



# SCAMS, SCHEMES & SWINDLES

A REVIEW OF CONSUMER FINANCIAL FRAUD RESEARCH

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[fraudresearchcenter.org](http://fraudresearchcenter.org)



FINANCIAL FRAUD  
RESEARCH CENTER



“To the extent that people reach old age mentally sharp, physically fit, and financially secure, the problems of individual and societal aging fall away.”

— Laura L. Carstensen  
Founding Director, Stanford Center on Longevity

# LETTER FROM THE DIRECTOR

Dear Colleagues,

Launched in August 2011, the Financial Fraud Research Center (FFRC) is a new partnership between the Stanford Center on Longevity and the FINRA Investor Education Foundation. This initiative grew out of a convening at the Stanford Center on Longevity of an expert group of academics, regulators, practitioners, and policy-makers gathered to discuss the devastating impact of financial fraud. From this discussion, supported by AARP, arose a renewed understanding of the broad impact of financial fraud, and acknowledgement that the field could benefit from greater collaboration.

The FFRC identified three initiatives necessary to successfully advance the fight against financial fraud:

- Consolidating research and information in accessible language.
- Connecting research to practice via events, publications, and other engagement.
- Catalyzing further research.

This initial survey document consolidates academic and private research on consumer financial fraud, outlines conclusions, and highlights misperceptions and areas in need of further study in order to assist those studying and working in this field.

The goal of this paper is to provide interconnectedness and informed foundations, clear research directions and practical perspectives, as well as to communicate a broad and comprehensive understanding of consumer financial fraud research to date.

We encourage you to share your thoughts and responses with us directly, and to explore additional online, interdisciplinary resources at [FraudResearchCenter.org](http://FraudResearchCenter.org).

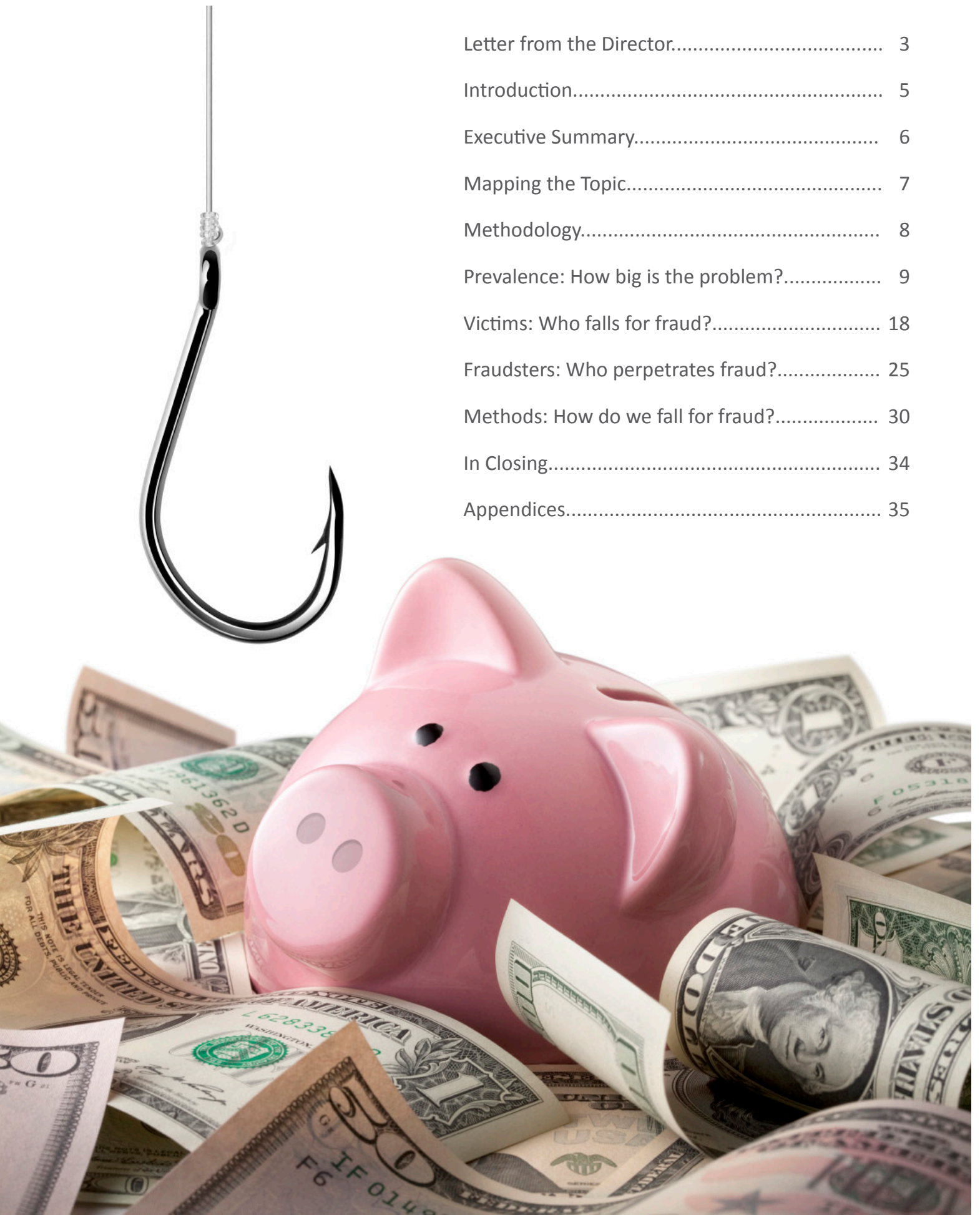


Martha Deevy  
Director, Financial Fraud Research Center



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# INTRODUCTION

Financial fraud is a major problem for individuals and society, yet advancing our understanding of the problem is hampered by a number of issues.

**Common assumptions about financial fraud are often not supported by research:**

Assumptions about fraud solidify through repetition, though they may or may not be supported by empirical research. Without careful study and clear communication of research findings, we misunderstand the scope of the problem and who is involved. Appreciating the distinction between what we know, and what we think we know, is necessary in order to effectively allocate research resources toward the truly unanswered questions.

**Research is isolated from practice:**

Valuable research is not translated for use by practitioners. As such, important findings remain dormant, and misunderstandings flourish.

**“Financial fraud” is poorly defined:**

Fraud against organizations is distinct from fraud against individuals, both in its methods and in its players. Much of fraud research has focused on fraud against governments and organizations, and a lack of a clear definition has allowed consumer fraud to remain relatively overshadowed and overlooked.

**Research that can be applied to fraud is distributed across many fields:**

Relevant research is conducted in different disciplines and, while this promotes a variety of perspectives, findings often fail to transmit from one field to another. Thus, the work of one discipline is unable to advance the understanding of another, stymieing the field as a whole.

**To address these issues and aid the fight against consumer financial fraud, the Financial Fraud Research Center:**

- Distinguishes consumer financial fraud as a discrete domain.
- Consolidates research on consumer financial fraud across disciplines.
- Highlights misunderstandings.
- Outlines research conclusions to depict what we know and what we don't know.
- Identifies areas that show promise for future study.

**Our work focuses on the major questions about fraud:**

How big is the problem? (Prevalence)  
Who falls for fraud? (Victims)  
Who perpetrates fraud? (Fraudsters)  
How do we fall for fraud? (Methods)

Key points can be found at the opening of each section, with possible next steps and research questions at each closing.

**We hope that this paper will provide an outline of the world of consumer financial fraud research, a picture of what we know, and a direction for where we might go next.**

# EXECUTIVE SUMMARY

By reviewing research on consumer financial fraud since 1990, this paper seeks to outline what we know (and what we have yet to learn) about consumer financial fraud — its prevalence, victims, perpetrators, and methods. Particular attention is paid to works with original data and research, and the examination is limited to those publications directly concerned with fraud. Research that seeks to measure the effectiveness of fraud prevention efforts is not reviewed in this document.

## Prevalence:

There is no question that financial fraud is a major problem. With tens of billions of dollars lost each year to tens of millions of victims, fraud is a pressing concern. This urgency is reflected in priorities of the American government, with the US Attorney General naming financial fraud one of three top priorities, after terrorism and violent crime. Yet current estimates of fraud's impact likely understate the costs, as under-reporting and under-admitting hamper our best efforts to measure fraud. It is possible that measurable fraud losses are but a fraction — and potentially a minor fraction — of the fraud costs to individuals and society.

## Victims:

The safest assumption is that everyone is susceptible to fraud, though the degree of either exposure or susceptibility may vary by fraud type. Some people may, through circumstance or behavior, find themselves frequently targeted by fraudsters and occasionally victimized, while other individuals may be less exposed and thus go unvictimized, regardless of their susceptibility to the tactics of con artists. Although research has yet to identify unique markers of personal vulnerability, the demographic, behavioral and psychological profiles of victims are relatively well studied. Profiling is important because it has the potential to allow government agencies with limited human and dollar resources to target information and protection to those who need it most. An emerging conclusion in profiling research is that there is no generalized profile of a “typical” victim. Profiling studies that analyze victims by type of scam, however, have yielded a clearer picture of scam-specific profiles. In other words, while everyone is vulnerable, some people may be more vulnerable to particular scams than others.

## Fraudsters:

Fraudsters are, by intention, largely hidden. This complicates systematic research and profiling efforts. In spite of these limitations, interviews, surveys, anecdotal evidence, and emerging experimental studies are beginning to identify the correlations and causes of fraudulent behavior. What information is available aligns with popular stereotypes that con men are likely to be white, young or middle-aged men from middle-class backgrounds, often characterized as “middle class failures.” However, these stereotypes and initial studies make substantial use of “common sense” assumptions that may be mistaken. Additional data and experimentation is necessary before we can make conclusive statements about the nature and motivations of fraudsters.

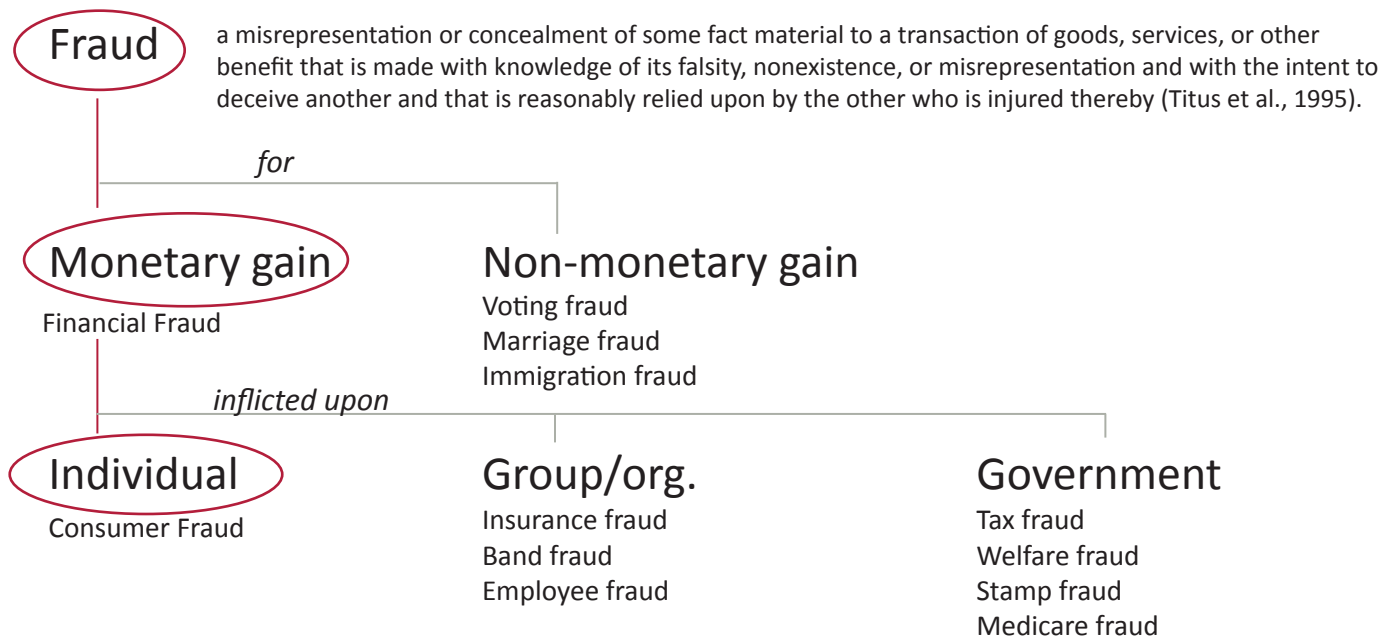
## Methods:

Successful fraud looks just good enough to be true. By mimicking the persuasive strategies, communication streams, and payment mechanisms of legitimate commerce, skilled fraudsters give few indications that their offers are scams. Fraudsters' methods anticipate informed, skeptical consumers by providing numerous markers of legitimacy, authenticity, and appeals to trust. The means by which fraudsters contact targets and obtain money mirror trends in everyday transactions, with the internet outpacing all other mechanisms.

Realistically assessing our ability to measure fraud's prevalence and impact, realigning the way we understand and relate to victims, identifying reliable sources of information on fraudsters, and expanding our study of the methods employed in carrying out fraud will provide valuable contributions both to fraud research and to fraud-fighting efforts in the U.S. and abroad.

# MAPPING THE TOPIC

This paper intentionally considers only research on individual consumer victimization. Fraud that targets organizations (such as embezzlement, corruption, and tax evasion) has – perhaps thanks to the deeper pockets of its potential targets – received much more attention. Measuring the extent of organizational fraud, its targets, and its perpetrators is the express focus of other organizations, including the Institute for Fraud Prevention (IFP) and the Association of Certified Fraud Examiners (ACFE), among others. Our resources are dedicated to understanding, preventing, and detecting consumer-targeted scams, schemes, and swindles: what we term consumer financial fraud. Where data has covered both fraud against organizations and consumers (sometimes termed ‘white collar crime’ generally), this fact is noted in the text.



Financial Fraud Research Center

The Center feels that the realm of research surrounding fraud-fighting is logically distinct, worthy of sustained attention, and similarly in need of independent review. This paper purposefully examines only research addressed at fraud itself (as opposed to studying and evaluating fraud-fighting efforts).

# METHODOLOGY

Our method was to employ a variety of bibliographic back-tracing and logarithmic search methods to extract the most complete volume of works on consumer financial fraud within the last 22 years (to 1990). Search terms included “scams,” “fraud,” “swindles,” “consumer fraud,” “consumer scams,” “elder fraud,” “affinity fraud,” “con artists,” “scammers,” “internet fraud,” “cyber fraud,” “cyber scams,” “telemarketing scams,” “white collar crime,” “deception,” and others. The geographic focus of this review is the United States, but several relevant international works were also included. The country of origin for these sources is indicated in the text.

Emphasis was placed on recent works in order to maximize relevance and reduce overlap. Bibliographies were then crosschecked to reduce the likelihood of overlooking bodies of research. Significant “silos” exist, even within the relatively isolated research area of consumer financial fraud; certain groups of work tend to internally reference and neglect work from other disciplines, limiting the field as a whole. While this tendency is discouraging for fraud research, it points out the benefits of this interdisciplinary review to create valuable connections.

In total, over 95 peer-reviewed research articles and books were reviewed, analyzed, and summarized for the purpose of this project. An additional 15 non-peer-review pieces were also included (including recent works from *The New York Times* and *The Wall Street Journal*), as these speak to the popular perceptions — and misconceptions — of consumer financial fraud.



# PREVALENCE

## HOW BIG IS THE PROBLEM?

### Highlights:

- We know that fraud is a major problem.
- Complaints of fraud are increasing, although fraud is still under-reported.
- The way we measure fraud is flawed.
- An estimated \$40 to \$50 billion of measurable, direct costs are lost to fraud annually.
- Costs vary by fraud type, and can go far beyond the financial.
- Large amounts of time and money are spent avoiding fraud – not included in the rate or cost statistics.
- Which types of fraud are most common is unclear.

### Research Summary:

While there is no conclusive way to measure the rate of fraud, even that which is measurable has a tremendous impact on individuals as well as society as a whole.

While efforts to arrive at a conclusive measure for the extent of fraud are unlikely, ongoing comparative efforts – such as the annual survey conducted by the National White Collar Crime Center (NW3C) – provide some insight into which types of fraud are increasing or decreasing. Notably, the fluctuations tend to mirror the legitimate-market version of whatever form of fraud is being perpetrated. For example, internet fraud increases with the rise of the internet, gold scams increase with the price of gold, and home repair scams increase in the wake of natural disasters. In general, fraud follows the trends.

Measuring cost is complicated by the fact that there are many types of costs – monetary, psychological, physical, and the least understood cost: time. Conservative estimates make use only of acknowledged victims in surveys and the direct losses those individuals can recall. Loss estimates do not include the potentially large number of un-reported and un-admitted incidents, or indirect costs (such as prosecution, detection, or non-monetary physical, psychological, or temporal costs). This is partly due to the difficulty of finding reliable data to address these more disparate or less tangible costs.

With these issues in mind, prevalence and cost estimates should be viewed as the visible tip of a much larger iceberg of fraud losses.

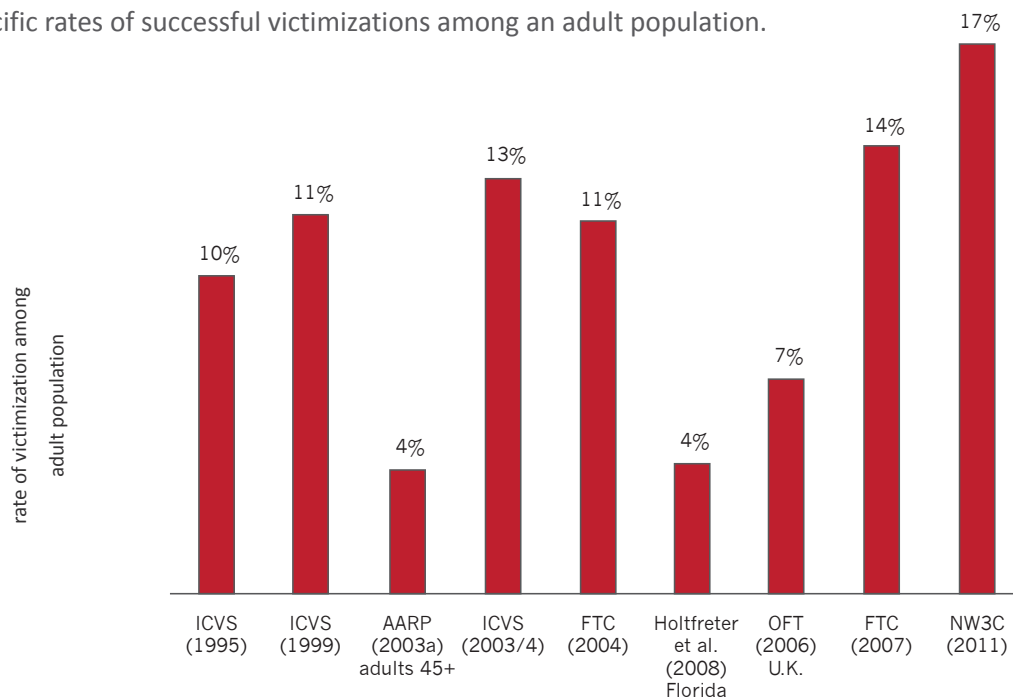
Other organizations measuring the prevalence of fraud include the The United Nations Interregional Crime and Justice Research Institute (UNICRI), which conducts the International Crime Victims Survey (ICVS), the Federal Trade Commission (FTC), AARP, the Association of Certified Fraud Examiners (ACFE), the Federal Bureau of Investigations (FBI), and the Office of Fair Trading (OFT) in the United Kingdom.

*“In every sector of every country, fraud has a pernicious impact on the quality of life.”*

Gee et al., 2011, p. 2

## Tens of millions of adults fall victim to fraud, losing tens of billions of dollars annually.

The prevalence of fraud is generally measured by using broad surveys that ask whether an individual has experienced an incident of fraud in the preceding 12 months. Below are a range of figures from different data sources which provide specific rates of successful victimizations among an adult population.



Estimates vary depending on what types of fraud are measured and whether figures rely on independent self-reporting or on responses to surveys.

- In one of the first national surveys of fraud victimization, Titus et al. (1995) found a past-year victimization rate of 15%, with victims losing \$216.29 on average. Expanding the adult sample to the national 1991 U.S. population, the researchers estimated an “annual loss from personal fraud in excess of \$40 billion (\$40,036,455,000)” (Titus et al., 1995, p. 59).
- Consumers filing complaints with the Consumer Sentinel Network reported losing over \$1.5 billion to fraud in 2011 (Federal Trade Commission, 2012). These complaints consisted of a broad base of consumer scams from fake lotteries to investment fraud.
- Ultrascan (2008) estimates that \$4.3 billion was lost to advance fee fraud in 2006 (in Ross and Smith, 2011).
- Estimates from the FBI and the Association of Certified Fraud Examiners approximate the annual cost of white collar crime as being between \$300 and \$660 billion, although this definition of white-collar crime extends far beyond consumer financial fraud (Association of Certified Fraud Examiners, 2005).
- Using the recent 14% victimization rate (Federal Trade Commission, 2007) and today’s census, the annual cost of consumer financial fraud in the U.S. is approximately \$50 billion. This rivals the annual gross output of the radio and television broadcasting industry (\$52.2b).

Each of these estimates attempts to make use of a sub-sample of the population, which is then extrapolated to the population at large. The wide variation in rates may suggest either inconsistencies within the survey measures, or inconsistencies in the source population pools.

## The amount of money lost per victim and per scam is unknown. Estimates vary widely.

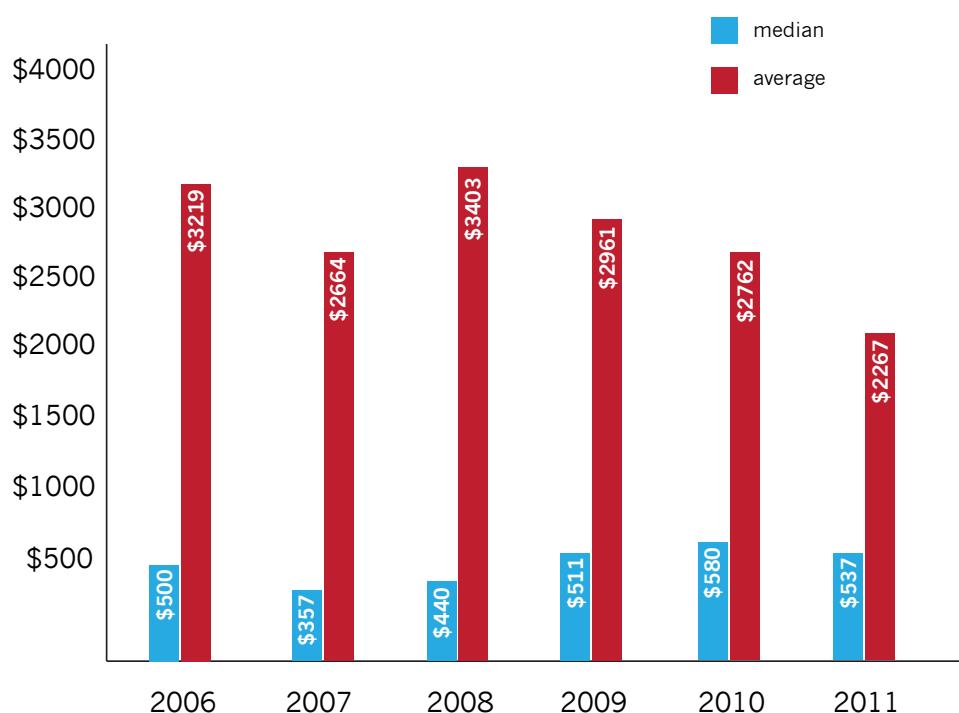
Estimates of the amount of money lost to each victim of fraud range from small (under \$50) to quite large (over \$1 million). These variations may reflect the fact that there is no “typical” loss for victims, just as there is no “typical” cost for any other consumer expenditure. “Average” losses likely correlate with scam type, though this is unproven. It is reasonable to infer that a certain type of fraud is connected to the cost of the legitimate form of that product or service. However, given the unreliability of other assumptions relating to our understanding of fraud (see “Prevalence: flawed measures” and “Victims: stereotypes”), such logical deductions should be empirically tested before they are relied upon.

Studies report different findings for the most “costly” scam type:

- Internet deception median losses were \$722 (Grazioli and Jarvenpaa, 2003).
- In one Australian study of fraud, victims of Nigerian dating scams (in which fraudsters create false online dating profiles to request money) lost \$17,500 (Ross and Smith, 2011).
- In one study conducted in the UK, highest mean losses were \$9,000 for investment scams, \$8,000 for African advance fee scams, \$7,000 for property investor scams, \$5,000 for bogus holiday club scams, and \$3,000 for foreign lottery scams (Office of Fair Trading, 2006a). (Currency has been converted to U.S. dollars.)

The Federal Trade Commission’s Consumer Sentinel Network (CSN), an online database of millions of consumer complaints, provides some longitudinal data for the amount of money lost to fraud per victim. The CSN includes 30 fraud categories ranging from prizes, sweepstakes, and lotteries to investment related complaints. Below are the median and average dollar amounts lost per victim from 2006 to 2011. Although these numbers are median and average values, keep in mind that extreme losses are not uncommon. For example, in 2006, 267 people reported losing over \$1 million to fraud.

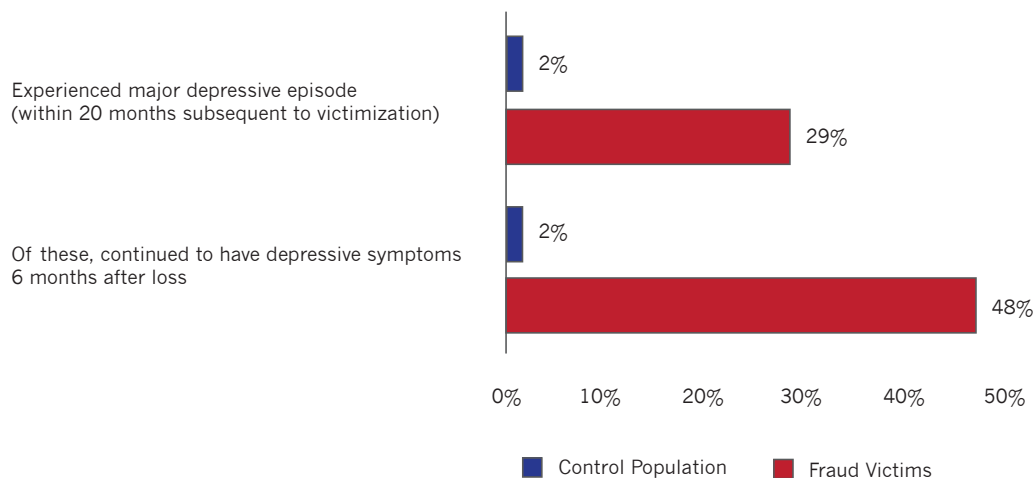
Median and Average Dollar Losses per Fraud Victim



Source: Federal Trade Commission, 2009, 2011, 2012

## Financial fraud is more than a financial crime. Its victims experience non-financial costs.

Fraud is one of the few crimes in which the victims may be made to feel complicit in their own victimization. The act of deception and betrayal inherent to fraud — particularly frauds that exploit social and religious ties, or other bonds of deep trust — inflicts psychological consequences. Only one group of victims has been surveyed for these consequences (below, a group of investment fraud victims), even though the demonstrable effects appear significant.



Source: Ganzini et al., 1990, p. 59

Fraud is commonly seen as inflicting only financial damages on its victims. This may in part be the result of a lack of research in this area, with only a few interview studies and anecdotal efforts to uncover non-monetary costs. Unlike financial losses, which can be measured in dollars and cents, psychological and emotional impacts are more challenging to track.

In addition, non-financial consequences are not limited to the fallout of victimization itself. Hours and days spent attempting to recoup losses are just the beginning. For retired victims without the necessary working years to recover from a major fraud, there is the ongoing mental trauma of losing a child's inheritance, of losing a sense of security, and/or of losing the ability to support oneself through old age.

Unfortunately, interviews and anecdotal evidence suggest that those who attempt to share the incident with friends or with the authorities may face stigmatization and ridicule (Button et al., 2011). Police units may not have the resources to respond, may share a belief in the complicity of the victim, or may simply fail to perceive the victim as a victim at all. This incurs its own sort of harm, as the victim is not only betrayed, but socially isolated.

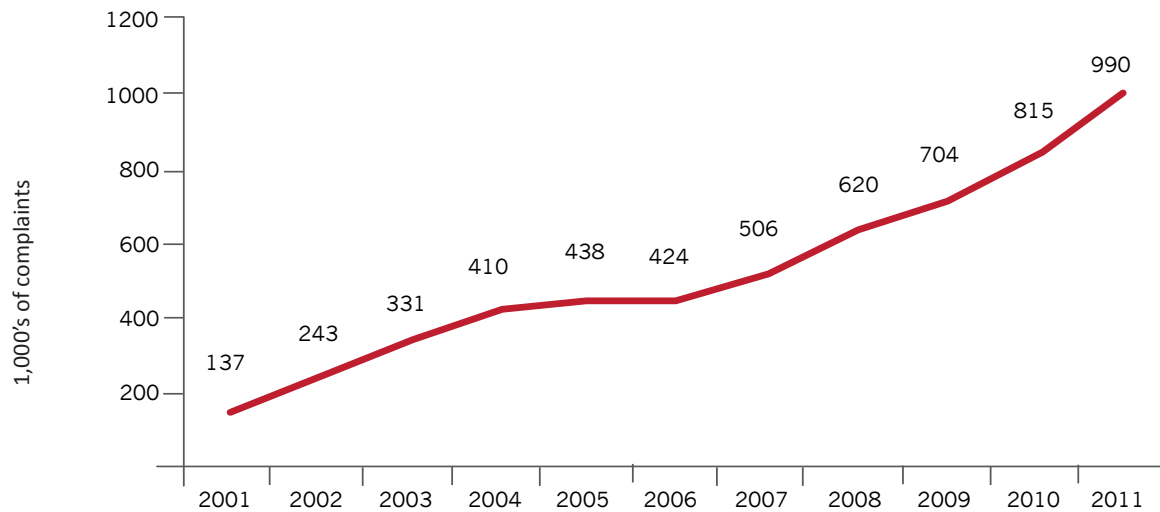
Even preliminary research efforts suggest that fraud has the potential to incur substantial, broad, and long-lasting physical, psychological, and social costs. Early empirical research has taken the form of interviews, an examination of psychological harm in the wake of a large investment fraud, and a survey on the amount of time lost due to dealing with fraud. Further research would valuably explore and quantify the direct and indirect social, psychological, and other non-monetary consequences of fraud.

*“One of the striking myths that still predominates around fraud victimization is that fraud is a victimless crime or that it has less impact than some other crimes. This is wrong.”*

Button et al., 2011, p. 3

## Complaints of fraud are increasing.

An increase in the number of complaints of fraud may not indicate increasing incidence (see below), but it speaks to fraud's impact. The following figure from the Federal Trade Commission tracks the rise of fraud complaints since 2001. Note: these numbers do not account for the rising population.



Source: Federal Trade Commission, 2012, p. 5

Repeated studies provide the most reliable source of trend data with respect to the incidence of fraud, as different surveys use different measures and definitions. The Federal Trade Commission (FTC), National Crime Victim Survey (NCVS), and the Internet Crime Complaint Center (IC3) provide information over the past 10 years with respect to both surveyed responses and reported fraud incidents.

In 2009, IC3 received 336,655 fraud complaints, which represented an increase of 22.3% compared to 2008. IC3 complainants reported losing an unprecedented \$559 million in 2009, an increase of more than 110% over the amount reported lost during the previous year.

Since many reports of fraud are now collected online, there is some doubt as to whether the rising reports of fraud reflect an actual trend, or simply the increasing ease with which individuals can report incidents as they occur. For the same reason, complaints may over-represent internet-related crimes.

It is perhaps safe to conjecture that the rising complaint rate does reflect a rising incidence of fraud overall, particularly given the degree to which fraud is consistently unreported.

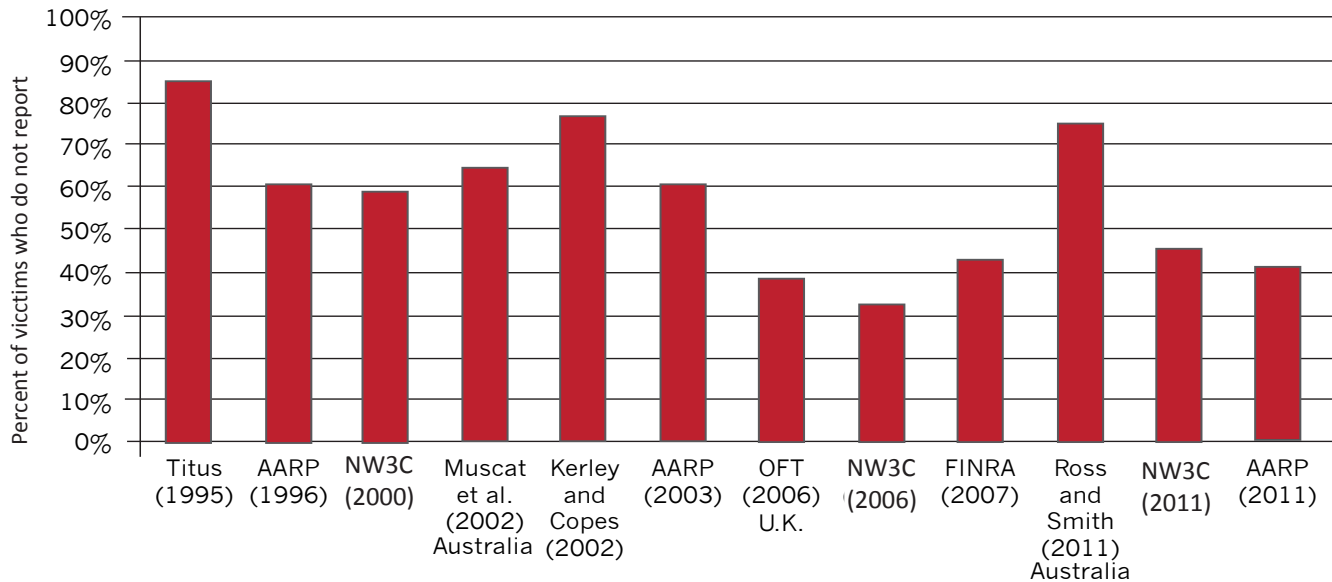
*“[E]very year Americans lose almost \$100 billion in telemarketing, investment, and charity fraud. While this dollar figure is staggering, it does not capture the true costs of this crime.”*

Pratkanis, 2005, p. 40

flawed measures

## The way we measure fraud is flawed by under-reporting and under-admitting.

People frequently fail to report incidents of fraud. The numbers below refer to the percentage of victims who chose not to report or take any other responsive action to their victimization.



Measures of fraud rely on the accuracy of individuals' self-report, on the reliability of individuals' recollections, and on the willingness of individuals to share incidents of victimization. Given that many people fail to report or admit fraud, attempts to quantify the amount of fraud and its costs in society very likely understate its scope. Indeed, the true cost of fraud may dwarf the already sizeable estimates of \$40 - \$50 billion.

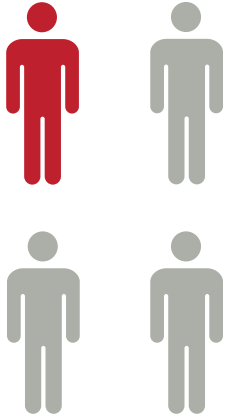
Resources allocated to law-enforcement and other fraud-fighting agencies would be influenced by a more accurate tally of fraud's prevalence and impact. By identifying who is going uncounted, what causes people to stay silent, and what can encourage victims to step forward, policy makers and law enforcement can gain a clearer view of the problem and improve prevention efforts.

A better understanding of reporting and under-reporting behavior may also help guide resources for consumers directly. Currently, while there are places victims can go to report fraud, these agencies are often incapable of taking appropriate action. Clarifying the proper reporting mechanism for consumers (akin to the recent creation of the National Fraud Authority in the United Kingdom) may be a valuable service in itself, and allow for a more accurate picture of fraud in future.

*“Under-reporting also has implications for how enforcers select cases to pursue.... This research suggests that over-reliance on a complaints-driven process may result in some of the worst scams not being investigated.”*

Office of Fair Trading, 2006b, p. 35

## Even known victims may not admit their own victimization.



Only 1 in 4 investment fraud victims, having lost between \$1,000 and \$25,000 in a scam, admitted to having been scammed or swindled in the preceding 3 years.

Source: AARP, 2003a

Fraud victims often deny having been victims, skewing our measurement of fraud's impact. The numbers below refer to independently corroborated fraud victims who had been contacted directly by law enforcement regarding the fraudulent incident.

- Of known investment fraud victims, 12% denied ever losing money on an investment (FINRA, 2007).
- Only half of known lottery fraud victims admitted to having been scammed/swindled in the previous 3 years (AARP, 2003a).

Asking individuals to predict their own behavior in such circumstances is likewise unreliable. For instance, people say they will report incidents, but don't.

- In one national survey of white collar crime victimization, nearly 95% indicated that they would report an incident of white collar crime victimization, while only 21% of actual victims indicated having reported their victimization (National White Collar Crime Center, 2000).

flawed measures

## Why people report — or don't

There is some evidence that victims fail to come forward out of embarrassment, a belief that reporting won't make a difference, or a combination of these reasons. Successfully addressing these issues would be necessary steps to encourage future reporting behavior.

Some victims are embarrassed.

- In one U.K. study, 1 in 5 victims failed to report, admitting being too embarrassed to come forward (Office of Fair Trading, 2006b).
- In another Australian study, 1 in 4 people cited embarrassment as a reason for not reporting (Ross and Smith, 2011).

Victims feel that there is little benefit (and potentially substantial cost) to reporting an incident of fraud.

- Not worth it: Nearly 1 in 3 victims said it wasn't worth reporting (Office of Fair Trading, 2006b).
- Lack confidence in police: 1 in 5 victims felt the police wouldn't find the offender (Ross and Smith, 2011).
- Not enough evidence: 1 in 4 victims felt there wasn't enough evidence for legal action (Ross and Smith, 2011).

Other reasons why victims may not report incidents remain to be explored, including:

- To whom? – The dispersion of reports to a wide variety of agencies suggests that consumers may lack clarity concerning where to report incidents of fraud.
- What do you mean by "fraud"? – By clarifying definitions and providing examples, known victims of certain types of fraud may be more likely to acknowledge having been victimized (Shadel and Pak, 2007).
- Was it really fraud? – Incidents of fraud may be mistaken for incompetence or miscommunication.
- What fraud? – Much of the victimization that respondents report occurred quite recently. Since this is true regardless of when a survey was conducted, this suggests that people may be forgetting past incidents.

Even when reports are made, they are not directed to those capable of taking action.

- Approximately 1/4 of reported victimizations were made to crime control agencies, though this, again, varied significantly by type of crime overall: "only 14.43% of total victimizations were brought to the attention of any type of criminal justice agency" (National White Collar Crime Center, 2006, p. 10-11).
- Of those who reported (55% of all victims), only 1 in 5 (21%) reached an entity with criminal investigative or prosecutorial powers (National White Collar Crime Center, 2011). That leaves 12% of overall victimizations having reached a criminal justice entity.
- 50% of victims reported to the business involved in the crime (National White Collar Crime Center, 2000, p. 10).

Those who do report fraud may not be doing it for themselves.

- The majority of people who report incidents do so to protect others: 57% did so to ensure that it didn't happen to anyone else, compared to 16% who sought some form of action or recourse for the wrong (Office of Fair Trading, 2006b).

*"Perhaps the biggest reason for the lack of reporting deals with restitution, or rather, the lack thereof."*

Schoepfer & Piquero, 2009, p. 211



# NEXT STEPS & QUESTIONS

## Rates

- Can the “under-admit rate” be combined with current survey data to paint a more accurate picture of the prevalence of fraud?
- To what extent are high-value frauds over-represented in the fraud rate data?
- Given the surprisingly high average estimates of the dollars lost to dating and internet scams, incorporating these types of fraud into future surveys could allow for a more reliable measure of their costs.
- What methods allow surveys to garner the most accurate responses?
- Can measures of consumer fraud be standardized, including questions regarding number of victimizations per person, number of fraud attempts, and success rates?

## Costs

- Given the promising findings of initial research, further exploration of the non-financial costs of fraud on individuals and societies would be valuable.
- How do the non-financial impacts of fraud victimization compare with the consequences of more traditional violent crimes?
- How can we better measure the indirect costs of fraud? Can the survey of indirect costs in the United Kingdom be mirrored here?

## Reporting

- What other factors impact the likelihood of reporting?
- What can be done to encourage people to report fraud?
- How can we clarify where individuals should report different types of fraud?

## Admitting

- What questioning strategies can most effectively encourage victims to admit having been taken by fraud?
- What prevents people from admitting their own victimization?

*“To be honest I didn’t want all the hassle of finding out about why my money was taken like that, I never ever bothered to phone up anybody. I just thought right, well I was conned but it won’t happen again.”*

Office of Fair Trading 2006b, p. 37, quoting fraud victim

# VICTIMS

## WHO FALLS FOR FRAUD?

### Highlights:

- There is no single profile of a fraud victim but certain generalizations can be made about victims of specific fraud schemes.
- Our stereotypes about victims are not entirely accurate.
- It is difficult to find reliable victim data, which limits the ability to develop a more complete understanding of victim profiles.
- Who is likely to fall victim to fraud is complicated by the two contributing kinds of vulnerability: a) some individuals may be more likely to be targeted by fraudsters, and b) others may be more likely to fall for a fraud once targeted.

### Research Summary:

Fraud victim profiling is a relatively well-studied area in the realm of consumer financial fraud research. Studies have explored three broad types of profiling analysis: demographic, behavioral, and psychological. A general trend is that profiling victims of all scam types does not result in a reliable picture of the “typical” scam victim. As such, many recent studies have sought to profile victims of specific types of fraud by comparing them to the general population in terms of demographic, behavioral and psychological measures. These studies have largely focused on victims of investment and lottery fraud, but have recently included victims of identity theft, advance fee loan scams, health care/prescription drug scams, and business opportunity scams (AARP, 2011).

While there does not appear to be a “typical” generalized scam victim, recent research has created a clearer picture of the “typical” scam victim by type of scam. For example, investment and lottery fraud victims differ from the general population, and each other, in terms of demographics, education, financial literacy, openness, exposure to sales situations, and experience of negative life events (AARP, 1996; AARP, 2003a; AARP, 2007; Consumer Fraud Research Group, 2006; Pak and Shadel 2007; AARP, 2008; AARP, 2011).

Although we are beginning to have a clearer understanding of how scam-specific victims differ from the general population, one issue that remains to be studied is how these victims differ from the typical consumer in the specific marketplace in which they were swindled. For example, we know how the typical lottery scam victim differs from the general population, but how does she differ from the typical lottery player? This level of fine-grained analysis may identify if there is a unique marker of scam vulnerability beyond exposure to the marketplace. Moreover, we know that different individuals are more vulnerable to different types of fraud, but it is possible that every individual is vulnerable on some level, depending perhaps on the skillfulness of the ploy. Attempts to assess average consumers as potentially vulnerable targets of fraud, and to incorporate the wide range of fraud sophistication into research, may also advance our understanding of who falls for fraud.

Note: This Center and the research reviewed does not address the consequences of dementia or medically-significant cognitive impairment. It is the opinion of this Center that financial abuse in such circumstances, while serious and relevant, requires dramatically different protective responses and should be considered as a distinct phenomenon from the victimization of cognitively healthy individuals.

## profiling

## Some measures show promise of identifying particularly vulnerable populations.

Profiling studies typically explore differences in various demographic, behavioral, and psychological factors between victims and non-victims. Below are descriptions of select research findings for each profiling measure.

### Demographic Variables

**Age** – The academic literature is mixed on the question of whether younger or older people are more likely to be victimized by fraud. In support of older consumers being the more likely victims, a 1996 study by AARP found that while individuals over 50 comprised 35% of the American population, they accounted for 57% of all fraud victims (AARP, 1996). Another AARP study in 1999 found that the 50-64 year old age cohort was the most likely group to report having been victimized by a major fraud (AARP, 1999). In addition, a 2003 study of known lottery and investment fraud victims found the percentage of victims over age 50 to be extremely high (AARP, 2003). A survey conducted by the North American Securities Administrator's Association (NASAA) indicated that 45% of investment complaints were made by seniors over the age of 65 (Struck, 2006). Most recently, the 2011 AARP Foundation National Fraud Victim Study surveyed known victims of fraud and found that the average age of fraud victims was much higher than the average age of the general population (AARP, 2011).

Conversely, in a national survey across all scam types, Titus and colleagues found that older consumers were three times less likely to be fraud victims than younger consumers (Titus et al., 1995). Another smaller scale study also found that younger adults were more likely to become victims of fraud (Van Wyk and Benson, 1997). These findings were confirmed by the 2003 and 2005 Federal Trade Commission national surveys that found older consumers less likely to be victimized than younger consumers (Federal Trade Commission, 2004, 2007).

It appears that general surveys across all scam types tend to find that older consumers are less victimized, but studies that have analyzed victims by scam type (such as telemarketing, investment, and lottery fraud) tend to find larger proportions of senior victims. This may result from the fact that many of the general surveys rely on self-report data, while the studies stratified by scam type often use data sets of known victims obtained from law enforcement. Younger individuals are more likely than older individuals to admit victimization (AARP, 2011), which may skew the self report data used in many of the general surveys.

**Gender** – Research supports the finding that gender has no impact on fraud vulnerability across all scam types (Titus et al., 1995; Kerley and Copes, 2002; Federal Trade Commission, 2004). However, studies have shown that the incidence varies by scam. For example, women are more likely to be victims of lottery fraud, while men are more likely to be victims of investment fraud (e.g., AARP, 2003, 2011).

**Race** – Several studies suggest that race has no impact of likelihood of victimization (Titus et al., 1995; AARP, 2003; Kerley and Copes 2002; Lee and Soberon-Ferrer, 1997). On the other hand, African Americans, Native Americans, and Hispanics were more likely than non-Hispanic whites or Asians to be fraud victims in the 2003 and 2005 Federal Trade Commission national surveys (Federal Trade Commission, 2004, 2007).

**Income/Financial Status** – Those in precarious financial circumstances may be more vulnerable to fraud. A few studies have shown that those with lower incomes are more likely to be fraud victims, as well as those who think their income will either go up or down significantly in the next three years (Federal Trade Commission, 2004; Kerley and Copes, 2002). Additionally, debt burden appears to have an effect on fraud victimization. In a 2005 Federal Trade Commission survey, nearly 1 in 4 respondents with more debt than they could comfortably handle were victims of fraud, compared to 1 in 10 of those without personal debt (Federal Trade Commission, 2007).

When analyzing income for specific types of fraud, studies have found that investment fraud victims have a higher income than the general population and lottery fraud victims have a lower income than the general population (e.g. AARP, 2003, 2011).

**Education** -- The literature relating to the impact of education on fraud victimization is mixed. The Federal Trade Commission's 2003 national survey found no significant differences among fraud victims based on educational attainment (Federal Trade Commission, 2004). Other studies, however, have found that those on the educational extremes (a master's degree or higher, or those who had dropped out of high school) were less likely to be fraud victims than those with some college or a college degree (Titus et al., 1995; Kerley and Copes, 2002).

With respect to different scam types, victims of investment fraud have a higher educational attainment than the general population and victims of lottery fraud have lower educational attainment than the general population (AARP 2003).

**Financial Literacy** – Several studies have shown that investment fraud victims are more financially literate than the general population, while lottery fraud victims are less financially literate than the general population (Consumer Fraud Research Group, 2006; AARP, 2007, 2008).

**Marital Status** – The literature is mixed with respect to marital status and fraud victimization generally. The 2003 Federal Trade Commission survey found no significant difference between married and single people in terms of their fraud victimization (Federal Trade Commission, 2004). Soberon-Ferrer and Lee (1997) used data collected from a 1993 AARP survey of consumer data to create a “vulnerability scale” that relates to likelihood of fraud victimization. This study suggests that married people, with lower vulnerability marks, may be less likely to become fraud victims. When analyzed based on different scam types, studies show investment fraud victims are more likely to be married and lottery fraud victims are more likely to be widowed or divorced than the general population (Consumer Fraud Research Group, 2006; AARP, 2003, 2007, 2008, 2011).

**Urban/Rural Environment** – The literature is mixed. In the 2005 National Public Survey on White Collar Crime, living in an urban setting was associated with increased likelihood of fraud victimization (National White Collar Crime Center, 2006). However, most studies find no relationship between fraud victimization and living in a rural vs. urban environment.

*“Even the most wary and sophisticated consumers may fall victim to fraudulent offers — in the mail, in the media, and on the Internet.”*

Federal Trade Commission, 2004, p. ES-1

## Behavioral or Situational Variables

**Risk-Taking** – Van Wyk and Benson (1997) found that people who reported greater financial risk-taking behavior were also more likely to report being the target of fraud, although they did not necessarily become victims of fraud. Using national survey data, Schoepfer & Piquero (2009) found that involvement in risky behavior predicted fraud victimization.

**Credit Card Use** – In one study, those with more credit cards in their wallets were more likely to be victims of free prize offers, but credit card use was not a significant predictor of general fraud victimization (Schoepfer and Piquero, 2009).

**Religious Fervor** – Extreme religiosity may correlate with increased vulnerability. Lottery fraud victims are more likely than non-victims to describe themselves as “extremely religious” (Consumer Fraud Research Group, 2006).

**Exposure to Sales Situations** – Research suggests that scam victims as a whole report significantly more behaviors that increase their exposure to sales situation, like attending seminars, reading all mail, and sending away for free information (FINRA Foundation, 2007; AARP, 2008, 2011).

**Openness** – Studies have shown that investment fraud victims tend to be more open to outside sources of information than the general population (FINRA Foundation, 2007; AARP, 2007, 2008).

**Negative Life Events** – The Investor Fraud Study (2006) performed by the Consumer Fraud Research Group for the FINRA Foundation showed that investment fraud and lottery fraud victims reported a significantly greater number of negative life events (e.g. employment issues, home maintenance issues, legal issues, medical issues and neighborhood issues) than non-victims (Consumer Fraud Research Group, 2006).

**Previous Victimization** – Past victims may be more vulnerable to future victimization. For example, in one U.K. study, those respondents who reported having previously responded to a scam also reported being more likely to respond again (Office of Fair Trading, 2009). However, subsequent work in this area has been unable to replicate this finding.

## Psychological Variables

**Low Self-Control/Impulsivity** – Evidence suggests that those with low self-control, who are also more likely to engage in a range of risky behaviors, are prone to victimization. For example, Holfreter et al. (2008) found that a 1-unit increase on their 5-point low self-control scale increased the odds of fraud victimization of targeted individuals by 302 percent. Similarly, 1 in 3 investment fraud victims buy things “on the spur of the moment” as compared to 1 in 4 of the general population and 1 in 5 lottery fraud victims (AARP, 2003).

**Contentedness** – Those who are less content with their lives may be more vulnerable. Lottery and investment fraud victims were more likely than the general population to feel that they had gotten less than they deserved out of life (Consumer Fraud Research Group, 2006).

**Interest in Persuasion** – Research suggests that scam victims as a whole are significantly more interested in persuasion statements than the general population (e.g., AARP, 2011).

## Putting it all together: victim profile by type of scam

As evidenced above, analyzing scam victims as a whole obscures many of the distinguishing characteristics between victims and non-victims. By analyzing victims by scam type, however, much more coherent findings emerge. Below are the most current victim profiles to date.

### Investment Fraud Victims



More likely to be male, relatively wealthy, risk-taking, interested in persuasive statements, open to sales situations, and better educated than the general public.

### Lottery Scam Victims



More likely to be female, older, single, lower income, interested in persuasive statements, open to sales situations, and less educated than the general public.

## The stereotype of fraud victims as older, less educated adults is entrenched.

There is a common perception, especially in the media, that older, uneducated people are more likely to be victims of fraud. Indeed, the profiles of some victims, such as lottery fraud victims, do show higher proportions of victims coming from older age groups. However, the profile of the typical investment fraud victim is vastly different from the popular notion of fraud victims as lonely, old, and uneducated. Moreover, as mentioned above, several national studies indicate that younger consumers are more likely to be victimized than older consumers. Even in the face of this countervailing research, the perception that all fraud victims are old and uneducated remains common. For example, the National White Collar Crime Center (NW3C) conducted a survey in 1999 to examine the public's perceptions of, and experiences with, white collar crime. As you can see below, 49% of the respondents believed those with less than a college education are more likely to be the victims of fraud, and 60% of respondents believed those over 60 years old are more likely to be victims of fraud (NW3C, 2001).

Believe those with less than a college education are more likely to be victims of fraud.

49%

Believe those 60+ years are more likely to be victims of fraud.

60%

Source: National White Collar Crime Center, 2001

Understandably, sources in the popular media mirror the stereotypes around victims (e.g., Span, 2012). The persistence of this belief may in part stem from the fractured nature of the consumer financial fraud research field, as applicable research may be difficult to locate. Stereotypes about victims are also perpetuated by the words of fraudsters, who often vilify targets to justify their own exploitative action.

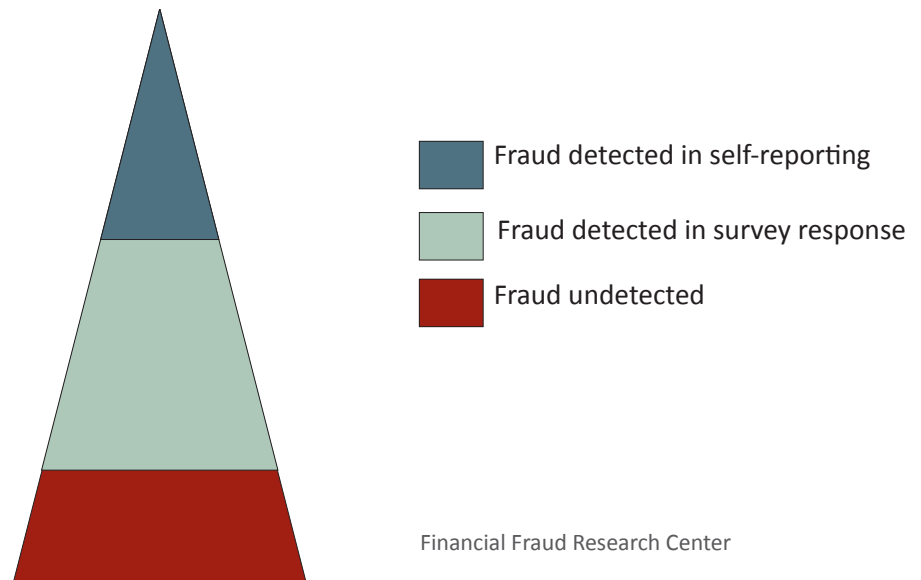
*“You can't cheat an honest man.”*

Dornstein, 1996 in Titus, 2001, p. 136, Attributed to a 19th-century con artist

limitations

### Identifying non-victim pools for profiling comparison is difficult.

Problems with identifying non-victims and eliciting accurate responses make it challenging to glean clear answers from research. Previous studies have indicated that those who report fraud victimization to authorities may only be the “tip of the iceberg” of the total number of victims (conceptually visualized below). Many other fraud victims report their victimization when explicitly asked in national telephone surveys, but it is likely that a substantial number of fraud victims will never be accurately identified because they are either unwilling to admit being swindled, or are unaware of their victimization.



In order to identify profiles of likely fraud victims, pools of known victims are compared to “non-victims.” Unfortunately, “non-victim” populations may or may not include a sizeable number of those victims who deny their own victimization, forgot the incident, or were unaware of having been swindled. This means that the control group of “non-victims” may be unreliable. Given the rates of “under-admitting” (see “Prevalence: flawed measures” above) for even those victims with large, recent losses, the likelihood that individuals are accurately representing their lifetime victimization history may be rather low. Nor does someone’s current status as “non-victim” mean that he/she is invulnerable, or even less susceptible than an average victim; the individual may have gone unvictimized thanks to luck, rather than to any reliable protective mechanism.

Furthermore, the scam-specific victim profiles, which do distinguish the victim from the general population, may not distinguish the victim from the typical consumer in that specific marketplace. For example, is the profile of a male, wealthy, educated and risky investor a unique marker of investment fraud vulnerability, or is it merely the profile of the typical investor? Similarly, is the profile of the typical lottery scam victim simply the profile of the typical lottery player? If the victim and typical consumer profiles converge, then the increased victimization associated with the victim profile may be the result of increased exposure, rather than unique vulnerability once targeted. The ideal scenario would be to compare the scam specific victims to the typical consumer in each marketplace, rather than to the general public. In this comparison, differences between the victim and typical consumer would suggest a measure of personal susceptibility beyond exposure.

While data limitations have thus far precluded distinguishing vulnerability at such a fine-grained level, the current profiling research is sufficient to help direct the allocation of resources to those who are most targeted by fraud.

## NEXT STEPS & QUESTIONS

- Are there certain types of scams that not only target certain populations, but to which certain populations are particularly susceptible once they've been targeted?
- Are there useful, simple means of assessing one's own psychological susceptibility to fraud?
- What makes individuals unusually invulnerable to fraud? Is this potentially a more readily identifiable subgroup?
- If the majority of consumers are vulnerable to fraud, what does this imply for fraud-fighting, consumer protection, and legislative efforts?
- Does lack of satisfaction with a certain aspect of one's life make one more vulnerable to a fraud ploy targeting that area?
- Can individual susceptibility to fraud be contextualized to reflect the sophistication of the particular ploy?



# FRAUDSTERS

## WHO PERPETRATES FRAUD?

### Highlights:

- What we know about fraudsters and their methods is the most limited area of consumer financial fraud research.
- What information we have conforms to broad stereotypes of fraudsters as generally young or middle-class white men of a middle age.
- Some non-demographic measures appear to be linked to fraud offending, though these remain speculative.
- Fraudsters differ from “typical” criminals inasmuch as they seem to be members of middle-class backgrounds who were unsuccessful in the mainstream.
- Preliminary findings suggest that fraudsters are motivated by money, an easy lifestyle, and power.
- Fraudsters fail to see themselves as criminals.

### Research Summary:

The nature of consumer financial fraud is such that fraudsters are difficult to locate. Most of what we know about fraudsters is anecdotal.

A few studies have surveyed known investment and telemarketing fraudsters both in and out of prison (Doocy et al., 2001; Shover et al., 2003), while more recent efforts have attempted to assess cheating and “fraudulent” behavior in a laboratory setting (Holtfreter et al., 2010).

However, there is reason to doubt the reliability of self-reporting of fraudsters’ motivations in surveys, and the applicability of laboratory experiments to real-life situations is unclear.

Our perceptions may also be skewed by the limited types of fraud known con-artists engaged in; there is no reason to believe that a telemarketing fraudster shares the same background, profile, or motivations as does a work-at-home scam artist, or as a high-stakes Ponzi schemer.

In spite of these limitations, there appears to be some consensus around common demographics of fraud offenders: male, white, and middle-class. Whether this perception will persist as more fraud is uncovered – and as fraudulent acts become increasingly accessible to those beyond the stereotypical “white-collar” set – remains to be seen.

Fraudster profiling efforts are in the earliest stages of study.

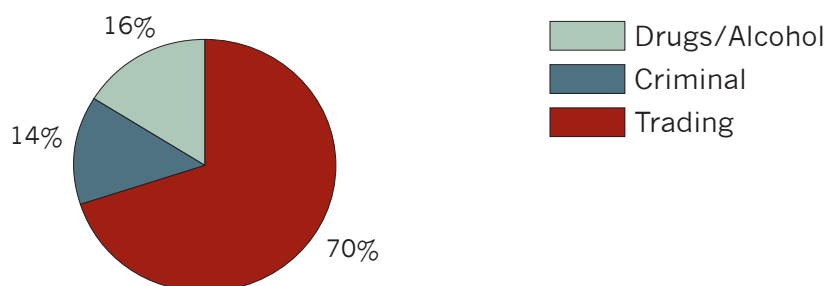
*“Telemarketing fraudsters, unlike the professional thieves of previous generations, are likely to spend their weekends on the lake, playing golf, or having friends over for a barbeque. Still, they blow their earnings on drugs, gambling, fast living and conspicuous consumption. They earn a reasonably good return from crime, but like ‘box men’ of yore, few spend appreciable time in jails and prisons.”*

Shover et al 2003, p. 502

## What information we have conforms to popular stereotypes about fraudsters.

The stereotypical fraudster might be described as a middle-class failure: white, male, young to middle-aged, with an erratic job history in spite of a having a traditional middle-class background. When fraudsters engage in illegal activity, it is most often with non-violent offenses. Fixated on an image of wealth and success that they are unable to achieve in the mainstream, the stereotypical fraudster goes outside the mainstream to cultivate money, power, and a stereotypically lavish lifestyle.

Of investment fraudsters with offenses on file, crimes were generally non-violent (Doocy et al., 2001, p. 16):



Some demographic measures have been linked to fraud offending, though the data may be out of date, based on limited survey samples, or anecdotal.

- White: 19 in 20 telemarketing fraudsters interviewed were white (Shover et al., 2003, p. 493).
- Male: 19 in 20 scam artists were men, while just 1 in 20 were women (Doocy et al., 2001, p. 15).
- Young or middle-aged: Telemarketers' average age was 35 in one study (Doocy et al., 2001, p. 15) and 42 in another (Shover et al., 2003; p. 493).

As the moniker “white collar crime” suggests, fraudsters frequently appear to come from the ranks of the middle-class.

- Parents were conventional and hard working, and the family finances were secure if not comfortable. Families were generally patriarchal (primary male income) (Shover et al., 2003, p. 494).
- Telemarketing fraudsters' “responses reveal little that distinguishes them from others of similar age and class background. Certainly, the disadvantages and pathologies commonplace in the early lives of most street criminals are in scant evidence here” (Shover et al., 2003, p. 495).

It is likely that the broader access to markets will allow those outside of the middle class entry into traditionally “white collar” avenues of crime.

*“Fraudsters are more like ‘office workers who are more comfortable with a cup of coffee and a tall tale than a lunch pail and a few quick beers.’”*

Stevenson, 1998 in Doocy et al., 2001, p. 16

## Some speculative non-demographic measures may be linked to fraud offending.

Identifying behavioral and psychological indicators of likely fraudulent behavior is a valuable field of research, still in its early stages of development.

Criminal offense histories are not uncommon.

- 60% had “had at least one action filed against them in their adult lifetime,” though the actual records of 69% were clean in the state Department of Corporation files” (Doocy et al., 2001, p. 16).

Frequent job changes are common.

- The average number of jobs held by a group of investment fraudsters since they were 18 was 12.9 (Doocy et al., 2001).
- The average amount of time on any job was just over a year (Doocy et al., 2001).
- These jobs were often white collar positions “that typically provide the worker with a cubicle and protection from outdoor weather cycles” (Doocy et al., 2001, p. 16).

Fraudsters often appear to be those who did not excel among their middle-class peers. Even among relatively stable backgrounds, fraudsters represent a high proportion of those who failed to succeed in this environment, perhaps turning to “alternative” methods as a result.

- Of the group of 47 telemarketing fraudsters interviewed in one study, 8 were high school drop-outs; of the 21 who were college attendees, they averaged only 2 years in attendance (Shover et al., 2003).

Lack of self-control appears to explain some fraudulent behavior.

- In one study, low self-control was an excellent predictor of fraudulent behavior, but much of the variance was left unexplained (Smith, 2004).
- In a study of college undergraduates, low self-control accounted for 91% of the explained variation in academic fraud (plagiarism, lying to a professor, etc.) and 39% of fraud offending (i.e. “used someone else’s credit card without their permission” and “misrepresented yourself on a job application or resume”) (Holfreter et al., 2010).

Fraudsters appear to fixate on money at an early age.

- Many telemarketing fraudsters reported awareness of an uncommon interest in money from an early age (Shover et al., 2003).
- Typically, telemarketing fraudsters began working for pay while young, and worked throughout adolescence (Shover et al., 2003).

*“For our [telemarketing fraudster] subjects, many of whom were floundering on conventional paths, criminal telemarketing was a godsend; it came along at a time when they needed to show that they could make something of themselves.”*

Shover et al., 2003, p. 495

## Motivations often seem to include the classic mix of money, lifestyle, and power.

While it is logical to suppose that fraudsters are unusually motivated by greed, this assumption remains to be tested. Certainly financial considerations are no less motivating factors for fraudsters than they are for average citizens, and the money to be had can be staggering.

- Only one person [2.1%] reported earning less than \$1,000 weekly, and most said their annual earnings were in the range of \$100,000 to \$250,000. Five placed their annual earnings in excess of \$1m (Shover et al., 2003).

The work-life balance may hold its own appeal for fraudsters.

- Describing 20-30 hour work-weeks, flexible schedules, and no need for extensive training or advanced education, the opportunity to excel without sacrificing lifestyle likely contributes to fraud's appeal. With few rigid rules or strictures, this business may provide its own form of freedom (Shover et al., 2003).

Though challenging to quantify, some fraudsters speak to the rewards of power or perceived control.

- "I want to beat that person I am talking to on the phone" (Shover et al., 2003, p. 497).
- "It was the money, but it was [also] the ability to control people" (Shover et al., 2003, p. 497).

Fraudsters may not experience a disincentive to commit their crime in the face of such strong motivations, as they often fail to see themselves as criminals. Fraudsters distinguish themselves from 'typical' criminals in a number of ways that do not appear to differ substantively from the ways in which population at large views con artists, fraudsters, and other criminals employing deception. Just as there may be some public ambivalence around the skillful conman and the culpability of the victim, so too do fraudsters employ these perceptions in their self-analysis — or at least in their descriptions of their self-reflections. Fraudsters often:

- Object to the label 'criminal' as too strong:

Notwithstanding the fact that the interviewees were all convicted felons, most criminal telemarketers rejected the labels "criminal" and "crime" as inaccurate or excessive (Shover et al., 2003).

- Blame the victims:

Fraudsters describe victims as culpable themselves, either due to greed, gullibility, or the victim's own desire to outwit the traditional methods of making money (MacDonald, 1939, in van Wyk and Benson, 1997).

- Make use of ambiguity:

Describing their tactics as simply 'aggressive sales', fraudsters attempt to characterize their own actions in terms of possibly reprehensible — yet legal — methods. They compare their actions to a retail outlet marking up a t-shirt by 1,000% (Shover et al., 2003).

*"I was making too much money. It just seemed so easy."*

Shover et al., 2003, p. 496, quoting convicted fraudster

## NEXT STEPS & QUESTIONS

- To what extent do fraudsters differ from the general population?
- To what extent are the types of people involved in fraud shifting? For example, is the internet transforming the typical profile of a fraudster?
- To what extent can those interviewed be relied upon to present a representative picture of fraudsters generally? In what ways are they likely to differ from those fraudsters not available for interview?
- Do instances of cheating/fraudulent behavior in a classroom or laboratory setting correlate with similar instances of fraud in the real world?
- What motivates fraudulent behavior? Does a desire for money, an easy lifestyle, and power adequately describe fraudsters' motivation to commit fraud?

# METHODS

## HOW DO WE FALL FOR FRAUD?

### Highlights:

- Fraud imitates the strategies and appearance of legitimate products, goods, and services.
- While persuasive tactics generally mimic legitimate marketing practices, some extend to threats and/or acts of violence.
- Technological methods (both of contacting targets and receiving payment) mirror the technological transformations of the broader market.
- The methods of fraud remain to be systematically surveyed and investigated.

### Research Summary:

Fraud is, at its core, successful marketing for illegitimate purposes. To understand fraud is to understand deception — its persuasive strategies and practical methods.

The array of research that directly addresses fraud through the study of deception (and its brethren: lying, dishonesty and betrayal) is both immense and disperse. This research encompasses such fields as psychology, linguistics, sociology, and fields concerned with the use and misuse of communication. The future of fraud research could fruitfully apply the findings of these disciplines to enrich our understanding of how we fall for fraud.

Current efforts to explore methods of fraud are limited to 1) a handful of studies examining the persuasive strategies used in successful fraud attempts, 2) surveys measuring the communication methods used to contact intended victims, and 3) surveys describing the mechanisms by which money is transferred from victims to fraudsters.

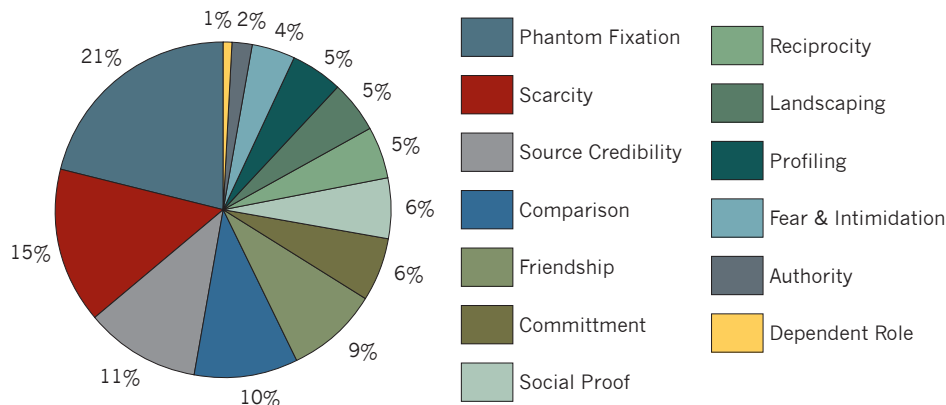
The focus on the latter two methods is partly due to the fact that these lend themselves to quantitative analysis. Deception, on the other hand, is much more difficult to measure. Ongoing research will need to explore the problems of identifying intended deception, providing a quantitative filter, and evaluating results in a systematic, repeatable manner.

*“It is often subtlety compared to outright lies that marks the dividing line between an acceptable and a criminal marketing pitch.”*

Doocy et al., 2001, p. 7

## Persuasion tactics make use of the same mechanisms as legitimate marketing.

Aside from fraud's illegality and intention to mislead, its persuasive tactics largely overlap with those of legitimate marketing.



Source: Shadel and Pak, 2007, p. 67

By studying the marketing strategies of fraudsters, studies have been able to analyze what psychological methods are used to perpetrate a scam. As with other aspects of studying fraud, the type of scam is important; what is being sold and to whom dictates which strategies are used.

### Establishing Legitimacy

- Mimicking social bonds: Socially-targeted phishing attacks were substantially more successful than the control condition, non-targeted, attacks (76% vs. 16%) (Jagatic et al., 2005).
- References: In approximately 40% of Nigerian-originated fraud cases in Australia, additional “references” were also introduced to substantiate the fraudster’s claim (Ross and Smith, 2011).
- Testimonials: The presence of credible testimonials were linked with both deception and trust on a fraudulent purchasing site (Grazioli and Jarvenpaa, 2000).

*“We had a lot of confederates working for us — other investors we bought in that we paid to give references [about] how wonderful we were” (Ruffenauch, 2004, quoting convicted investment fraudster).*

- Mentioning risks: 88% of victims of an investment fraud said a fraudster mentioned possible risks, and that this seemed to support the offer’s legitimacy (Shichor et al., in Pontell and Shichor, 2001).

### Invoking Fear

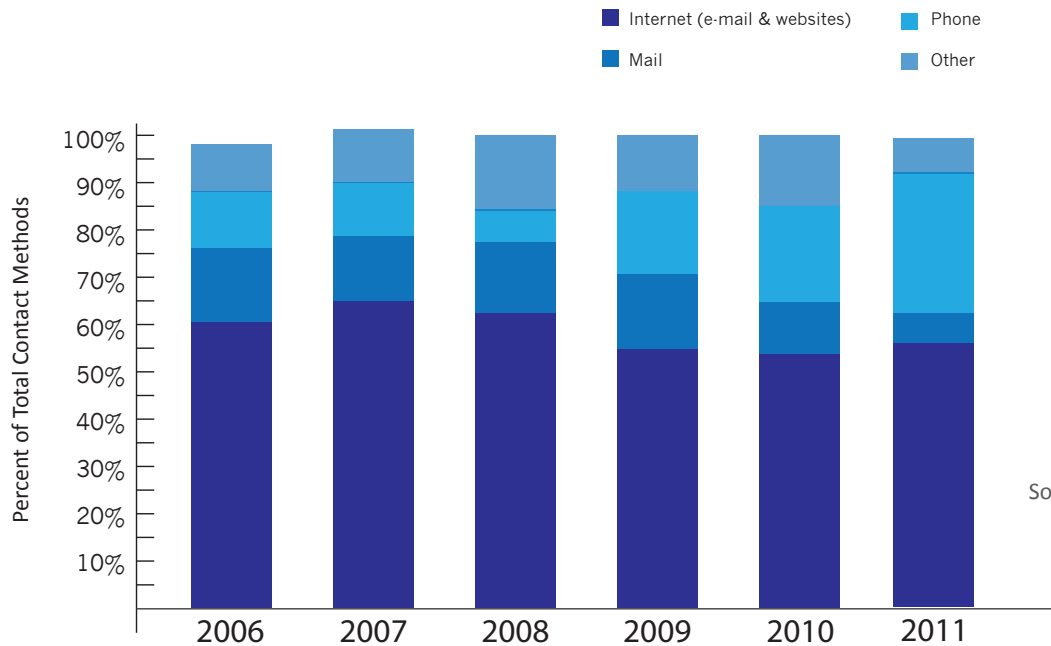
- Occasionally fear and even threats of violence are employed, demonstrating that fraud is not, in fact, entirely a non-violent crime.
- Around 1 in 5 of Nigerian-originated fraud victims reported that the offenders made threats of violence against either the victim or their family (Ross and Smith, 2011).

*“It’s all about packaging and the picture that you paint for them — the image, all about the dream you’re making for them.”*

Ruffenauch, 2004, quoting convicted fraudster

### Internet is the contact method of choice for fraud.

Although telemarketing has long been associated with consumer fraud, the internet has consistently been the most frequently reported method of contact for fraud victimization in recent years.

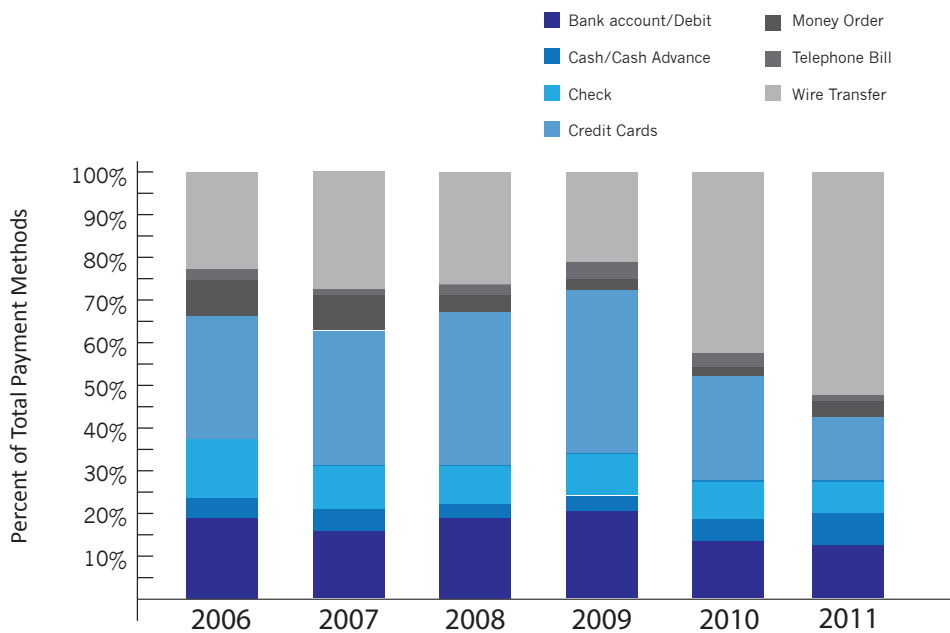


Source: Federal Trade Commission, 2009, 2011, 2012

\*Some years may not add up to 100% due to rounding in the original data source.

### Payment methods for fraud are diverse.

The chart below shows Consumer Sentinel Network fraud complaints by method of consumer payment. Note that these figures include a significant number of complaints from CSN data contributors MoneyGram International and Western Union Money Transfer, which may affect the distribution of the reported method of payment.



Source: Federal Trade Commission, 2009, 2011, 2012

*“As suggested by criminological theories, the occurrence of Internet deception is increasing at approximately the rate of growth of the Internet itself.”*

Grazioli and Jarvenpaa, 2003, p. 4



# NEXT STEPS & QUESTIONS

- Are there persuasive methods used in fraud that differ in nature from legitimate persuasive methods?
- Is it possible to effectively train people to recognize manipulative intent in persuasive messages?
- Are there persuasion strategies that can serve as markers for fraud? Perhaps excessive attempts to prove legitimacy?
- Are there certain communication technologies that are more or less conducive to detecting fraudulent ploys?

# IN CLOSING

There is still a great deal that we do not know about fraud.

Our ability to improve our understanding is most limited by the difficulty of acquiring reliable information and data.

Appreciating the incompleteness of our information can prevent reliance on measures that underestimate the problem, and can help temper conclusions about fraud's victims and offenders.

Fraud dwarfs the oft-quoted \$40 billion figure. Individual likelihood of victimization is a factor of both exposure and susceptibility, with the vast majority of consumers vulnerable under the right circumstances. Fraudsters appear to be individuals unable to achieve the financial success in the mainstream that they feel they deserve.

Research within and across a wide range of disciplines is necessary to help shed light on this complex problem. Given the hidden nature of fraud, research may not yield conclusive answers to the basic questions of fraud's impact, victims, and perpetrators, yet conclusive answers are not required for definitive action. Even with limitations of data and resources, developing our understanding of fraud's underpinnings, enhancing the sophistication of fraudster and victim profiling, and tracking fraud's evolution can help guide future fraud-fighting efforts.

# APPENDICES

I. Distribution of Original Research Data

II. Victim Profiling Sources

III. Bibliography

# I. DISTRIBUTION OF ORIGINAL RESEARCH DATA

Symbols (below) indicate shared data sources	Fraud Rate	Report Rate	Under-admit Rate	Other Fraud Impact	Rate by Type	Cost per person	Cost type of fraud	Victims most targeted	Most susceptible	Fraudster profiling	Communication methods	Persuasion strategies	Other trends
AARP, 1994	✓	✓			✓			✓	✓				
AARP, 1996		✓			✓				✓		✓	✓	✓
AARP, 1996									✓				
AARP, 1997													
AARP, 2003	✓	✓	✓						✓				
AARP, 2003a					✓	✓			✓				
AARP, 2007*		✓	✓		✓				✓				
AARP 2008					✓	✓							
AARP, 2011		✓	✓					✓	✓				
Alves and Wilson, 2008									✓				
British Columbia Securities Commission, 2012	✓					✓			✓				
Button et al., 2009		✓		✓		✓	✓	✓	✓		✓	✓	
Button et al., 2010				✓									
Copes et al., 2001 ☹		✓											
Cukier et al., 2007												✓	
Deem, 2000				✓									
Doocy et al., 2001								✓		✓		✓	✓
Downs et al., 2006	✓				✓				✓				
Federal Bureau of Investigations, 2011							✓						✓
Consumer Fraud Research Group, 2006†			✓						✓				
FINRA Foundation (formerly NASD), 2007		✓	✓						✓		✓	✓	
Friedman, 1992								✓	✓				
Federal Trade Commission, 2012	✓				✓	✓	✓	✓	✓		✓		✓
Federal Trade Commission, 2004	✓				✓	✓	✓		✓		✓		
Federal Trade Commission, 2007	✓				✓	✓	✓		✓		✓		✓
Ganzini et al., 1990				✓									
Grabosky and Duffield, 2001										✓			
Grazioli and Jarvenpaa, 2000					✓							✓	
Grazioli and Jarvenpaa, 2003					✓	✓				✓		✓	✓
Harrington, 2009									✓				
Holtfreter et al., 2006	✓					✓			✓		✓		
Holtfreter et al., 2008	✓				✓	✓		✓	✓				
Holtfreter et al., 2010									✓				✓
Horvitz and Pratkanis, 2002									✓			✓	
Jagatic et al., 2005				✓					✓			✓	✓
Kerley and Copes, 2002 ☹	✓	✓			✓	✓			✓				
Kirk, 2008	✓												
Langenderfer and Shimp, 2001									✓				
Lee and Geistfeld, 1999								✓	✓				
Lee and Soberon-Ferrer, 1997^									✓				
Levi et al., 2007						✓							
Mason and Benson, 1996 (☹)		✓											
MetLife, 2011						✓		✓	✓				✓

Symbols (below) indicate shared data sources	Fraud Rate	Report Rate	Under-admit Rate	Other Fraud Impact	Rate by Type	Cost per person	Cost type of fraud	Victims most targeted	Most susceptible	Fraudster profiling	Communication methods	Persuasion strategies	Other trends
Muscat et al., 2002	✓	✓			✓				✓				
National Consumers League, 2011					✓				✓		✓		✓
National Institute of Justice, 1995☆													
National White Collar Crime Center, 2011	✓	✓			✓								✓
National White Collar Crime Center, 2006	✓	✓			✓				✓				
National White Collar Crime Center, 2000 *	✓	✓							✓				
Office of Fair Trading, 2006a	✓	✓		✓	✓	✓	✓	✓	✓			✓	
Office of Fair Trading, 2009	✓								✓			✓	
Pratt et al., 2010	✓							✓			✓		
Reiboldt and Vogel, 2003									✓				
Reisig and Holtfreter, 2007		✓											
Ross and Smith, 2011	✓	✓			✓	✓			✓		✓	✓	
Sakurai and Smith 2003										✓			
Schoepfer and Piquero, 2009 *		✓							✓				
Shadel and Pak, 2007*†		✓	✓		✓				✓			✓	
Shichor et al., in Pontell and Shichor, 2001						✓			✓			✓	
Shover et al., 2004#										✓			
Shover et al., 2003#										✓			
Smith, 2004										✓			
Soberon-Ferrer and Lee, 1996^													
Struck, 2006								✓	✓				
Takasaki, 2011				✓		✓	✓						
Titus et al., 1995☆	✓	✓		✓	✓		✓	✓	✓				
Trahan et al., 2005									✓			✓	
Van Wilsem, 2011					✓	✓			✓				
Van Wyk and Benson, 1997 🐼	✓							✓	✓				
Van Wyk and Mason, 2001 🐼	✓	✓						✓	✓				
Wall Street Journal and Pennsylvania Securities Commission, 2004								✓		✓		✓	✓

## II. VICTIM PROFILING SOURCES

The following list outlines which publications provide data for each of the victim profiling characteristics.

Age — Shadel and Pak, 2007; AARP, 2011; Pak, 2008; Office of Fair Trading, 2006a; Consumer Fraud Research Group, 2006; National Consumers League, 2011; Van Wilsem, 2011; British Columbia Securities Commission, 2012; Federal Trade Commission, 2012; Federal Trade Commission, 2007; Federal Trade Commission, 2004; AARP, 1996; AARP, 2003a; Muscat et al., 2002; Ross and Smith, 2011; Kerley and Copes, 2002; Lee and Geistfeld, 1999; Lee and Soberon-Ferrer, 1997; Van Wyk and Benson, 1997; Titus et al., 1995; Van Wyk and Mason, 2001; Schoepfer and Piquero, 2009; Holtfreter et al., 2006

Education — Shadel and Pak, 2007; AARP, 2011; Pak, 2008; Consumer Fraud Research Group, 2006; Federal Trade Commission, 2007; Federal Trade Commission, 2004; AARP, 2003a; Ross and Smith, 2011; Kerley and Copes, 2002; Lee and Geistfeld, 1999; Lee and Soberon-Ferrer, 1997; Van Wyk and Benson, 1997; Titus et al., 1995; AARP, 1996; Schoepfer and Piquero, 2009

Financial Literacy — Shadel and Pak, 2007; Consumer Fraud Research Group, 2006; Office of Fair Trading, 2006a; Van Wilsem, 2011; AARP, 2011; British Columbia Securities Commission, 2012

Gender — Shadel and Pak, 2007; AARP, 2011; Pak, 2008; Office of Fair Trading, 2006a; Consumer Fraud Research Group, 2006; Federal Trade Commission, 2007; Federal Trade Commission, 2004; AARP, 1996; AARP, 2003; Ross and Smith, 2011; Kerley and Copes, 2002; Shichor et al., in Pontell and Shichor, 2001; Lee and Geistfeld, 1999; Lee and Soberon-Ferrer, 1997; Van Wyk and Benson, 1997; Titus et al., 1995; Schoepfer and Piquero, 2009; Holtfreter et al., 2006; National White Collar Crime Center, 2006; Button et al., 2009b

Income — Shadel and Pak, 2007; AARP, 2011; Pak, 2008; Consumer Fraud Research Group, 2006; Federal Trade Commission, 2007; Federal Trade Commission, 2004; AARP, 2003a; Ross and Smith, 2011; Kerley and Copes, 2002; Shichor et al., in Pontell and Shichor, 2001; Lee and Geistfeld, 1999; Lee and Soberon-Ferrer, 1997; Van Wyk and Benson, 1997; Titus et al., 1995; AARP, 1996; Van Wyk and Mason, 2001; Schoepfer and Piquero, 2009; Holtfreter et al., 2006; National White Collar Crime Center, 2006

Household Size — Shadel and Pak, 2007; AARP, 1996; Lee and Geistfeld, 1999; Titus et al., 1995

Race — Shadel and Pak, 2007; Federal Trade Commission, 2007; Federal Trade Commission, 2004; AARP, 1996; AARP, 2003a; Kerley and Copes, 2002; Lee and Geistfeld, 1999; Lee and Soberon-Ferrer, 1997; Titus et al., 1995; National White Collar Crime Center, 2006

Urban/Rural Environment — Van Wilsem, 2011; National White Collar Crime Center, 2006; Titus et al., 1995; Shichor et al., in Pontell and Shichor, 2001

Risk-Taking — Van Wyk and Mason, 2001; FINRA Foundation, 2007; van Wyk and Benson, 1997; Schoepfer and Piquero, 2009; National White Collar Crime Center, 2000

Impulsivity — Van Wilsem, 2011; Holtfreter et al., 2008; AARP, 2003a

Awareness of Scams Generally — Office of Fair Trading, 2009; AARP, 2003a

Marital Status — Shadel and Pak, 2007; AARP, 2011; Pak, 2008; Consumer Fraud Research Group, 2006; Federal Trade Commission, 2007; Federal Trade Commission, 2004; AARP, 1996; AARP, 2003a; Kerley and Copes, 2002; Shichor et al., in Pontell and Shichor, 2001; Lee and Soberon-Ferrer, 1997

# III. BIBLIOGRAPHY

- AARP. (1996). *Telemarketing fraud victimization of older Americans: an AARP survey*. Washington, DC: AARP.
- AARP. (1999). *Consumer behavior, experiences and attitudes: A comparison by age groups*. Washington, DC: AARP. Retrieved from [http://www.aarp.org/money/scams-fraud/info-1999/d16907\\_behavior.html](http://www.aarp.org/money/scams-fraud/info-1999/d16907_behavior.html)
- AARP. (2002). *AARP Michigan home repair fraud survey*. Retrieved from <http://www.aarp.org/money/scams-fraud/info-2002/aresearch-import-207.html>
- AARP. (2003a). *Off the hook: reducing participation in telemarketing fraud*. AARP Foundation. Washington, DC: AARP.
- AARP. (2003b). *2003 Consumer experience survey: Insights on consumer credit behavior, fraud and financial planning*. Washington, DC: AARP. Retrieved from <http://www.aarp.org/money/credit-loans-debt/info-2003/aresearch-import-131.html>
- AARP. (2003c). *2002 AARP Montana consumer fraud survey*. Retrieved from <http://www.aarp.org/money/scams-fraud/info-2003/aresearch-import-215.html>
- AARP. (2003d). *Washington consumer fraud and protection survey*. Retrieved from [http://www.aarp.org/money/scams-fraud/info-2003/wa\\_fraud\\_03.html](http://www.aarp.org/money/scams-fraud/info-2003/wa_fraud_03.html)
- AARP. (2003e). *Attitudes toward consumer issues: A 2003 survey of AARP members in West Virginia*. Retrieved from [http://www.aarp.org/money/scams-fraud/info-2003/wv\\_consumer\\_2003.html](http://www.aarp.org/money/scams-fraud/info-2003/wv_consumer_2003.html)
- AARP. (2007). *Stolen futures: An AARP Washington survey of investors and victims of investment fraud*. Washington, DC: AARP. Retrieved from [http://www.aarp.org/money/scams-fraud/info-2007/wa\\_fraud\\_07.html](http://www.aarp.org/money/scams-fraud/info-2007/wa_fraud_07.html)
- AARP. (2008). *Consumer fraud: A 2008 survey of AARP Colorado members' experiences and opinions*. Retrieved from [http://www.aarp.org/money/scams-fraud/info-10-2008/co\\_fraud\\_08.html](http://www.aarp.org/money/scams-fraud/info-10-2008/co_fraud_08.html)
- AARP. (2009). *Protecting older investors: 2009 free lunch seminar report*. Retrieved from <http://assets.aarp.org/rgcenter/consume/freelunch.pdf>
- AARP. (2010). *Consumer fraud issues: survey of AARP members age 50+ in West Virginia*. Retrieved from [http://www.aarp.org/money/scams-fraud/info-03-2010/wva\\_fraud\\_10.html](http://www.aarp.org/money/scams-fraud/info-03-2010/wva_fraud_10.html)
- AARP. (2011). *AARP Foundation national fraud victim study*. Report by Shadel, D., & Pak, K. Washington, DC: AARP. Retrieved from <http://www.aarp.org/money/scams-fraud/info-03-2011/fraud-victims-11.html>
- Allen, J. V. (2000). Financial abuse of elders and dependent adults: The FAST (Financial Abuse Specialist Team) Approach. *Journal of Elder Abuse & Neglect*, 12(2), 85–91. doi:10.1300/J084v12n02\_09
- Alves, L. M., & Wilson, S. R. (2008). The effects of loneliness on telemarketing fraud vulnerability among older adults. *Journal of Elder Abuse & Neglect*, 20(1), 63–85. doi:10.1300/J084v20n01\_04
- Aziz, S. J., Bolick, D. C., Kleinman, M. T., & Shadel, D. P. (2000). The national telemarketing victim call center: Combating telemarketing fraud in the United States. *Journal of Elder Abuse & Neglect*, 12(2), 93–98. doi:10.1300/J084v12n02\_10
- Baker, S. M., Gentry, J. W., & Rittenburg, T. L. (2005). Building understanding of the domain of consumer vulnerability. *Journal of Macromarketing*, 25(2), 128–139. doi:10.1177/0276146705280622
- Baker, W., & Faulkner, R. R. (2003). Diffusion of fraud: Intermediate economic crime and investor dynamics. *Sociology Department Faculty Publication Series*, 41(4). Retrieved from [http://scholarworks.umass.edu/sociol\\_faculty\\_pubs/110](http://scholarworks.umass.edu/sociol_faculty_pubs/110)
- Bales, K., & Fox, T. L. (2009). Evaluating a trend analysis of fraud factors. *Academy of Accounting and Financial Studies*, 1–85.
- Bateson, H., & Morton, J. (2009). *Conned: scams, frauds and swindles*. Piatkus Books.

- Bearden, W. O., Netemeyer, R. G., & Teel, J. E. (1989). Measurement of consumer susceptibility to interpersonal influence. *Journal of Consumer Research*, 15(4), 473–81.
- Benson, M., & Simpson, S. S. (2009). *White collar crime: An opportunity perspective* (1st ed.). Routledge.
- Bower, J., & Gilson, S. (2003). The social cost of fraud and bankruptcy. *Harvard Business Review*. Retrieved from <http://hbr.org/2003/12/the-social-cost-of-fraud-and-bankruptcy/ar/1>
- Boyle, J. M. (1992). *Fraud victimization survey, 1990*. Inter-university Consortium for Political and Social Research.
- Braithwaite, J. (2010). Diagnostics of white-collar crime prevention. *Criminology & Public Policy*, 9(3), 621–626. doi:10.1111/j.1745-9133.2010.00655.x
- Burrows, J. W. (2008). Measuring the impact of fraud in the UK: A conceptual and empirical journey. *The British Journal of Criminology*, 48(3), 293-318. Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1148055](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1148055)
- Butler, R. N. (1968). Why are older consumers so susceptible? *Geriatrics*, 23(12), 83–88.
- Button, M., Gee, J., Lewis, C., & Tapley, J. (2010). *The human cost of fraud: A vox populi*. Centre for Counter Fraud Studies & MacIntyre Hudson. Retrieved from <http://www.port.ac.uk/departments/academic/icjs/centreforcounterfraudstudies/documents/filetodownload,116542,en.pdf>
- Button, M., Lewis, C., & Tapley, J. (2009a). *A better deal for fraud victims: research into victims' needs and experiences*. Project Report. National Fraud Authority. Retrieved from <http://eprints.port.ac.uk/4067/>
- Button, M., Lewis, C., & Tapley, J. (2009b). *Fraud typologies and the victims of fraud literature review*. Project Report. National Fraud Authority, London. Retrieved from <http://eprints.port.ac.uk/3989/>
- Carcach, C., Graycar, A., & Muscat, G. (2001). The victimisation of older Australians. *Trends & Issues in Crime and Criminal Justice*. Australian Institute of Criminology. Retrieved from <http://192.190.66.44/documents/6/C/8/%7B6C8F8118-CEFD-4BAF-8947-DA10C934872E%7Dti212.pdf>
- Carey, M., & Sherman, G. (1976). *A compendium of bunk: or, How to spot a con artist: a handbook for fraud investigators, bankers, and other custodians of the public trust*. Thomas.
- Choi, N. G., Kulick, D. B., & Mayer, J. (1999). Financial exploitation of elders: Analysis of risk factors based on county adult protective services data. *Journal of Elder Abuse & Neglect*, 10(3-4), 39–62. doi:10.1300/J084v10n03\_03
- Consumer Fraud Research Group. (2006). *Investor fraud study final report*. NASD Investor Education Foundation.
- Copes, H., Kerley, K. R., Mason, K. A., & Van Wyk, J. (2001). Reporting behavior of fraud victims and black's theory of law: An empirical assessment. *Justice Quarterly*, 18(2), 343–363. doi:10.1080/07418820100094931
- Croall, H. (1989). Who is the white-collar criminal? *British Journal of Criminology*, 29(2), 157–174.
- Cukier, W., Nesselroth, E., & Cody, S. (2007). Genre, narrative and the “nigerian letter” in electronic mail. *Proceedings of the 40th Hawaii International Conference on System Sciences*. doi:10.1109/HICSS.2007.238
- Deem, D. L. (2000). Notes from the field: Observations in working with the forgotten victims of personal financial crimes. *Journal of Elder Abuse & Neglect*, 12(2), 33–48. doi:10.1300/J084v12n02\_05
- Doig, Alan. (2006). *Fraud*. Cullompton: Willan.
- Doocy, J. H., Shichor, D., Sechrest, D. K., & Geis, G. (2001). Telemarketing fraud: Who are the tricksters and what makes them trick? *Security Journal*, 14(3), 7–26. doi:10.1057/palgrave.sj.8340087
- Dorn, N., Levi, M., Artingstall, D., & Howell, J. (2009). *Impacts of financial crimes and amenability to control by the FSA: proposed framework for generating data in a comparative manner*. SSRN eLibrary. Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1458366](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1458366)



- Downs, J. S., Holbrook, M. B., & Cranor, L. F. (2006). Decision strategies and susceptibility to phishing. *Proceedings of the second symposium on Usable privacy and security*, 79–90. Retrieved from <http://dl.acm.org/citation.cfm?id=1143120.1143131>
- Duffield, G. M., & Grabosky, P. (2001). The psychology of fraud. *Trends & Issues in Crime and Criminal Justice*. Australian Institute of Criminology. Retrieved from [http://www.aic.gov.au/publications/current\\_series/tandi/181-200/tandi199.aspx](http://www.aic.gov.au/publications/current_series/tandi/181-200/tandi199.aspx)
- Federal Bureau of Investigations. (2011). *Financial crimes report 2010-2011*. FBI. Retrieved from <http://www.fbi.gov/stats-services/publications/financial-crimes-report-2010-2011/financial-crimes-report-2010-2011>
- Federal Trade Commission. (2004). *Consumer fraud in the United States: An FTC survey*. Report by Anderson, K. Federal Trade Commission. Washington, DC.
- Federal Trade Commission. (2007). *Consumer fraud in the United States: The second FTC survey*. Report by Anderson, K. Federal Trade Commission. Washington, DC.
- Federal Trade Commission. (2008). *Consumer fraud and identity theft complaint data: January - December 2007*. Federal Trade Commission. Washington, DC.
- Federal Trade Commission. (2009). *Consumer sentinel network data book for January - December 2008*. Federal Trade Commission. Washington, DC.
- Federal Trade Commission. (2011). *Consumer sentinel network data book for January - December 2010*. Federal Trade Commission. Washington, DC.
- Federal Trade Commission. (2012). *Consumer sentinel network data book for January - December 2011*. Federal Trade Commission. Washington, DC.
- FINRA Foundation (formerly NASD). (2006). *Senior investor literacy and fraud susceptibility survey*. Retrieved from [http://www.finrafoundation.org/web/groups/sai/@sai/documents/sai\\_original\\_content/p036699.pdf](http://www.finrafoundation.org/web/groups/sai/@sai/documents/sai_original_content/p036699.pdf)
- FINRA Foundation. (2007). *Senior fraud risk survey*. FINRA Investor Education Foundation. Washington, DC.
- Fraud Advisory Panel. (2006). *Victims of fraud*. Fraud Advisory Panel.
- Friedman, M. (1992). Confidence swindles of older consumers. *Journal of Consumer Affairs*, 26(1), 20–46. doi:10.1111/j.1745-6606.1992.tb00014.x
- Friedman, M. (1998). Coping with consumer fraud: The need for a paradigm shift. *Journal of Consumer Affairs*, 32(1), 1–12. doi:10.1111/j.1745-6606.1998.tb00397.x
- Friedrichs, D. O. (2009). Trusted criminals: white collar crime. In *Contemporary Society* (4th ed.). Wadsworth Publishing.
- Furnell, S. M. (2004). Getting caught in the phishing net. *Network Security*, 5, 14–18. doi:10.1016/S1353-4858(04)00081-9
- Gannon, R., & Doig, A. (2010). Ducking the answer? Fraud strategies and police resources. *Policing and Society*, 20(1), 39–60. doi:10.1080/10439460903377329
- Ganzini, L., McFarland, B., & Bloom, J. (1990). Victims of fraud: comparing victims of white collar and violent crime. *The Bulletin of the American Academy of Psychiatry and the Law*, 18(1), 55–63.
- Gee, J., Button, M., & Brooks, G. (2009). *The financial cost of fraud*. Working Paper. MacIntyre Hudson, Milton Keynes. Retrieved from <http://eprints.port.ac.uk/3988/>
- Gee, Jim, Button, M., & Brooks, G. (2011). *The financial cost of fraud: what data from around the world shows*. Centre for Counter Fraud Studies & MacIntyre Hudson.

- Geis, G., Pontell, H. N., & Shichor, D. (2001). *Contemporary issues in crime and criminal justice: essays in honor of Gilbert Geis*. Prentice Hall.
- Gibbs, C., McGarrell, E. F., & Axelrod, M. (2010). Transnational white-collar crime and risk. *Criminology & Public Policy*, 9(3), 543–560. doi:10.1111/j.1745-9133.2010.00649.x
- Grabosky, P. N., & Duffield, G. M. (2001). *Red flags of fraud*. Australian Institute of Criminology.
- Grabosky, P., & Shover, N. (2010). Forestalling the next epidemic of white-collar crime. *Criminology & Public Policy*, 9(3), 641–654. doi:10.1111/j.1745-9133.2010.00658.x
- Grazioli, S., & Jarvenpaa, S. L. (2000). Perils of internet fraud: an empirical investigation of deception and trust with experienced Internet consumers. *IEEE Transactions on Systems, Man, and Cybernetics - Part A: Systems and Humans*, 30(4), 395–410. doi:10.1109/3468.852434
- Grazioli, Stefano, & Jarvenpaa, S. L. (2003). Deceived: under target online. *Communications of the ACM*, 46(12), 196–205. doi:10.1145/953460.953500
- Grazioli, Stefano, Johnson, P. E., & Jamal, K. (2006). *A cognitive approach to fraud detection*. SSRN eLibrary. Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=920222](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=920222)
- Gregg, D. G., & Scott, J. E. (2006). The role of reputation systems in reducing on-line auction fraud. *International Journal of Electronic Commerce*, 10(3), 95–120.
- Harrington, B. (Ed.). (2009). *Deception: from ancient empires to internet dating* (1st ed.). Stanford University Press.
- Henderson, M. A. (2000). *How con games work*. Citadel.
- Holtfreter, K., Reisig, M. D., & Blomberg, T. G. (2005). Consumer fraud victimization in Florida: An empirical study. *St. Thomas Law Review*, 18, 761.
- Holtfreter, K., Reisig, M. D., Piquero, N. L., & Piquero, A. R. (2010). Low self-control and fraud offending, victimization, and their overlap. *Criminal Justice and Behavior*, 37(2), 188–203. doi:10.1177/0093854809354977
- Holtfreter, K., Reisig, M. D., & Pratt, T. C. (2008). Low self-control, routine activities, and fraud victimization. *Criminology*, 46(1), 189–220. doi:10.1111/j.1745-9125.2008.00101.x
- Holtfreter, K., Van Slyke, S., & Blomberg, T. (2005). Sociolegal change in consumer fraud: From victim-offender interactions to global networks. *Crime, Law and Social Change*, 44(3), 251–275. doi:10.1007/s10611-006-9006-8
- Horvitz, T., & Pratkanis, A. R. (2002). A laboratory demonstration of the fraudulent telemarketers' 1-in-5 prize tactic. *Journal of Applied Social Psychology*, 32(2), 310–317. doi:10.1111/j.1559-1816.2002.tb00217.x
- Houtlosser, P., & van Rees, A. (Eds.) (2006). *Considering pragma-dialectics*. Lawrence Erlbaum Associates, Inc. Publishers. New Jersey.
- International Crime Victim Survey. (2007). *Criminal victimisation in international perspective: key findings from the 2004-2005 ICVS and EU ICS* (No. 257). Tilburg University, UNICRI, United Nations Office on Drugs and Crime.
- Jacob, C., & Berger, P. (1995). *Twisted genius: Confessions of a \$10 million scam man* (First Printing.). Four Walls Eight Windows.
- Jagatic, T. N., Johnson, N. A., Jakobsson, M., & Menczer, F. (2007). Social phishing. *Communications of the ACM*, 50(10), 94–100. doi:10.1145/1290958.1290968
- James, D. (1993). *How con artists are making \$billions yearly: Step-by step procedures con artists are using to scam you*. Hughes Henshaw Pubns.
- Johnson, P. E., Grazioli, S., & Jamal, K. (1993). Fraud detection: Intentionality and deception in cognition. *Accounting, Organizations and Society*, 18(5), 467–488.

- Kaye, A. P., & Darling, G. (2000). Oregon's efforts to reduce elder financial exploitation. *Journal of Elder Abuse & Neglect*, 12(2), 99–102. doi:10.1300/J084v12n02\_11
- Kerley, K., & Copes, H. (2002). Personal fraud victims and their official responses to victimization. *Journal of Police and Criminal Psychology*, 17(1), 19–35. doi:10.1007/BF02802859
- Kirk, D. (2008). Opinion - fighting fraud. *Journal of Criminal Law*, 72, 335.
- Kitchens, T. L. (1993). *The cash flow analysis method: following the paper trail in Ponzi schemes*. FBI Law Enforcement Bulletin, 62(8), 10-13.
- KPMG. (2012). *Boom time for fraudsters as "austerity bites"*. Retrieved from <https://www.kpmg.com/UK/en/IssuesAndInsights/ArticlesPublications/NewsReleases/Pages/fraud-barometer-boom-time-for-fraudsters-as-austerity-bites.aspx>
- Kumaraguru, P., Rhee, Y., Acquisti, R., Cranor, L. F., Hong, J., & Nunge, E. (2007). Protecting people from phishing: the design and evaluation of an embedded training email system. *In Proceedings of the SIGCHI conference on Human factors in computing systems*. doi.acm.org/10.1145/1240624.1240760
- Lane, S. W. (2011). Are local authority fraud teams fit for purpose? *Journal of Financial Crime*, 18(2), 195–213. doi:10.1108/13590791111127769
- Langenderfer, J., & Shimp, T. A. (2001). Consumer vulnerability to scams, swindles, and fraud: A new theory of visceral influences on persuasion. *Psychology and Marketing*, 18(7), 763–783. doi:10.1002/mar.1029
- Lee, J., & Soberon-Ferrer, H. (1997). Consumer vulnerability to fraud: Influencing factors. *Journal of Consumer Affairs*, 31(1), 70–89. doi:10.1111/j.1745-6606.1997.tb00827.x
- Levi, M., Burrows, J., Fleming, M. H., & Hopkins, M. (2007). *The nature, extent and economic impact of fraud in the UK*. Association of Chief Police Officers.
- Levi, M. (2006). The media construction of financial white-collar crimes. *British Journal of Criminology*, 46(6), 1037–1057. doi:10.1093/bjc/azl079
- Levi, M. (2008a). *The phantom capitalists: The organization and control of long-firm fraud*. Ashgate Publishing, Ltd.
- Levi, M. (2008b). White-collar, organised and cyber crimes in the media: some contrasts and similarities. *Crime, Law and Social Change*, 49(5), 365–377. doi:10.1007/s10611-008-9111-y
- Levi, M. (2010a). The phantom capitalists ride again: a response to my critics. *Global Crime*, 11(3), 350–354. doi:10.1080/17440572.2010.490644
- Levi, M. (2010b). Hitting the suite spot: sentencing frauds. *Journal of Financial Crime*, 17(1), 116–132. doi:10.1108/13590791011009400
- Martin, N. (2009). Consumer scams and the elderly: Preserving independence through shifting default rules. *Elder Law Journal*, 17, 1.
- Mason, K. A., & Benson, M. L. (1996). The effect of social support on fraud victims' reporting behavior: A research note. *Justice Quarterly*, 13(3), 511–524. doi:10.1080/07418829600093071
- Moore, E., & Mills, M. (1990). The neglected victims and unexamined costs of white-collar crime. *Crime & Delinquency*, 36(3), 408–418. doi:10.1177/0011128790036003007
- Moore, M., & Lee, J. (2000). The vulnerable elderly consumer: Examination of an actual victim profile. *The Journal of Consumer Education*, 51, 28-34.

- Muscat, G., James, M., & Graycar, A. (2002). Older people and consumer fraud. *Trends & Issues in Crime and Criminal Justice*. Australian Institute of Criminology. Retrieved from [http://www.aic.gov.au/publications/current series/tandi/201-220/tandi220.aspx](http://www.aic.gov.au/publications/current_series/tandi/201-220/tandi220.aspx)
- Natarajan, M. (2010). *International crime and justice*. Cambridge University Press.
- National Consumers' League. (2011). *NCL's fraud center: Top scams of 2011*. National Consumers' League.
- National Institute of Justice. (1995). *Fraud victimization: The extent, the targets, the effects*. Retrieved from <http://www.nij.gov/pubs-sum/184353.htm>
- National White Collar Crime Center. (2000). Report by Rebovich, D. J., & Layne, J. *The national public survey on white collar crime*. Morgantown, WV.
- National White Collar Crime Center. (2006). Report by Kane, J., & Wall, A.D. *The 2005 national public survey on white collar crime*. Morgantown, WV.
- National White Collar Crime Center. (2011). Report by Huff, R. Desilets, C., & Kane, J. *The 2010 national public survey on white collar crime*. Morgantown, WV.
- Norrsgard, L. E., & Norrgard, J. M. (1998). *Consumer fraud: a reference handbook*. ABC-CLIO.
- Office of Fair Trading. (2006a). *Fraud review final report: A consultation response by the Office of Fair Trading* (No. OFT875). Office of Fair Trading.
- Office of Fair Trading. (2006b). *Research on impact of mass marketed scams: A summary of research into the impact of scams on UK consumers*. (No. OFT883). Office of Fair Trading.
- Office of Fair Trading. (2009). *The psychology of scams: Provoking and committing errors of judgment* (No. OFT1070). Office of Fair Trading.
- Old scams, new victims: breaking the cycle of victimization: hearing before the Special Committee on the Aging*. United States Senate, 109th Congress, first session, Washington, DC. (July 27, 2005).
- Pan, G., Seow, P., Suwardy, T., & Gay, E. (2011). Fraud: A review and research agenda. *Accountancy Business and the Public Interest 2011*, 138-178. Retrieved from <http://visar.csustan.edu/aaba/Seow2011.pdf>
- Park, D. (2005). *Consumer fraud and the aging mind*. Scientific Testimony Presented to the Senate Special Committee on Aging (July 27, 2005).
- Park, R. E. (1915). The city: suggestions for the investigation of human behavior in the city environment. *The American Journal of Sociology*, 20(5), 577-612.
- Parry, T. G. (1992). Health expenditure in Australia: the current dilemma. *Economic Papers: A Journal of Applied Economics and Policy*, 11(2), 64-75.
- Phua, C., Lee, V., Smith, K., & Gayler, R. (2010). *A comprehensive survey of data mining-based fraud detection research*. eprint arXiv:1009.6119
- Pontell, H. N., & Geis, G. (2010). How to effectively get crooks like Bernie Madoff in Dutch. *Criminology & Public Policy*, 9(3), 475-481. doi:10.1111/j.1745-9133.2010.00643.x
- Pratkanis, Anthony R. (2005). Testimony to the U.S. Senate Special Committee on Aging. [http://aging.senate.gov/minority/public/index.cfm/files/serve?File\\_id=41cec89b-d176-607f-4be6-d80fb4c8bd6b](http://aging.senate.gov/minority/public/index.cfm/files/serve?File_id=41cec89b-d176-607f-4be6-d80fb4c8bd6b)
- Pratt, T. C., Holtfreter, K., & Reisig, M.D. (2010). Routine online activity and internet fraud targeting: Extending the generality of routine activity theory. *Journal of Research in Crime and Delinquency*, 47(3), 267-296. doi:10.1177/0022427810365903

- Reiboldt, W., & Vogel, R.E. (2003). A critical analysis of telemarketing fraud in a gated senior community. *Journal of Elder Abuse & Neglect*, 13(4), 21–38. doi:10.1300/J084v13n04\_02
- Reichman, N. (2010). Getting our attention. *Criminology & Public Policy*, 9(3), 483–491. doi:10.1111/j.1745-9133.2010.00644.x
- Reisig, M. D., & Holtfreter, K. (2007). Fraud victimization and confidence in Florida's legal authorities. *Journal of Financial Crime*, 14(2), 113–126. doi:10.1108/13590790710742618
- Rimkus, A., Melinchok, M.D., McEvoy, K., & Yeager, A.K. (Eds.) (2005). *Thesaurus of aging terminology*. Ageline Database, Research Information Center, AARP. Retrieved from [http://www.lidc.sfu.ca/uploads/page/28/AARP\\_AgeLine\\_thesaurus.pdf](http://www.lidc.sfu.ca/uploads/page/28/AARP_AgeLine_thesaurus.pdf)
- Ross, S. & Smith, R.G. (2011). Risk factors for advance fee fraud victimization. *Trends & Issues in Crime and Criminal Justice*, No. 420. Australian Government: Australian Institute of Criminology.
- Ruffenach, G. (2004). *Confessions of a scam artist: brought to you to by Pennsylvania Securities Commission*. Pennsylvania Securities Commission.
- Sakurai, Y., & Smith, R. G. (2003). Gambling as a motivation for the commission of financial crime. *Trends & Issues in Crime and Criminal Justice*, No. 256. Australian Government: Australian Institute of Criminology. Retrieved from <http://www.aic.gov.au/publications/current series/tandi/241-260/tandi256.aspx>
- Schlegel, K., & Weisburd, D. (1994). *White-collar crime reconsidered*. UPNE.
- Schoepfer, A., & Piquero, N. L. (2009). Studying the correlates of fraud victimization and reporting. *Journal of Criminal Justice*, 37(2), 209–215. doi:10.1016/j.jcrimjus.2009.02.003
- Sechrest, D. K., Shichor, D., Doocy, J. H., & Geis, G. (1998). A research note: Women's response to a telemarketing scam. *Women & Criminal Justice*, 10(1), 75–89. doi:10.1300/J012v10n01\_04
- Shadel, D. P., & Pak, K. B. S. (2007). *The psychology of consumer fraud*. Unpublished PhD dissertation, Tilburg University. Retrieved from [http://taos.publishpath.com/Websites/taos/Images/ProgramsTaosTilburgDissertations/Pak\\_ShadelDissertationFINAL.pdf](http://taos.publishpath.com/Websites/taos/Images/ProgramsTaosTilburgDissertations/Pak_ShadelDissertationFINAL.pdf)
- Shichor, D., Doocy, J. H., & Geis, G. (1996). Anger, disappointment and disgust: Reactions of victims of a telephone investment scam. *International Victimology*, 105–111.
- Shover, N., Coffey, G. S., & Sanders, C. R. (2004). Dialing for dollars: Opportunities, justifications, and telemarketing fraud. *Qualitative Sociology*, 27(1), 59–75.
- Shover, N., & Coffey, G. S. (2002). *Origins, pursuits and careers of telemarketing rredators*. University of Tennessee, Department of Sociology.
- Shover, Neal, Coffey, G. S., & Hobbs, D. (2003). Crime on the line: Telemarketing and the changing nature of professional crime. *British Journal of Criminology*, 43(3), 489–505. doi:10.1093/bjc/43.3.489
- Shover, Neal, Fox, G. L., & Mills, M. (1994). Long-term consequences of victimization by white-collar crime. *Justice Quarterly*, 11(1), 75–98. doi:10.1080/07418829400092141
- Shover, Neal, & Wright, J. P. (2001). *Crimes of privilege: Readings in white-collar crime*. Oxford University Press.
- Smith, T. R. (2004). Low self-control, staged opportunity, and subsequent fraudulent behavior. *Criminal Justice and Behavior*, 31(5), 542–563. doi:10.1177/0093854804267092
- Smith, G., Button, M., Johnston, L., & Frimpong, K. (2010, November). *Studying fraud as white collar crime*. Palgrave Macmillan, Basingstoke. Retrieved from <http://eprints.port.ac.uk/3994/>

- Smith, R. G., Holmes, M. N., & Kaufman, P. (1999). Nigerian advance fee fraud. *Trends & Issues in Crime and Criminal Justice*. Australian Institute of Criminology. Retrieved from [http://www.aic.gov.au/publications/current series/tandi/121-140/tandi121.aspx](http://www.aic.gov.au/publications/current_series/tandi/121-140/tandi121.aspx)
- Snider, L. (2010). Framing e-waste regulation. *Criminology & Public Policy*, 9(3), 569–577. doi:10.1111/j.1745-9133.2010.00651.x
- Spalek, B. (1999). Exploring the impact of financial crime: A study looking into the effects of the Maxwell scandal upon the Maxwell pensioners. *International Review of Victimology*, 6(3), 213–230. doi:10.1177/026975809900600304
- Span, P. (2012). *Tips for fighting fraud*. The New Old Age Blog. Retrieved from <http://newoldage.blogs.nytimes.com/2012/04/23/tips-for-fighting-fraud/>
- Stevenson, R. J. (1998). *The boiler room and other telephone sales scams*. University of Illinois Press.
- Struck, P. (2006). Presentation at the U.S. Securities and Exchange Commission: Seniors Summit. July, 17, 2006.
- Takasaki, Y. (2011). *Fraud and poverty: Exploring ex ante victim data*. Tsukuba Economics Working Papers.
- Teaster, P. B. (2003). *A response to the abuse of vulnerable adults: The 2000 survey of state adult protective services*. Washington, DC: National Center on Elder Abuse.
- Titus, R. M., & Gover, A.R. (2001). Personal fraud: The victims and the scams. *Crime Prevention Studies*, 12, 133–152.
- Titus, R. M., Heinzelmann, F., & Boyle, J. M. (1995). Victimization of persons by fraud. *Crime & Delinquency*, 41(1), 54–72. doi:10.1177/0011128795041001004
- Trahan, A., Marquart, J., & Mullings, J. (2005). Fraud and the American dream: Toward an understanding of fraud victimization. *Deviant Behavior*, 26(6), 601–620. doi:10.1080/01639620500218294
- United States Department of Justice. (2004). *Financial crimes against the elderly*. Retrieved from <http://www.cops.usdoj.gov/default.asp?Item=1047>
- Van De Bunt, H. (2010). Walls of secrecy and silence. *Criminology & Public Policy*, 9(3), 435–453. doi:10.1111/j.1745-9133.2010.00640.x
- Van Wyk, J., & Benson, M. (1997). Fraud victimization: Risky business or just bad luck? *American Journal of Criminal Justice*, 21(2), 163–179. doi:10.1007/BF02887448
- Vasiu, L., & Vasiu, I. (2004). Dissecting computer fraud: from definitional issues to a taxonomy. *Proceedings of the 37th Annual Hawaii International Conference on System Sciences*. doi:10.1109/HICSS.2004.1265413
- Vaughan, D., & Carlo, G. (1975). The appliance repairman: A study of victim-responsiveness and fraud. *Journal of Research in Crime and Delinquency*, 12(2), 153–161. doi:10.1177/002242787501200207
- Whitty, M. T., & Buchanan, T. (2012). The online romance scam: A serious cyber-crime. *Cyberpsychology, Behavior, and Social Networking*, 15(3), 181-183. Doi:10.1089/cyber.2011.0352
- Wilsem, J. van. (2011). “Bought it, but never got it” assessing risk factors for online consumer fraud victimization. *European Sociological Review*. doi:10.1093/esr/jcr053
- Wyk, J. V., & 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. doi:10.1177/1043986201017004003
- Yang, S., Zhao, Y., & Dhar, R. (2009). *Modeling the under reporting bias in panel survey data*. SSRN eLibrary. Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1484773](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1484773)
- Yoon, C., Cole, C. A., & Lee, M. P. (2009). Consumer decision making and aging: Current knowledge and future directions. *Journal of Consumer Psychology*, 19(1), 2–16. doi:10.1016/j.jcps.2008.12.002

The mission of the Financial Fraud Research Center at the Stanford Center on Longevity is to serve as **a hub in the fight against financial fraud**. The Center **consolidates information, connects research to practice,** and **catalyzes further research,**

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