30*	.05*	-.01	-.01
Y3 Reporting to Other Organizations	.30*	----	.03	.02	.02
X1 Perceived Support	.05*	.03	----	-.11*	-.11*
X2 Social Activities	-.01	.02	-.01*	----	.07*
X3 Social Relationships	-.01	.02	-.11*	.07*	----
X4 Age	.03	.01	.07*	-.09*	-.28*
X5 White	-.03	-.01	-.08*	.09*	.03
X6 Male	-.05*	-.03	-.05*	-.04*	.14*
X7 College Education	-.04	.04*	-.08*	.17*	.04*
X8 Seriousness	.09*	.10*	.06*	-.02	-.00

* $p < .05$ *(Continued)*

	X4	X5	X6	X7	X8
Y1 Reporting	.02	-.01	-.05*	-.00	.10*
Y2 Reporting to the Police	.03	-.03	-.05*	-.04	.09*
Y3 Reporting to Other Organizations	.01	-.01	-.03	.04*	.10*
X1 Perceived Support	.07*	-.08*	-.05*	-.08*	.06*
X2 Social Activities	-.09*	.09*	-.04*	.17*	-.02
X3 Social Relationships	-.28*	.03	.14*	.04*	-.00
X4 Age	----	-.06*	-.05*	-.13*	-.08*
X5 White	-.06*	----	.01	-.10*	-.04*
X6 Male	-.05*	.01	----	.09*	-.08*
X7 College Education	-.13*	-.10*	.09*	----	-.07*
X8 Seriousness	-.08*	-.04*	-.08*	-.07*	---

* $p < .05$

Table 4. Logistic Regressions of General Fraud Reporting by Social Support

Variables	Model 1 (N = 2,522)		Model 2 (N = 2,381)		Model 3 (N = 2,381)	
	Coef.	(SE)	Coef.	(SE)	Coef.	(SE)
Perceived Support	.035	.029	.016	.027		
Social connectedness					.005	.034
Interpersonal Support					.040	.036
Social Activities	.043	.046	.052	.048		
Outside Activities					.064	.153
Social get-togethers					-.027	.227
Street-side shopping					.552	.336
Religious Services					.147	.118
Healthy Entertainment					-.064	.149
Leisure Sports					-.110	.121
Social Relationships	.04	.047	.076	.052		
Married					.477**	.179
Children					.206	.190
Living with Someone					-.338	.186
Working					-.129	.129
Age			.007	.007	.002	.008
White			-.073	.164	-.043	.165
Male			-.287**	.111	-.291**	.113
College Education			.010	.125	.033	.128
Seriousness			.660**	.143	.677**	.144
Constant	-2.37**	.553	-2.59**	.773	-2.75**	.847

* $p < .05$, two tailed. ** $p < .01$, two tailed.

Table 5. Logistic Regressions of Reporting Fraud to the Police by Social Support

Variables	Model 1 (N = 2,507)		Model 2 (N = 2,366)		Model 3 (N = 2,366)	
	Coef.	(SE)	Coef.	(SE)	Coef.	(SE)
Perceived Support	.083*	.035	.051	.035		
Social connectedness					.083*	.045
Interpersonal Support					.019	.050
Social Activities	.017	.065	.025	.066		
Outside Activities					.361	.230
Social get-togethers					.248	.375
Street-side shopping					.389	.489
Religious Services					.424*	.175
Healthy Entertainment					-.545**	.189
Leisure Sports					-.417*	.170
Social Relationships	-.078	.065	-.062	.071		
Married					.404	.285
Children					-.047	.259
Living with Someone					-.539	.291
Working					-.222	.179
Reporting Fraud to Other Organizations	2.085**	1.49	2.094**	.155	2.10**	.157
Age			.002	.009	-.005	.010
White			-.309	.207	-.200	.212
Male			-.165	.155	-.168	.156
College Education			-.211	.171	-.071	.179
Seriousness			.447*	.120	.469*	.202
Constant	-4.01**	.695	-3.25**	.976	-3.16**	1.057

* $p < .05$, two tailed. ** $p < .01$, two tailed.

Table 6. Logistic Regressions of Reporting Fraud to Other Organizations by Social Support

Variables	Model 1 (N = 2,507)		Model 2 (N = 2,366)		Model 3 (N = 2,366)	
	Coef.	(SE)	Coef.	(SE)	Coef.	(SE)
Perceived Support	.034	.030	.022	.032		
Social connectedness					.015	.043
Interpersonal Support					.020	.047
Social Activities	.120*	.060	.132*	.064		
Outside Activities					.070	.203
Social get-togethers					-.028	.305
Street-side shopping					.625	.468
Religious Services					-.055	.144
Healthy Entertainment					.263	.195
Leisure Sports					.235	.156
Social Relationships	.083	.057	.095	.062		
Married					.440*	.209
Children					.253	.231
Living with Someone					-.246	.221
Working					.023	.158
Reporting Fraud to the Police	2.084**	.149	2.097**	.155	2.105**	.158
Age			.007	.009	.006	.010
White			.057	.205	.032	.207
Male			-.101	.133	-.134	.137
College Education			.117	.156	.102	.160
Seriousness			.582**	.176	.579**	.178
Constant	-3.58**	.671	-4.18**	.931	-4.39**	1.087

* $p < .05$, two tailed. ** $p < .01$, two tailed.

Table 7: Sensitivity Test: Reporting Fraud to the Police w/o Organization Reporting Variable

Variables	Model 1 (N = 2,541)		Model 2 (N = 2,400)		Model 3 (N = 2,400)	
	Coef.	(SE)	Coef.	(SE)	Coef.	(SE)
Perceived Support	.099*	.040	.065	.034		
Social connectedness					.091*	.042
Interpersonal Support					.051	.046
Social Activities	.041	.050	.056	.067		
Outside Activities					.327	.197
Social get-togethers					.261	.319
Street-side shopping					.595	.438
Religious Services					.374*	.159
Healthy Entertainment					-.457*	.177
Leisure Sports					-.310*	.156
Social Relationships	-.008	.062	.022	.069		
Married					.647**	.247
Children					.879	.249
Living with Someone					-.628*	.252
Working					-.164	.166
Age			.006	.009	-.002	.010
White			-.320	.188	-.208	.192
Male			-.274	.147	-.285	.148
College Education			-.230	.154	-.143	.149
Seriousness			.631**	.175	.633*	.179
Constant	-3.98**	.784	-3.49**	.965	-3.63**	1.038

* $p < .05$, two tailed. ** $p < .01$, two tailed.

Table 8: Sensitivity Test: Reporting Fraud to the Organization w/o Police Reporting Variable

Variables	Model 1 (N = 2,518)		Model 2 (N = 2,376)		Model 3 (N = 2,376)	
	Coef.	(SE)	Coef.	(SE)	Coef.	(SE)
Perceived Support	.063	.035	.045	.032		
Social connectedness					.048	.040
Interpersonal Support					.038	.042
Social Activities	.123*	.056	.136*	.059		
Outside Activities					.180	.183
Social get-togethers					-.000	.272
Street-side shopping					.738	.430
Religious Services					.040	.34
Healthy Entertainment					.010	.182
Leisure Sports					.126	.146
Social Relationships	.072	.055	.095	.062		
Married					.582*	.200
Children					.243	.224
Living with Someone					-.406	.208
Working					-.027	.146
Age			.007	.009	.004	.009
White			-.080	.187	-.061	.189
Male			-.172	.128	-.204	.131
College Education			.073	.157	.082	.148
Seriousness			.725**	.157	.721**	.159
Constant	-3.67**	.671	-4.03**	.918	-4.23**	1.034

* $p < .05$, two tailed. ** $p < .01$, two tailed.

References

- Anderson, Keith B. (2013). *Consumer Fraud in the United States, 2011: The Third FTC Survey*. Washington, DC: Federal Trade Commission.
- Area Agency On Aging | Region One | Maricopa County, Arizona. (n.d.). Area Agency. Retrieved September 25, 2021, from <https://www.aaaphx.org/>.
- Barchia, K., & Bussey, K. (2010). The psychological impact of peer victimization: Exploring social-cognitive mediators of depression. *Journal of Adolescence*, 33(5), 615–623.
- Barrera, M. (1986). Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology*, 14(4), 413–445.
- Black, D. (1976). *The Behavior of Law*. Orlando, FL: Academic Press.
- Blumberg, S. J., & Luke, J. V. (2007). Coverage Bias in Traditional Telephone Surveys of Low-Income and Young Adults. *Public Opinion Quarterly*, 71(5), 734–749.
- Boza, C., & Perry, K. N. (2014). Gender-Related Victimization, Perceived Social Support, and Predictors of Depression Among Transgender Australians. *International Journal of Transgenderism*, 15(1), 35–52.
- Burnes, D., Acierno, R., & Hernandez-Tejada, M. (2019). Help-Seeking Among Victims of Elder Abuse: Findings from the National Elder Mistreatment Study. *The Journals of Gerontology: Series B*, 74(5), 891–896.
- Bosick, S., Rennison, C., Gover, A., & Dodge, M. (2012). Reporting violence to the police: Predictors through the life course. *Journal of Criminal Justice*, 40, 441–451.
- Bowker, L. H. (1988). The effect of methodology of subjective estimates of the

- differential effectiveness of personal strategies and help sources used by battered women. In G. T. Hotaling, D. Finkelhor, J. T. Kirkpatrick, & M. A. Straus (Eds.), *Coping with family violence: Research and policy perspectives*. Newbury Park, CA: Sage.
- Cassel, J. (1976). The contribution of the social environment to host-resistance. *American Journal of Epidemiology*, 104, 107–122.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38(5), 300–314.
- Cochran, J. C. (2014). Breaches in the Wall: Imprisonment, Social Support, and Recidivism. *Journal of Research in Crime and Delinquency*, 51(2), 200–229.
- Cohen, S., & Hoberman, H. M. (1983). Positive Events and Social Supports as Buffers of Life Change Stress¹. *Journal of Applied Social Psychology*, 13(2), 99–125.
- Cohen, S. (1992). Stress, social support, and disorder. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 109 –124). New York: Hemisphere.
- Cohen, S., Underwood, L.G., & Gottlieb, B.H. (2000) *Social Support Measurement and Intervention: A Guide for Health and Social Scientists*. Oxford University Press.
- Copes, H., Kerley, K. R., Mason, K. A., & Wyk, J. V. (2001). Reporting behavior of fraud victims and black's theory of law: An empirical assessment. *Justice Quarterly*, 18(2), 343–363.
- Consumer Financial Protection Bureau. (n.d.). Consumer Financial Protection Bureau. Retrieved September 6, 2021.

- Cullen, F. T. (1994). Social Support as an Organizing Concept for Criminology: Presidential Address to the Academy of Criminal Justice Sciences Presidential Address. *Justice Quarterly*, 11(4), 527–560.
- Deevy, M., Lucich, S., Beals, M. (2012). *Scams, schemes and swindles: A review of consumer financial fraud research*. Financial Fraud Research Center, Stanford Center on Longevity.
- Dipietro, S. M., & McGloin, J. M. (2012). Differential Susceptibility? Immigrant Youth and Peer Influence. *Criminology*, 50(3), 711–742.
- Fanslow, J. L., & Robinson, E. M. (2010). Help-Seeking Behaviors and Reasons for Help Seeking Reported by a Representative Sample of Women Victims of Intimate Partner Violence in New Zealand. *Journal of Interpersonal Violence*, 25(5), 929–951.
- Fisher, B. S., Daigle, L. E., Cullen, F. T., & Turner, M. G. (2003). Reporting sexual victimization to the police and others: Results from a national-level study of college women. *Criminal Justice and Behavior*, 30, 6-38
- Galvin, M. A., & Safer-Lichtenstein, A. (2018). Same Question, Different Answers: Theorizing Victim and Third Party Decisions to Report Crime to the Police. *Justice Quarterly*, 35(6), 1073–1104.
- Galvin, M. A., Loughran, T. A., Simpson, S. S., & Cohen, M. A. (2018). Victim Compensation Policy and White-Collar Crime: Public Preferences in a National Willingness-to-Pay Survey Victim Compensation and White-Collar Crime. *Criminology and Public Policy*, 17(3), 553–594.

- Gottfredson, M. R., & Gottfredson, D. M. (1988). *Decision making in criminal justice: Toward the rational exercise of discretion* (2nd Edition). New York: Plenum.
- Gottfredson, M. R., & Hindelang, M. J. (1979). A Study of the Behavior of Law. *American Sociological Review*, 44(1), 3–18.
- Greenberg, Martin S., & Ruback, R. Barry. (1992) *After the Crime Victim Decision Making*. Springer.
- Have, M., Graaf, R., van Weeghel, J., & Van Dorsselaer, S. (2013). The association between common mental disorders and violence: To what extent is it influenced by prior victimization, negative life events and low levels of social support? *Psychological Medicine*, 44, 1–14.
- Holtfreter, K. (2008). The effects of legal and extra-legal characteristics on organizational victim decision-making. *Crime, Law & Social Change*, 50(4–5), 307–330.
- Holtfreter, K., Reisig, M. D., Mears, D. P., & Wolfe, S. E. (2014). *Financial Exploitation of the Elderly in a Consumer Context*. NCJRS.
- Holtfreter, K., Reisig, M. D., & Turanovic, J. J. (2016). Self-rated poor health and loneliness in late adulthood: Testing the moderating role of familial ties. *Advances in Life Course Research*, 27, 61–68.
- Holtfreter, K., Reisig, M. D., Leeper Piquero, N., & Piquero, A. R. (2010). Low Self-Control and Fraud: Offending, Victimization, and Their Overlap. *Criminal Justice and Behavior*, 37(2), 188–203.
- Huff, R., Desilets, C., & Kane, J. (2010) The 2010 National Public Survey on White Collar Crime. *National White Collar Crime Center*.

- Jacobsen, W. C. (2019). The Intergenerational Stability of Punishment: Paternal Incarceration and Suspension or Expulsion in Elementary School. *Journal of Research in Crime and Delinquency*, 56(5), 651–693.
- Johnson, B. R., Lee, M. T., Pagano, M. E., & Post, S. G. (2016). Positive Criminology and Rethinking the Response to Adolescent Addiction: Evidence on the Role of Social Support, Religiosity, and Service to Others. *International Journal of Criminology and Sociology*, 5, 172–181.
- Kerley, K. R., & Copes, H. (2002). Personal fraud victims and their official responses to victimization. *Journal of Police and Criminal Psychology*, 17(1), 19–35.
- Kirchheimer, S. (2011). Scams trap older adults. AARP Bulletin.
- Lakey, B., & Cohen, S. (2000). *Social Support Theory and Measurement* (pp. 29–52).
- Liang, B., Goodman, L., Tummala-Narra, P., & Weintraub, S. (2005). A Theoretical Framework for Understanding Help-Seeking Processes Among Survivors of Intimate Partner Violence. *American Journal of Community Psychology*, 36(1–2), 71–84.
- Leone, J. M., Johnson, M. P., & Cohan, C. L. (2007). Victim Help Seeking: Differences Between Intimate Terrorism and Situational Couple Violence. *Family Relations*, 56(5), 427–439.
- Lin, N. (1986). Conceptualizing Social Support. In *Social Support, Life Events, and Depression*. Orlando: Academic Press.
- Machado, A., Santos, A., Graham-Kevan, N., & Matos, M. (2017). Exploring Help Seeking Experiences of Male Victims of Female Perpetrators of IPV. *Journal of Family Violence*, 32(5), 513–523.

- Martinez, D. J., & Abrams, L. S. (2013). Informal Social Support Among Returning Young Offenders: A Metasynthesis of the Literature. *International Journal of Offender Therapy and Comparative Criminology*, 57(2), 169–190.
- Mason, K. A., & Benson, M. L. (1996). The Effect of Social Support on Fraud Victims' Reporting Behavior: A Research Note Research Note. *Justice Quarterly*, 13(3), 511–524.
- Mears, D. P., Reisig, M. D., Scaggs, S., & Holtfreter, K. (2016). Efforts to Reduce Consumer Fraud Victimization Among the Elderly: The Effect of Information Access on Program Awareness and Contact. *Crime & Delinquency*, 62(9), 1235–1259.
- New Data Shows FTC Received 2.2 Million Fraud Reports from Consumers in 2020.* (2021, February 4). Federal Trade Commission.
- Nguyen, C. M., Barrash, J., Koenigs, A. L., Bechara, A., Tranel, D., & Denburg, N. L. (2013). Decision-making deficits in normal elderly persons associated with executive personality disturbances. *International Psychogeriatrics*, 25(11), 1811–1819.
- Overstreet, N. M., & Quinn, D. M. (2013). The Intimate Partner Violence Stigmatization Model and Barriers to Help-Seeking. *Basic and Applied Social Psychology*, 35(1), 109–122.
- Pouwelse, M., Bolman, C., Lodewijx, H., & Spaa, M. (2011). Gender differences and social support: Mediators or moderators between peer victimization and depressive feelings? *Psychology in the Schools*, 48(8), 800–814.
- Reisig, M. D., & Holtfreter, K. (2013). Shopping fraud victimization among the

- elderly. *Journal of Financial Crime*, 20(3), 324–337.
- Reyns, B. W., & Randa, R. (2017). Victim Reporting Behaviors Following Identity Theft Victimization: Results from the National Crime Victimization Survey. *Crime & Delinquency*, 63(7), 814–838.
- Reyns, B. W., & Englebrecht, C. M. (2014). Informal and Formal Help-Seeking Decisions of Stalking Victims in the United States. *Criminal Justice and Behavior*, 41(10), 1178–1194.
- Reyns, B. W., & Englebrecht, C. M. (2010). The stalking victim's decision to contact the police: A test of Gottfredson and Gottfredson's theory of criminal justice decision making. *Journal of Criminal Justice*, 38(5), 998–1005.
- Rigby, K. (2000). Effects of peer victimization in schools and perceived social support on adolescent well-being. *Journal of Adolescence*, 23(1), 57–68.
- Ross, M., Grossmann, I., & Schryer, E. (2014). Contrary to Psychological and Popular Opinion, There Is No Compelling Evidence That Older Adults Are Disproportionately Victimized by Consumer Fraud. *Perspectives on Psychological Science*, 9(4), 427–442.
- Scarpa, A., Haden, S. C., & Hurley, J. (2006). Community Violence Victimization and Symptoms of Posttraumatic Stress Disorder: The Moderating Effects of Coping and Social Support. *Journal of Interpersonal Violence*, 21(4), 446–469.
- Sellin T, Wolfgang M. (1964). *The Measurement of Delinquency*. New York: Wiley
- Schoepfer, A., & Piquero, N. L. (2009). Studying the correlates of fraud victimization and reporting. *Journal of Criminal Justice*, 37(2), 209–215.

- Shao, J., Zhang, Q., Ren, Y., Li, X., & Lin, T. (2019). Why are older adults' victims of fraud? Current knowledge and prospects regarding older adults' vulnerability to fraud. *Journal of Elder Abuse & Neglect*, 31, 1–19.
- Schichor, D., Doocy, J., Geis, G. (1996). Anger, disappointment and disgust: Reactions of victims of a telephone investment scam. In. Sumner, C., Israel, M., Oconnell, M., Sarre, R. (Eds.), *International victimology: Selected papers from the 8th international symposium*. Canberra: Australian Institute of Criminology.
- Shichor, D., Sechrest, D., & Doocy, J. (2000). Victims of investment fraud. In H. Pontell & D. Shichor (Eds.), *Contemporary issues in crime and criminal justice: Essays in honor of Gilbert Geis (pp.87–96)*. Upper Saddle River, NJ: Prentice Hall.
- Shover, Neal. (1998). White-Collar Crime. In *The Handbook of Crime and Punishment*. Oxford University Press.
- SKOGAN, W. G. (1984). Reporting Crimes to the Police: The Status of World Research. *Journal of Research in Crime and Delinquency*, 21(2), 113–137.
- Streeter, C. L., & Franklin, C. (1992). Conceptualization of Social Support. *Research on Social Work Practice*, 2(1), 81-98.
- Steffensmeier, D., Ulmer, J., & Kramer, J. (1998). The interaction of race, gender, and age in criminal sentencing: The punishment cost of being young, black, and male. *Criminology*, 36, 763-796.
- Spano, R., & Nagy, S. (2005). Social Guardianship and Social Isolation: An Application and Extension of Lifestyle/Routine Activities Theory to Rural Adolescents*. *Rural Sociology*, 70(3), 414–437.

- Tarling, R., & Morris, K. (2010). Reporting Crime to the Police. *The British Journal of Criminology*, 50(3), 474–490.
- Titus, R. M., Heinzelman, F., & Boyle, J. M. (1995). Victimization of persons by fraud. *Crime and Delinquency*, 41, 54–72.
- Titus, Richard. (2001). “Personal fraud and its victims”. In *Crimes of Privilege: Readings in White-Collar Crime*. Neal Shover and John Paul Wright. Oxford, UK: Oxford University Press.
- Tonry, M. H. (2000). *The Handbook of Crime & Punishment*. Oxford University Press.
- Turner, H. A., Shattuck, A., Finkelhor, D., & Hamby, S. (2017). Effects of Poly-Victimization on Adolescent Social Support, Self-Concept, and Psychological Distress. *Journal of Interpersonal Violence*, 32(5), 755–780.
- Van Wilsem, J. (2013). ‘Bought it, but Never Got it’ Assessing Risk Factors for Online Consumer Fraud Victimization. *European Sociological Review*, 29(2), 168-178.
- Van Wyk, J., & MASON, K. A. (2001). Investigating Vulnerability and Reporting Behavior for Consumer Fraud Victimization: Opportunity as a Social Aspect of Age. *Journal of Contemporary Criminal Justice*, 17(4), 328–345.
- Xie, M., & Baumer, E. P. (2019). Crime Victims’ Decisions to Call the Police: Past Research and New Directions. *Annual Review of Criminology*, 2, 217–240.
- Xie, M., & Lauritsen, J. (2012). Racial Context and Crime Reporting: A Test of Black’s Stratification Hypothesis. *Journal of Quantitative Criminology*, 28, 265–293.

Zimet, G., Dahlem, N., Zimet, S., & Farley, G. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment - J PERSONAL ASSESS*, 52, 30–41.