



# **Introduction to Research**

*Learn what we know right now...*

The following discussion serves as an extensive, but in no way comprehensive, review of recent fraud related research.

For purposes of this project, fraud is defined as:

The deliberate deception of an individual with the promise of goods, services or other financial benefits that are actually nonexistent, were never intended to be provided, or were grossly misrepresented (Titus, 1995).

Given this definition, this center's focus is on criminal acts that involve a "con man" interacting with a victim. Common consumer protection issues related to unfair and deceptive practices such as misleading advertising, car repair problems or contractual disputes are not included, though information found here may inform an understanding of them. Identify theft is not a focus unless it was accomplished through some kind of social interaction (e.g. phishing schemes).

## **Prevalence: How much fraud is out there?**

### **A. What percentage of the population is defrauded each year?**

Prevalence studies typically are done by surveying a random sample of the population and asking if they have been taken by a specific scam or by fraud in general. While they are far from perfect given self-reporting error, here is a snapshot of recent studies and the percent of respondents acknowledging they had been taken in the previous year by one or more scams:

Consumer Authority, Netherlands (2008) – 16.0%

Federal Trade Commission (2007) 13.5%

UN International Crime Victim Survey – US (2005) – 12.5%

UN International Crime Victim Survey – Major Industrialized Countries – (2005) 11.0%

AARP Consumer Fraud Study in Washington State (2003) – 12.0%

Titus (1995) US Department of Justice – 15.0%

FINRA (2007) National Risk Behavior Study (investment fraud only – lifetime) – 7.1%

Office of Fair Trading – UK (2006) – 6.5%

There are methodological differences in how questions are asked in these surveys that may in part explain the variation in rates. Those interested in this data should carefully review the methodology sections of each study. There is also compelling evidence that many survey participants under-report their experience as victims, with some error rates as high as 78%. Thus the prevalence rates reported here are probably on the low end (AARP, 2003; FINRA/WISE, 2006).

## **B. What types of scams are most common?**

Many different organizations collect data about the various frauds going on in the marketplace. Most of these data are the result of tabulating consumer complaints filed with government agencies. While many victims under-report fraud in surveys, they also frequently fail to report the crime to authorities. Surveys indicate the percentage of victims reporting fraud ranges between 20% and 50%. Thus, government agency complaint data is incomplete but nevertheless provides a snapshot of fraud activity in the marketplace.

## **C. How much money is lost to fraud each year?**

The answer to this question is still unknown. The commonly quoted “\$40 billion lost to fraud” phrase is out of date. This \$40 billion figure came from a study done by Richard Titus in the early 1990s (Titus, 1995). Several organizations have more recently attempted to estimate the total dollar losses:

- The Federal Trade Commission estimated that there were 48.7 million individual fraud transactions in 2005 and the average loss was \$60 per transaction. This would put the total dollar loss to fraud at approximately \$2.92 billion per year in the United States (FTC, 2007).
- The 2006 UK fraud study estimated total dollar losses in the UK in 2005 to be 3.5 billion pounds (UK, 2006).
- The Consumer Authority in the Netherlands estimated fraud losses in 2008 totaling 579 million Euros (Consumer Authority-Netherlands, 2009).

Each of these studies had quite different methods for estimating total losses to fraud. All of them relied on some variation of individuals self-reporting their experiences with fraud.

There is no doubt that losses are significant. The Bernie Madoff case alone resulted in losses to investors of over \$50 billion, most of whom never complained to a government agency, and new multi-million dollar ponzi schemes continue to emerge.

## **Profiling: Who falls for what?**

Many of the early fraud studies attempted to profile fraud victims as a whole, without regard to which type of fraud was being committed. The results of these approaches were decidedly mixed

(Pak & Shadel, 2007). More recent efforts to determine who is falling for fraud have focused on profiling victims by scam type. The most profiling work of this kind has been done on lottery and investment fraud victims.

The primary method for profiling these victims was as follows: law enforcement agencies provided researchers with lists of individuals whose status as a lottery or investment fraud victim had been verified. They were then surveyed along with a control group of randomly-selected members of the general public in order to see how responses differed between groups.

Studies employing this methodology found some key differences between lottery victims and the general population. Lottery victims were more likely to be over 70, female, lower education, lower income, living alone, less financially literate, had an external locus of control and had experienced more negative life events (AARP, 2003; FINRA/WISE, 2006). There is also some preliminary evidence from pilot studies that lottery victims might have a higher incidence of cognitive impairment.

Studies of investment fraud victims found they too had characteristics that differed from the general population. Investment victims were more likely to be between 55-62 years old, male, married, wealthier, more financially literate, more open to sales pitches used by con men, more likely to have invested in high-risk investments and not likely to have checked the background of a broker before investing (FINRA/WISE, 2006; AARP Washington, 2007; FINRA Risk Behavior Study, 2007 and AARP Foundation, 2008).

This profiling of lottery and investment fraud victims has revealed discrete demographic, psychological and situational differences that further research may wish to explore. Little work has been done to profile victims of scams other than lottery and investment fraud. A clear understanding of what type of people fall for which scams would help policy makers decide where to invest limited resources.

While several national surveys have profiled those who self-reported having been taken by various scams, such data clearly doesn't represent all victims and may be skewed by demographic differences between those who report and those who don't (FTC, 2007; Office of Fair Trade – UK, 2006; and Consumer Authority – Netherlands, 2009). The method of using lists of known victims has its limitations since they are not random samples. But we believe it is a better strategy than relying on individual self-reports.

### **Persuasion: Why do people comply with fraud pitches?**

When it comes to trying to understand why people comply with fraud pitches, researchers have zeroed in on studying the persuasion tactics cons use to defraud. In 2004, AARP and FINRA secured and transcribed over 300 undercover audiotapes of fraud pitches made by law enforcement of real con men pitching undercover investigators. They were then coded to determine what types of persuasion tactics are used for various fraud crimes. Researchers were able to identify the most commonly-used persuasion tactics for a variety of different scams (FINRA/WISE, 2006; Pak & Shadel, 2007; Pratkanis & Shadel, 2005).

A recent study done in the UK analyzed the psychological tactics used in various scams, and in particular raised important questions about the role of emotion in defrauding consumers (Office of Fair Trading, 2009). Additionally, some studies have shown that phishing scams often use social networks and context-setting strategies to gain victim's trust and defraud them (Jagatic et al., 2005).

Given the importance of a psychological understanding of fraud (both from the perspective of the victims and the perpetrators), much of the body of fraud-related research can be found within the wide field of psychology. This includes consumer psychology and marketing, neuropsychology, communications psychology and psycholinguistics, educational psychology, social psychology, etc.

### **Prevention: How has fraud prevention evolved?**

In the 1980s and 1990s, the basic theory behind fraud prevention efforts was to provide as many consumers with as much factual information as possible so they will not fall prey. In a nutshell: forewarned is forearmed.

While many state government agencies and national consumer agencies were churning out brochures and videos to distribute this information, some early studies were beginning to show that most consumers already knew a lot of the basic facts about how fraud works and many could parrot back prevention phrases like "if it sounds too good to be true, it probably is." Yet these same people were being victimized anyway. Another piece of research showed that particularly seniors found it difficult to politely end interactions with telemarketers (AARP, 1996).

Thus, the next iteration of fraud prevention was the development of specific tools like refusal scripts to get people off the phone when they were confronted with a scam artist. While these anti-fraud efforts in the mid to late 1990s represented huge commitments of resources, with dozens of government and social sector agencies throughout the country working together, they proved to be unsustainable, partly due to expense, but largely due to the fact that potential fraud victims represent a particular subset of people. As such, an initiative directed towards to public at large was particularly inefficient. In addition, such a "one size fits all" approach didn't account for the significant difference between victim types. Different messages are needed for an 80-year-old female widow who meets the lottery victim profile than for a 57-year-old male business owner who meets the investment victim profile.

Secondly, there was little, if any, research showing that brochures and videos actually prevented fraud, which made it hard to sustain funding for such activities. The only evaluation data from these early efforts were output metrics such as total number of people reached. Little behavior change research was conducted to determine if these efforts increased resistance to fraud appeals.

Finally, early attempts to forewarn consumers were not informed by the psychology literature, especially what is known about individual resistance to prevention messages such as the illusion of invulnerability (I can't be taken), psychological reactance (don't tell me what to do), threats to self-esteem (I am not a bad person) and, more recently information overload (I don't have time to read one more thing).

The latest efforts to incorporate the latest psychological, education, and decision making research into fraud prevention seeks to incorporate this sophisticated understanding. Look for upcoming findings in research and fraud prevention in our [News](#), [Research Implications](#), and [Research Archive](#).

### **Conclusion & References**

While many improvements have been made to fraud prevention tactics over the years, significant research advances are needed to understand and combat fraud. The development of these research advancements, and the multi-disciplinary initiative that will help turn academic achievements into real-world improvements, is the goal of this center. It is our hope that this interdisciplinary hub will facilitate the intellectual and practical connections necessary for more groundbreaking work in the study and prevention of financial fraud.

### **Bibliography:**

AARP (1996) Telemarketing fraud and older Americans: An AARP survey. Washington DC.

AARP Foundation (2003) Off the Hook: Reducing Participation in Telemarketing Fraud. Washington DC.

AARP Washington (2007) Stolen Futures: A Study of Investment Fraud Victims. Completed in conjunction with the Consumer Fraud Research Group, Seattle, Washington.

AARP Foundation (2008) Investor Victim Profiling. Completed in conjunction with the Consumer Fraud Research Group. Seattle, Washington.

FTC (2007) Consumer Fraud in the US: The Second FTC Survey. Washington DC. Consumer Authority (2009) Survey Report: Unfair Commercial Practices (UCPs) in the Netherlands.

FINRA/WISE (2006) Investor Fraud Study Final Report. Completed in conjunction with the Consumer Fraud Research Group and AARP Washington.

FINRA/AARP (2007) FINRA Risk Behavior Study. Completed in conjunction with Applied Research and Consulting, New York.

FINRA/AARP (2008) Outsmarting Investment Fraud Study. Completed in conjunction with the Consumer Fraud Research Group and AARP Washington.

Jagatic, T., Johnson, N., Jakobsson, M. and Filippo Menczer, (2005) Social Phishing, School of Informatics – Indiana University, Bloomington.

Office of Fair Trading (2006) Research on Impact of Mass Marketed Scams: A summary of research into the impact of scams on UK consumers, conducted by Exeter University.

Office of Fair Trading (2009) The psychology of scams: Provoking and committing errors of judgement. Prepared for the Office of Fair Trading by the University of Exeter School of Psychology.

Pak, K & Shadel, D. (2007) The Psychology of Consumer Fraud, doctoral dissertation, Tilburg University.

Pratkanis, A. and Shadel, D. (2005) Weapons of Fraud: A sourcebook for fraud fighters. AARP Washington.

Titus, Richard M., F. Heinzelmann, and J. Boyle (1995) Victimization of persons by fraud. *Crime & Delinquency* Vol. 41, No. 1, 54-72.

Sagarin, B., Cialdini, R., Rice, W., Serna, S. (2002) Dispelling the Illusion of Invulnerability: The Motivations and Mechanisms of Resistance to Persuasion, *Journal of Personality and Social Psychology*, Vol. 83, No. 3, 526 –541.

Van Dijk, (2005) Criminal Victimization in International Perspective: Key findings from the 2004-2005 – International Crime Victim Survey and European Union International Crime Survey.

(credit: *Doug Shadel, AARP Washington State Director. Stanford Financial Fraud Conference. 2009.*)