Scam: A dishonest scheme. Often a large scale impersonal scheme, targeting a lot of people not known to the scammer. Common scams include:

- 1) lotteries (Jamaican, Canadian, etc)
- 2) grandchildren arrested in another country
- 3) 419 scams (Nigerian scams) named after section of Nigerian penal code related to fraud



Brain Vulnerabilities: The Reptilian Brain

- The development of the forebrain, especially the frontal lobe and prefrontal cortex, is what makes us human
- It lets us pause and think before acting, considering the appropriateness and consequences of what we do
- Scams attempt to get us not to use this, instead returning to more primitive brain functions that operate based on risk, fear, and basic drives

Techniques of Persuasion: All About the Advertising

- Have the appearance of authority
- Give a sense of urgency
- Create a visceral feeling
- Disproportionate size of the prize to your cost
- Emotional triggers (greed, fear, sex, pity)
- Behavioral commitments (foot in the door)
- A personal touch

These common techniques induce errors in judgment and a return to more primitive reasoning. They affect everybody, not just seniors, but seniors appear a little more sensitive to them.

Risk Factors for Scam Participation

Emotional: Depression, loneliness, loss of loved ones, economic concerns, and difficulty adjusting to life phase make one prone to scams as the scammer is someone to connect with.

Behavioral: Addiction, heavy computer/smartphone use, and behavioral disinhibition are all issues that may make one more prone to participating in scams.

Societal: Difficulty keeping up with technological changes. Information overload.



Aging and the Brain (normal changes we all experience)

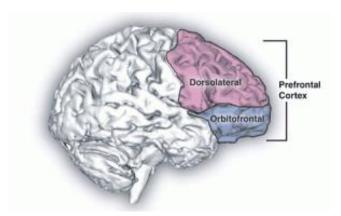
Physical Changes Associated with Aging

- brain atrophy begins in the 40s or earlier
- cerebral blood flow and metabolism decline
- neurofibrillary tangles begin to develop and neurotransmitter receptors decline

Thinking Changes Associated with Aging

- Fluid intelligence declines
 - Speed of information processing slows
 - Complex attention declines
 - o It becomes harder to solve unfamiliar problems

By themselves, these changes make rapid decision making harder, but don't fully explain why older people fall prey to scams so easily. This requires a little more analysis of the brain.



The frontal lobe: involved in the planning, execution, and control of movements

The prefrontal cortex (PFC): portion of the frontal lobe involved in that planning and decision making

Interesting Fact: damage to the PFC results in impaired judgment/real world reasoning, impulsivity, poor, and most significantly, poor awareness that these are problems.

Frontal Lobe Hypothesis of Aging (West, RL 1996): Cognitive deficits in older adults are primarily due to the anatomical and functional deterioration of the frontal lobes.

Supported by several lines of evidence including the following:

- Cognitive deficits in older adults are more pronounced in tasks that are highly dependent on executive functioning, assumed to be mediated by the prefrontal cortex.
- Age related reductions in brain volume (atrophy) are more pronounced in the prefrontal cortex than in other brain regions.



Scams and the Aging Brain – Erik Lande, PhD

<u>Key point</u>: Cognitive deficits in healthy older adults are greater for tasks that are highly dependent on executive control processes, such as inhibiting irrelevant information, coordinating multiple simultaneous operations (multi-tasking), and manipulating information within memory. These are some of the processes we would rely on to detect a scam.

Research shows that people with damage in the PFC also exhibit disinhibition and addictive behaviors and have poor insight into this, which can also lead to victimization by scams. Real world reasoning is hard to assess. One technique that has been effective is the Iowa Gambling Test, which simulates gambling and so has some similarities to the emotional and superficial motivations activated in scams. Individuals who exhibit impairment on this test tend to have damage in the prefrontal region of the brain. Older adults also have difficulty on this task.

Older adults also have weaker speed of information processing, memory, and novel reasoning, which can make rapid, real world decision making more prone to error. All of these difficulties make older adults more prone to victimization by scams.



Key point: Normal older adults who do not show significant cognitive impairment or dementia can exhibit some limitations in decision making when they are rushed and forced to rely on peripheral reasoning (emotions and urgency) rather than central processing (logic).

What Can We Do?

- **Be aware of scam warning signs**. Are they exhibiting:
 - secretive about phone calls or new friends
 - o a sudden increase in calls or junk mail
 - significant changes in how they access money, like using prepaid cards
 - sudden problems paying bills or buying food
 - lies about any of these issues
- **Begin where the victim is.** Explore:
 - o Is there denial or poor awareness of the issue? Is the victim in shock? Ashamed?
 - o Is cognitive impairment present?
 - o Identify support systems they can trust and count on



Respect autonomy while providing needed support

- Be collaborative and empathetic in your approach to the victim
- Be patient and remember this is a process
- Start with least restrictive approach to help (setting bills to autopay, or having someone go over bills and mail with the victim monthly)
- Increase support as needed



General Goals for Helping Seniors Fallen Victim to Scams

- Try to educate the senior and family about the problems they are having, but realize
 education is often not the problem, it is lack of insight into their deficits. These
 individuals know what a scam is. The problem is that their weakened insight and
 judgment limitations makes them believe that they won't fall for a scam.
- One-time interventions are not effective. Repetition that this is a scam and ongoing support is essential. Remember, scammers have spent a long time grooming them and convincing them to trust only the scammer. It will take time to change that
- Education must initially focus on building insight into their impaired reasoning and impulsivity. Once these problems can be accepted and understood, the individual will be more open to learning about how to recognize and avoid scams.
- Once insight has been established, compensatory strategies, such as phone hang-up
 devices and financial monitoring or assistance may be helpful. If attempted too soon,
 the individual may not use them and may attempt to hide their participation in scams.
- Unfortunately, in some cases supervision and limitation of access to financial assets may be necessary for protection as the individuals may be unable to develop insight into their problem.
- Family involvement and education is critical. Supervision may become necessary.



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Resources for legal advice or protection:

National Academy of Elder Law Attorneys

(NAELA)

http://www.naela.com

Resources for potential fraud or

exploitation:

Adult Protective Services (APS)

1-800-252-5400

http://www.apsnetwork.org/

National Elder Fraud Hotline

1-833-FRAUD-11 1-833-373-8311

www.justice.gov/stopelderfraud

Resources for reporting financial abuse:

Federal Trade Commission: ftc.gov

Internet Crimes: www.ic3.giv

Mass marketing fraud: stopfraud.gov

Resources for social services and investor protection:

National Center on Elder Abuse

http://www.ncea.aoa.gov

United Way

http://www.211.org

National Association of Professional Geriatric Care

Managers

http://www.caremanager.org

Case Management Society of America

http://cmsa.org/

North American Securities Administrators Association

http://www.nasaa.org Investor Protection Trust

http://www.investorprotection.org

