Elder Fraud *Prevention Summit*

October 13, 2025

aba.com/EFSummit

ABA 100 YEARS FOUNDATION

Elder Fraud *Prevention* Summit

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with generous support from

JPMorganChase

ABA 100 YEARS FOUNDATION

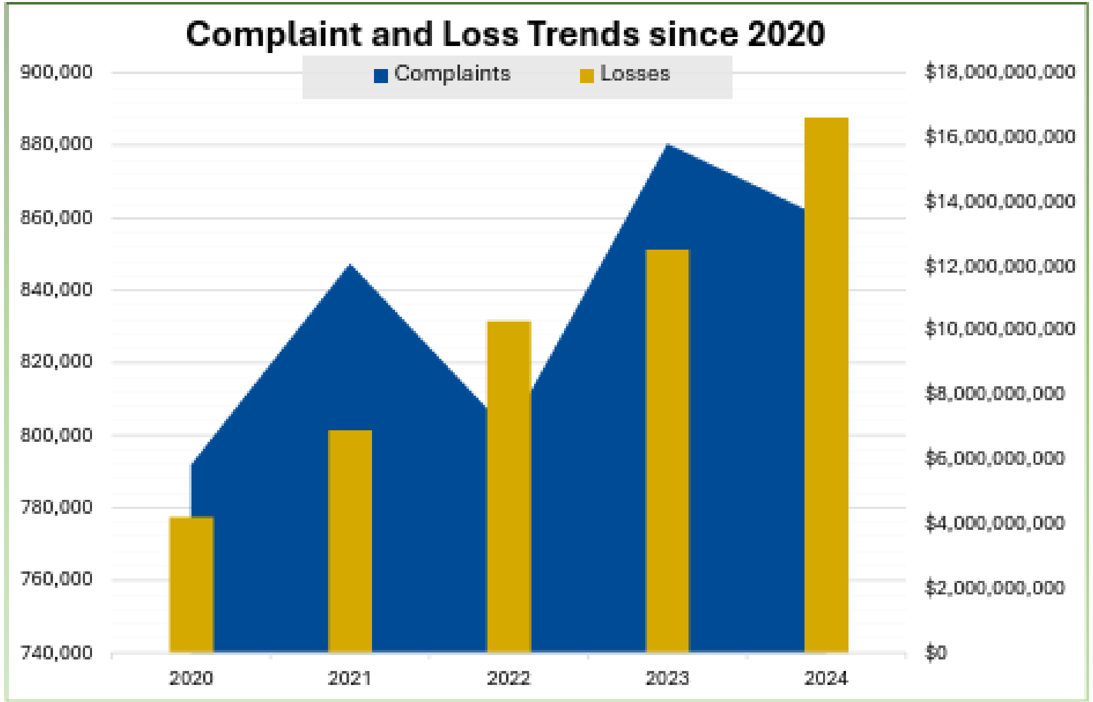
Welcome

Paul Benda
Executive Vice President, Risk, Fraud & Cybersecurity
American Bankers Association

Agenda Items

1. Fraud and Scam Trends
2. Role of Telecoms and Social Media
3. AI Deepfakes

FBI IC3 – 2024 Internet Crime Report

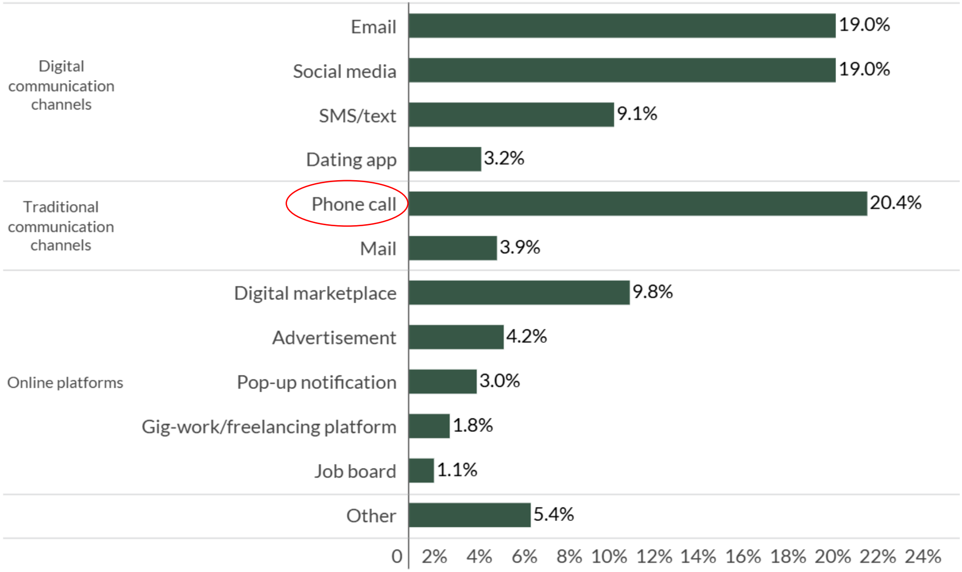


- 2024 – $16.6B in losses
- 33% increase from 2023
- Identity Theft
  - 2021 – 51,629
  - 2022 – 27,922
  - 2023 – 19,778
  - 2024 – 21,403
- 2024 National Public Data Breach – 2.9B personal records

Scams Landscape

Scammers' channels for initial contact

Share of financial scam victims reporting scammers made first contact through select channels



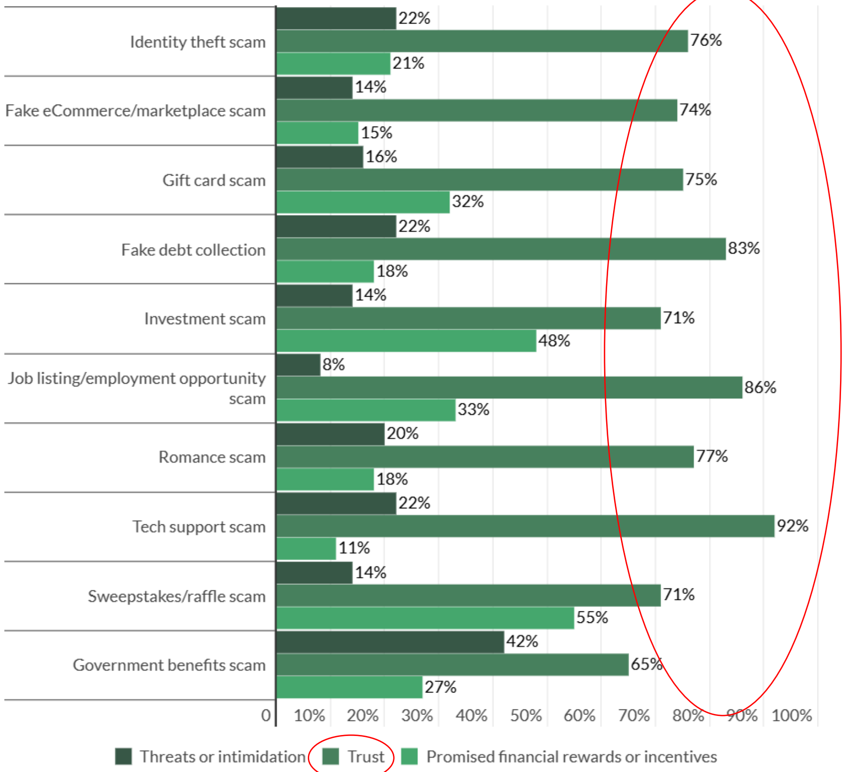
Source: PYMNTS Intelligence

How Scammers Tailor Financial Scams to Individual Consumer Vulnerabilities, January 2025

N = 2,209: Respondents who have experienced household financial loss because of a scam, fielded July 26, 2024 – Aug. 19, 2024

Financial scam compliance tactics

Share of financial scam victims reporting select tactics that scammers used to gain their compliance, by type of scam



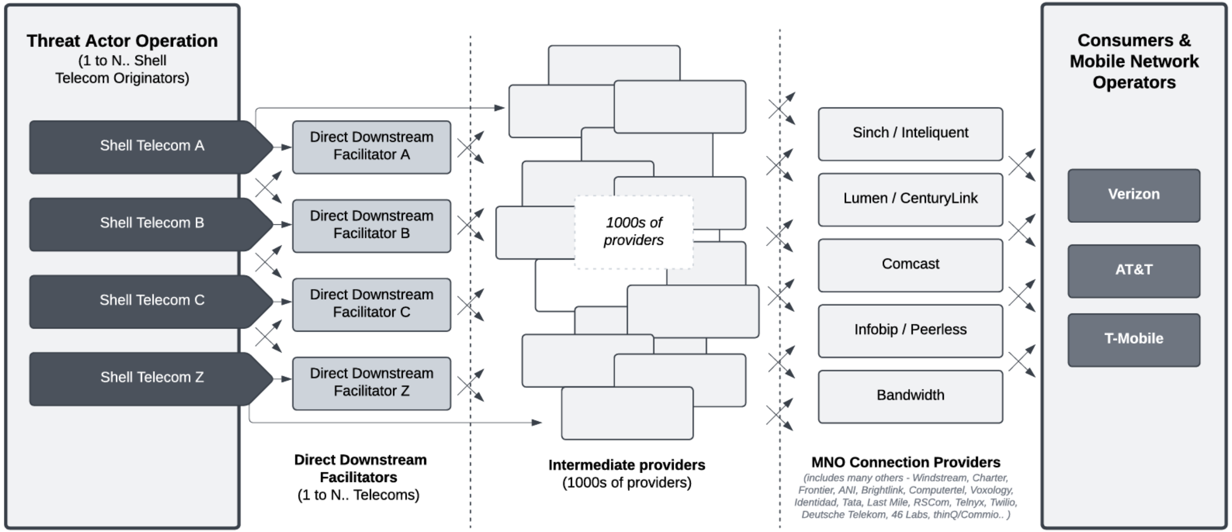
Source: PYMNTS Intelligence

How Scammers Tailor Financial Scams to Individual Consumer Vulnerabilities, January 2025

FCC Tracks “Traceback” Requests

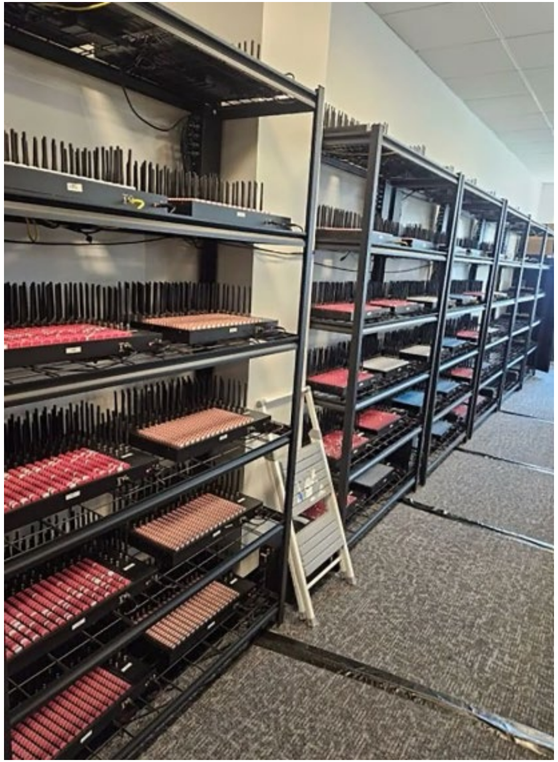
- Traceback – identifies telecom enabling reported calls and spoofed caller ID
- Known bad actors enable scam ecosystem

Reported Scam Type	Count
Order/Bank Scam	**1791**
Amazon	526
Debt Reduction	456
Cable/Phone Impersonation	436
Sweepstakes	219
Health Ins	192
Source: FCC	



- No KYC “Shell Telecoms”
- Enables individual bad actors to have dozens
- Feed hundreds of millions of calls into ecosystem
- No accountability

Growth of Pre-paid Sim Card Enabled Scam Calls

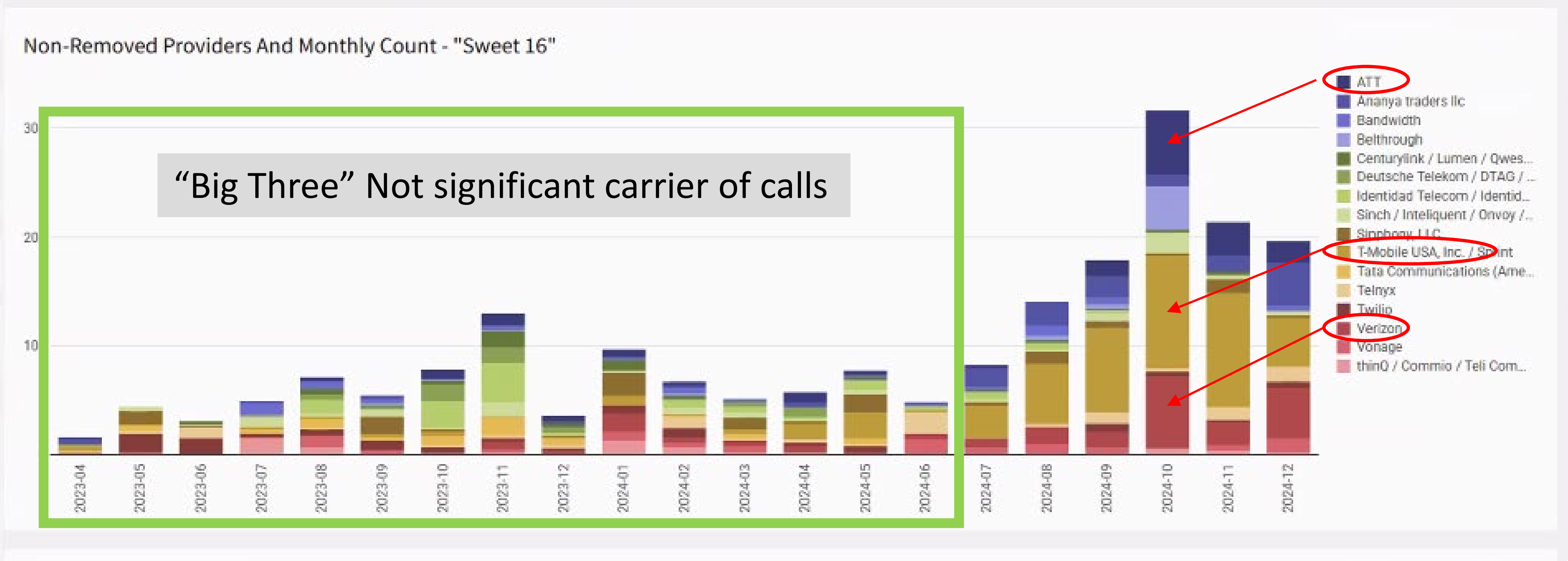


- Sim Farm
  - 100,000 sim cards
  - 300 servers
- mobileX sim cards
  - Use Verizon network
- Likely in operation for nearly a year

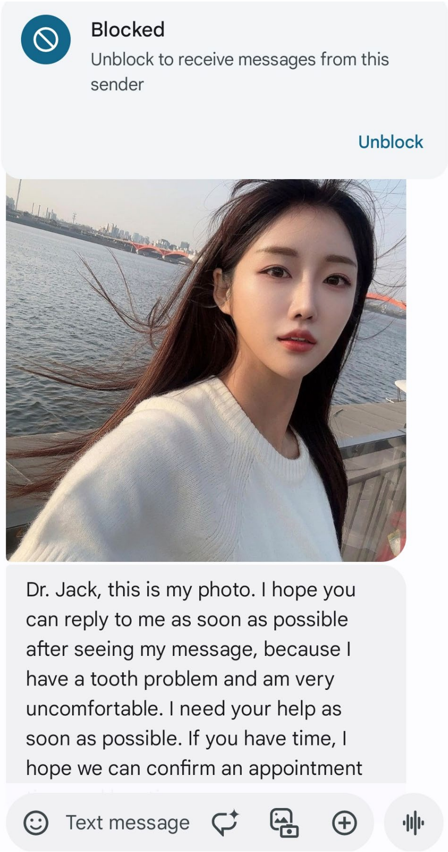
https://www.secretservice.gov/newsroom/releases/2025/09/us-secret-service-dismantles-imminent-telecommunications-threat-new-york

https://www.nytimes.com/2025/09/23/us/politics/secret-service-sim-cards-servers-un.html

Growth of Pre-paid Sim Card Enabled Scam Calls



Texts – Starting Point for Romance or Crypto Investment Schemes

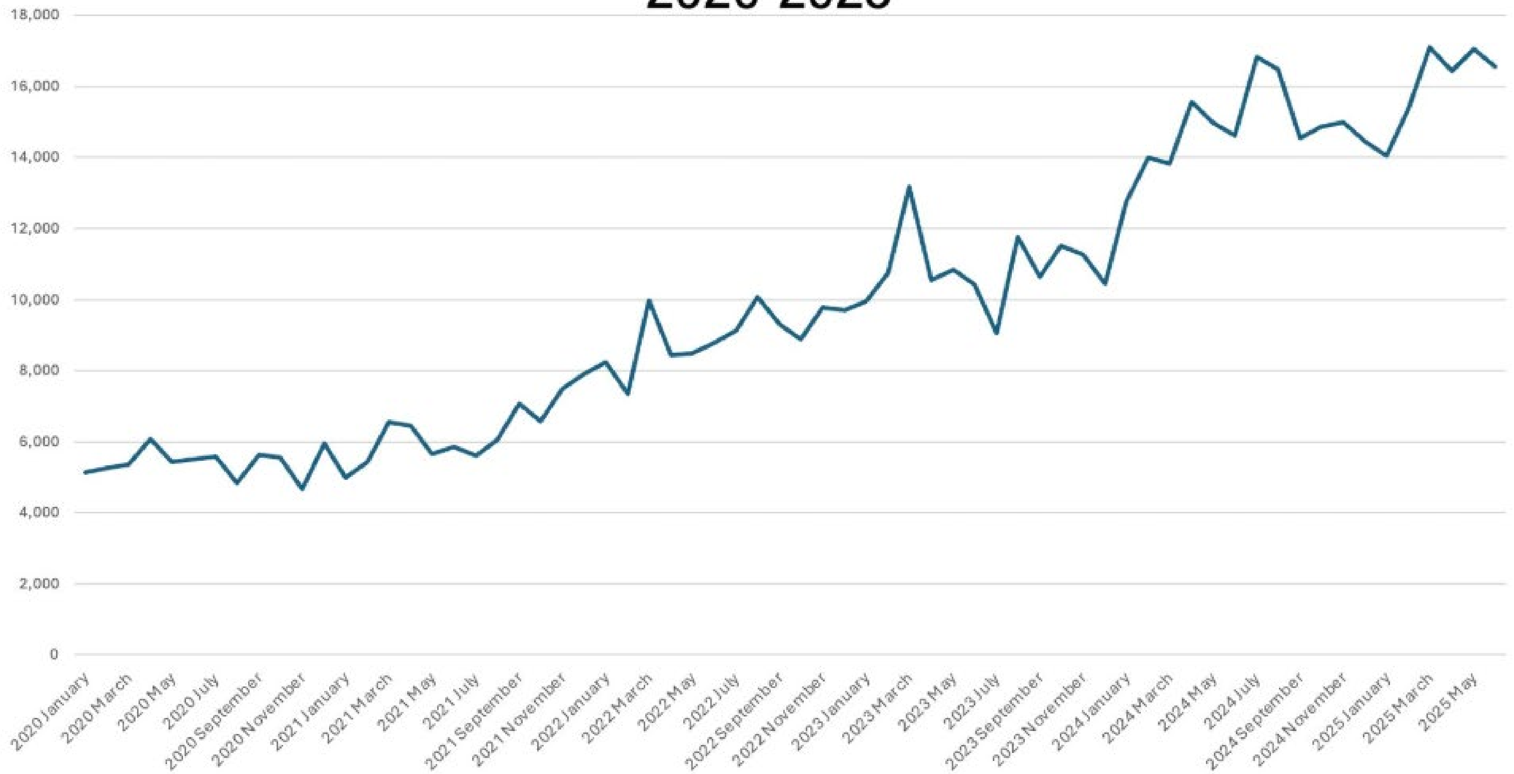


Crime Type	Loss
Investment	$6,570,639,864
Business Email Compromise	$2,770,151,146
Tech Support	$1,464,755,976
Personal Data Breach	$1,453,296,303
Non-Payment/Non-Delivery	$785,436,888
Confidence/Romance	$672,009,052
Government Impersonation	$405,624,084
Data Breach	$364,855,818
Other	$280,278,325
Employment	$264,223,271
Credit Card/Check Fraud	$199,889,841
Identity Theft	$174,354,745
Real Estate	$173,586,820

FBI IC3 Crypto Complaints

- 2020 ~ $500M
- 2021 ~ $1.5B
- 2022 ~ $3.75B
- 2023 ~ $5.6B
- 2024 ~ $6.6B

Monthly Account Takeover Incidents Reported to FinCEN between 2020-2025



The Rise of Scams on Meta Platforms*

50%

Scams on Zelle via JPMorgan traced to Meta Ads

8-32

Fraud “strikes” allowed before ad account removal

70%

New advertisers flagged for fraud, illicit goods, or poor-quality offers

230,000+

Scam ads using Andrew Forrest’s Name / Image / Likeness

$160B

Meta’s ad revenue in 2023 – incentivizing weak enforcement

Section 230 - Meta argues it has no legal duty to protect users from fraud

“Meta has no duty to protect users from third-party content on its platform, Plaintiff cannot state a negligence claim”

*https://www.wsj.com/tech/meta-fraud-facebook-instagram-813363c8?

Crypto Investment Schemes and Bitcoin ATMs

- Crypto Investment Schemes
  - Legitimate looking websites
  - Full functionality
  - "Grow" investment until try to cashout
  - Scammed again with "taxes"

- Bitcoin/Crypto ATMs used to exfiltrate funds
  - Athena sued by DC
  - Fees range 20-30% per transaction
  - 93% of transactions were fraudulent
  - Average age of customer 71
  - Average loss $8,000

- Some states passing BTM laws

Banks have been using traditional AI for years

Data classification and process automation

Uncovering patterns and predicting events

Credit scoring:
statistical models for assessing creditworthiness

Fraud detection:
analyze transaction patterns

Customer segmentation:
based on behavior for targeted marketing

Risk assessment:
predicting loan default risk

Process automation:
data entry or account reconciliation

Accessible Voice Deepfakes

Avoid noisy environments
Background sounds interfere with recording quality results.

Check microphone quality
Try external units or headphone mics for better audio capture.

Use consistent equipment
Don't change recording equipment between samples.

Click to upload, or drag and drop
Audio or video files, up to 10MB each
or
Record audio

10 seconds of audio required

Next

This is a copy of my voice

Where it gets scary
ABA CEO Rob Nichols copied

I hereby confirm that I have all necessary rights or consents to upload and clone these voice samples and that I will not use the platform-generated content for any illegal, fraudulent, or harmful purpose. I reaffirm my obligation to abide by ElevenLabs' Terms of Service, Prohibited Content and Uses Policy and Privacy Policy.

Back | Save voice

Try out your new clone

Your voice is now ready to be used throughout the product.

Generate speech
Take your new clone for a test drive with Text to Speech.

Speak with yourself
Speak with your own clone by creating a Conversational AI agent.

Narrate a story
Create a story, narrated by you using Studio.

AI Driven Tools Enable Better Scams

Generate background sounds using text prompt
“Thunderstorm with heavy rain”

Step 1: Obtain copy of child’s voice

Step 2: Use tools to clone the voice

Step 3: Create convincing script that
the child is in need of help/money.

Step 4: Execute script with cloned voice

Step 5: Merge cloned voice with
realistic background sound

AI Generated Song
From Voice Prompt

https://www.wsj.com/articles/voice-startup-elevenlabs-launches-ai-music-service-8a546cef

https://www.wsj.com/tech/personal-tech/the-panicked-voice-on-the-phone-sounded-like-her-daughter-it-wasnt-8d04cbc1?st=wBLoHh&reflink=desktopwebshare_permalink

Red Flags, Real Risks: Spotting Elder Financial Exploitation

Chantelle Smith
Consultant, Elder Justice Initiative
U.S. Department of Justice

Red Flags, Real Risks

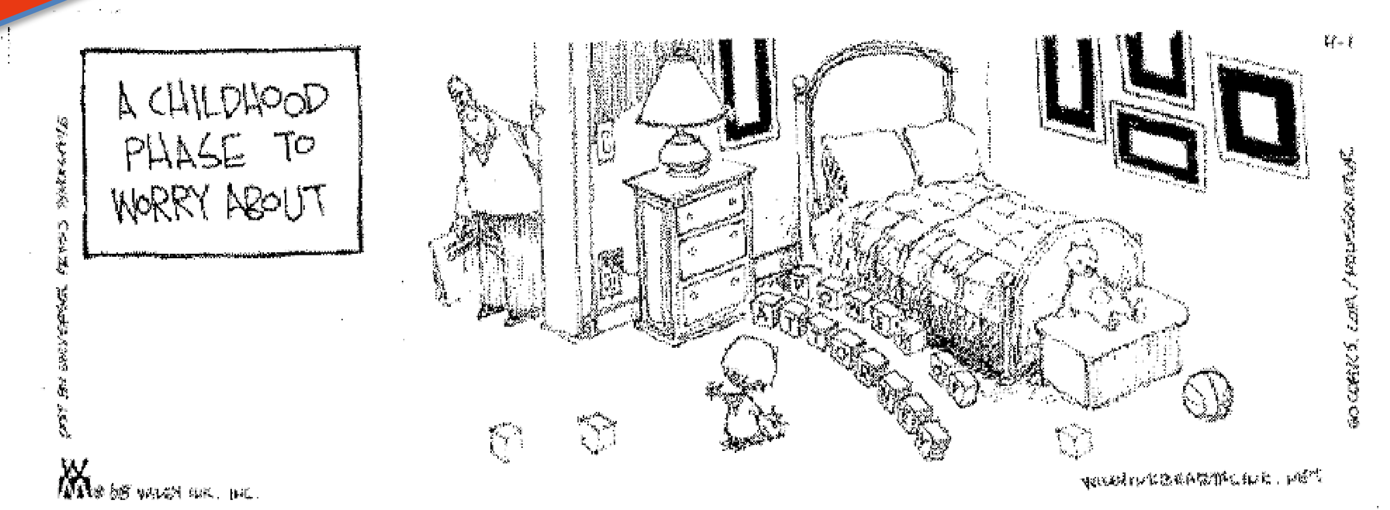
Spotting Elder Financial Exploitation

Chantelle Smith, JD
Consultant to DOJ Elder Justice Initiative
chantelle.c.smith@usdoj.gov
c: 202/451-7482

What We’ll Cover

- Why red flags matter — and why they’re often missed
- Obvious vs. subtle indicators
- Three cases from the field
- How patterns reveal risk
- Taking action when something feels wrong

POWER OF ATTORNEY



Show of Hands

How many of you have ever had a customer interaction that felt off — even if everything looked normal on paper?

Obvious Red Flags

Indicator	What It Looks Like
💬 New co-signer, joint account, beneficiary, or POA	Someone new suddenly involved or interested in finances
⏰ Urgency to act	"We need this done today" — customer anxious or pressured
💸 Large or unusual transaction	Purpose or amount inconsistent with history
❓ Confusion about transaction	Vague answers or repeats questions
📝 Changed documents	Signature, address, handwriting don't match records

DETECTION CUE

Slow down the process

Verify authority

Document who is driving the interaction

Obvious Red Flags

Indicator	What It Looks Like
💱 Movement of accounts	Transferring funds to accounts in other FIs
💸 Immediate withdrawals	Account is opened and funds immediately withdrawn
🏧 Use of ATM or online banking	Use inconsistent with history
📉 Overdrafts and changes in expenses	Sudden or frequent overdrafts and regular expenses no longer being paid
🏦 Closing out low-risk accounts	Cashing out CDs and closing savings accounts

DETECTION CUE

Slow down the process

Verify authority

Document who is driving the interaction

Subtle Red Flags

Indicator	Detection Tip
🗣️ Behavioral shift — quiet, coached, deferential	Ask privately: “Can you tell me what this is for?”
📞 New contact info	Confirm reason and who requested the change
💰 New or risky financial behavior	Compare to customer’s history
😟 Confusion or a “thinking problem”	Re-ask questions later; note inconsistency
👥 Persistent helper	Request private conversation; document reaction

DETECTION CUE

The danger isn’t one transaction — it’s the change in control

What Red Flags Have You Seen?

OBVIOUS
Third party present; large cash withdrawal

SUBTLE
Client quiet, lets agent speak; urgency

DETECTION
Private conversation, verify credentials, delay disbursement

Case 1: The "Helpful" Insurance Agent

- 82-year-old arrives at teller window with an insurance agent, a "senior specialist"
- Requests to cash out a long-held CD
- Leaves with a bag of cash
- "Loans" from clients

- Convicted of ongoing criminal conduct, money laundering, and theft
- Stalked, targeted, and groomed victims—continued after conviction
- Probation revoked seven years after the State first discovered an issue

I, Dennis M. Stephens, being of sound mind hereby give as collateral to

all my office furniture & equipment located at 800 N. 8th St. Clear Lake, Iowa 50428

AKA Dennis M. Stephens & Associates

Signed

11/3/03 Dennis M. Stephens

witness X

DENNIS M. STEPHENS & ASSOCIATES
P.O. BOX
800 N. 8TH ST. SUITE 101
CLEAR LAKE, IA 50428

5379

Date 11/3/03

Pay to the order of

$ 303.32

Three hundred three dollars and thirty two cents

CLEAR LAKE BANK & TRUST COMPANY

Dennis M. Stephens

⑈005379⑈ 323 2⑈

How to Steal a House

- Older woman with developmental disability; two adult children also with DD; husband passes away
- Neighbor steps up to “help”
- Opens credit cards; empties account; charges rent; acquires deed; mortgage; foreclosure
- Checks made out for “cash”
- Discovered only when county rent-subsidy worker spotted mismatch

OBVIOUS
Title change, inconsistent spending, drained account, credit cards

SUBTLE
Neighbor involved, physical control, controls communication

DETECTION
Property record checks; collaboration

Criminal case filed

Plead guilty to ongoing criminal conduct and theft

Victim and her daughter moved to a trailer via rent subsidy

The Loan that Didn't Fit

- Customer applies for a home equity loan on a brand new townhome
- Says it is for investment in a business opportunity
- Won't or can't explain the business or finances
- Vehicle sale + purchase + sale + purchase
- Prior, 401k + 20K

- Plead guilty to theft and securities fraud
- Five-year suspended sentence and $1000 fine
- Cease and desist order by consent
- New house...together

Common Thread: Shift in Control

Every case starts the same way — with a shift in control

Access → Urgency → Control → Loss

Key Pattern

Power and control change hands long before the money disappears

Pattern Recognition

DETECTION CUE

One red flag, we pay attention
Two or more linked red flags, we take action

Trigger	Paired Behavior	Why It Matters
📞 New contact info	🤝 Third-party involvement	⚠️ Possible diversion (undue influence)
💸 Large withdrawal	😟 Customer confusion	🛑 Potential coercion (undue influence)
📄 New legal document	⏰ Urgency	🎯 Pressure or forgery risk (undue influence)

You don't have to prove exploitation — you just have to interrupt it.

Detection & Response Playbook

- Pause / Hold – Delay or hold pending review
- Verify Independently – Confirm POA (or other legal document), authority, ownership
- Private Conversation – Speak alone with the customer, if possible
- Escalate – Contact compliance, APS, law enforcement and/or, if available and appropriate, a trusted person
- Document – Note observations and statements

What's your policy?

Obvious v. Subtle – Side-by-Side

Obvious	**Subtle**
New signers / POAs	Behavioral change
Visible confusion	New contact info
Large or urgent transactions	Outside influence

Both matter — especially when they mark a **change in control**

Discussion & Questions

What red flags shows up **most** in your work?

What makes it **hardest to act** when you see one?

Where could **coordination or collaboration** improve?

Thank you

Scammers, Seniors & the Science of Deception

Dr. N. Denburg
Professor of Neurology and Neuroscience
University of Iowa Carver College of Medicine

SCAMMERS, SENIORS, AND THE SCIENCE OF DECEPTION

Natalie Denburg, PhD

Professor of Neurology

University of Iowa Carver College of Medicine

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Elder Fraud Prevention Summit

Arlington, VA

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Key Questions

1. In normal aging, what aspects of thinking abilities undergo the greatest change?
    - What have our scientific studies in behavior, emotion, and brain imaging revealed?
2. What is dementia, how common is dementia, and what are the different forms of dementia?
    - Do patients with dementia have insight into their deficits?
3. What remains preserved in patients with dementia, particularly those with Alzheimer's disease?
    - What did you notice about the patient with dementia shown in the video?

Guiding Frameworks

Older Adulthood is a Time of Critical, Complex, and Stressful Decision-Making

- Medical decision-making
- Financial decision-making
- Estate planning
- Change in roles/responsibilities following the death of a spouse/partner
- Change in residence/living arrangement

How the Brain Changes with Normal Aging

Age-Associated Memory Impairment

How the Brain Changes with Normal Aging

Age-Associated Memory Impairment

Age-Associated Executive Impairment

How the Brain Changes with Normal Aging

Age-Associated Memory Impairment

Age-Associated Executive Impairment

Getting old doesn't mean having a bad memory; rather, getting old means decision-making problems and susceptibility to fraud.

Emotion is Necessary For Favorable Decision Making

(Somatic Marker Hypothesis; Damasio, 1994)

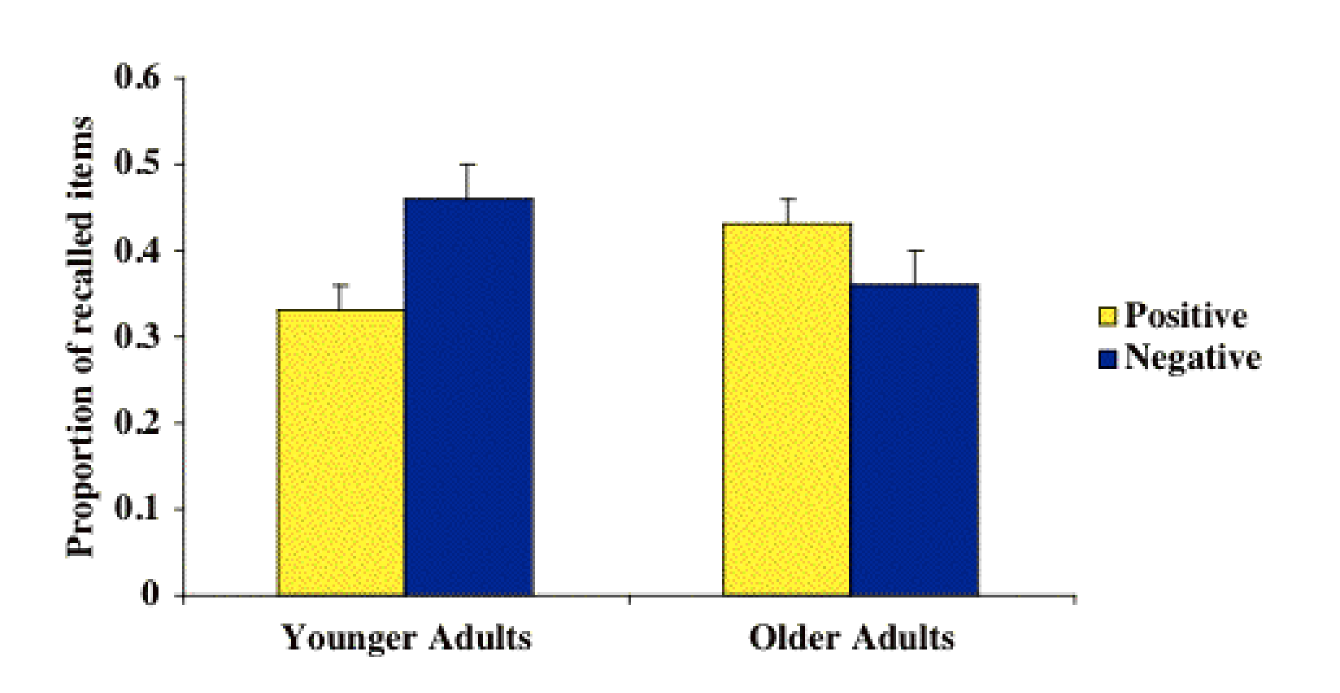
- Emotion via body feedback during decision making either encourages or discourages an action based on our prior experiences with similar situations
  - gut reaction
- Two brain areas are important to triggering various bodily changes (somatic states)
  - Frontal lobe and Insula
    - Damage to the frontal lobe and/or insula will produce impairments in somatic responses so that bodily feedback is not available to the individual to shape their decision making in an advantageous direction

Emotional Changes with Normal Aging (Positivity Bias)

(Carstensen et al., 1999)

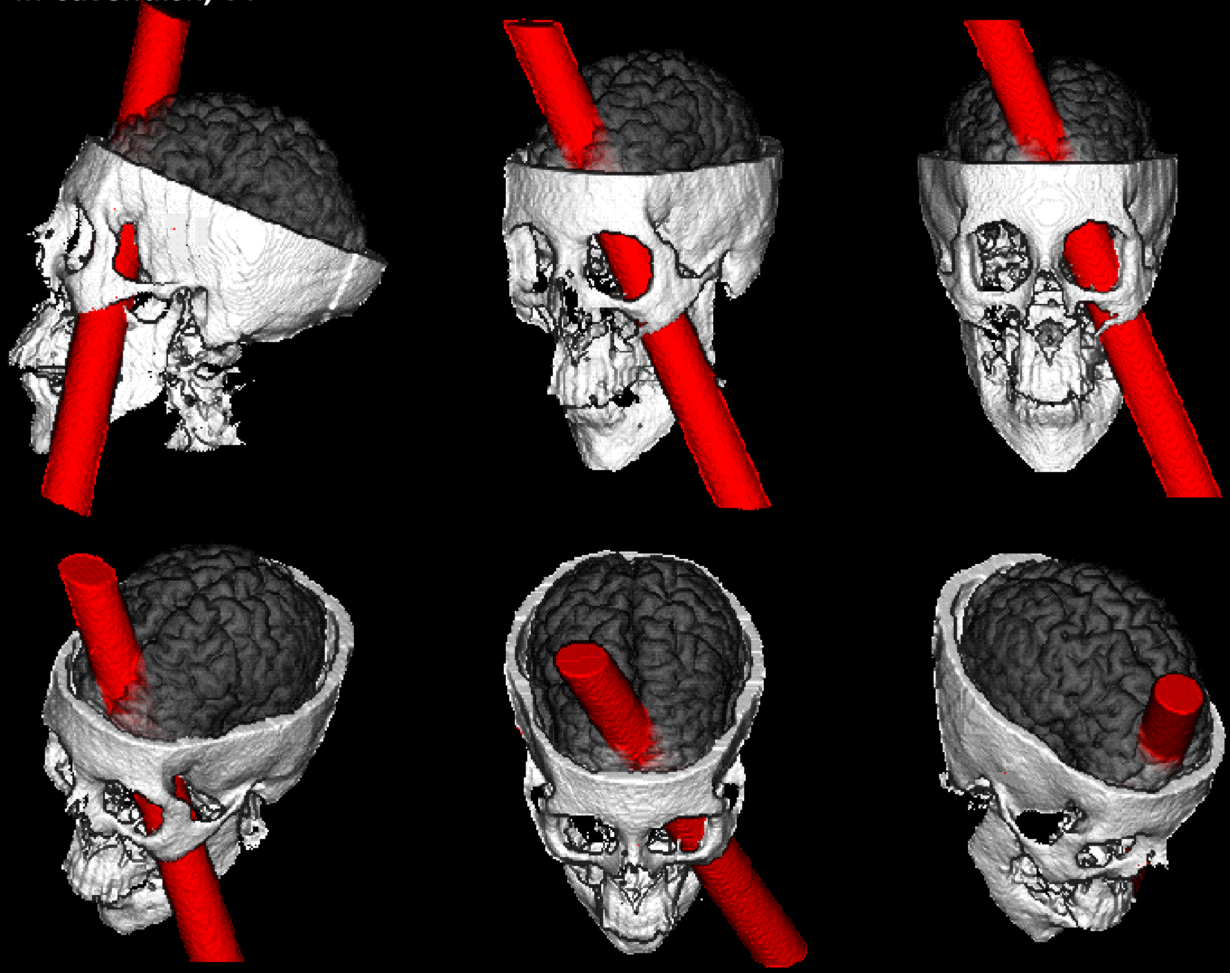
Positivity Bias: Emotional Memory

(Denburg et al., 2003)



Bringing Emotion to Bear on Decision Making

1848 in Cavendish, VT

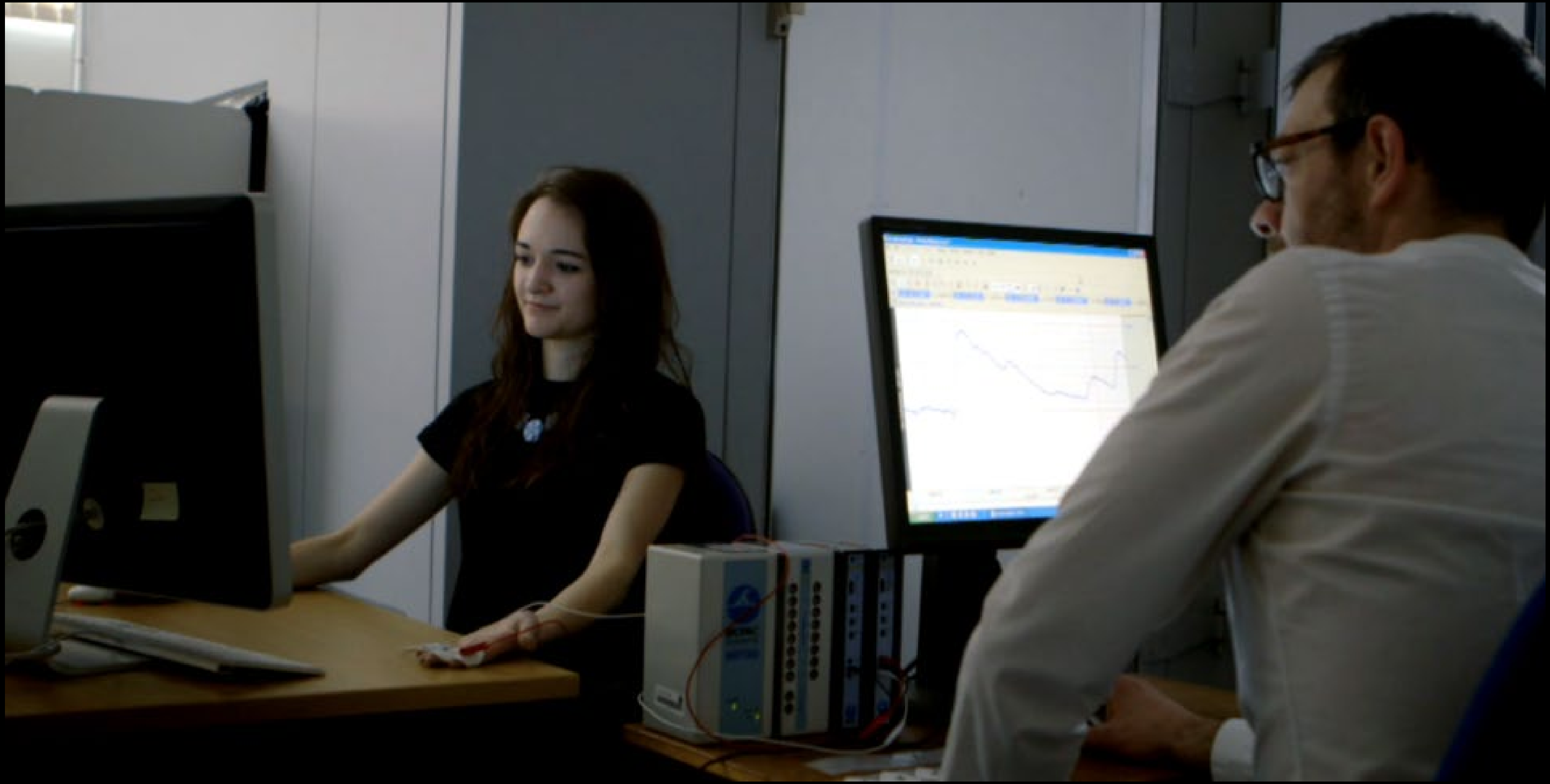


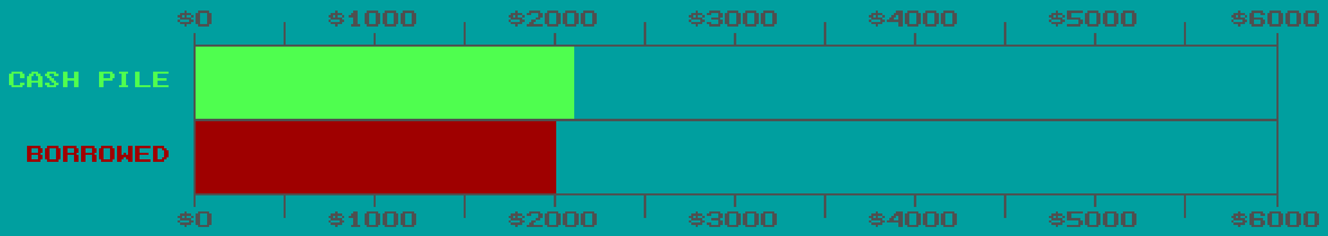
Development of the Iowa Gambling Task (Bechara et al., 1994)

- Well-known tasks of the frontal lobe (referred to as executive functioning) are not useful in modern day Phineas Gage-like patients.
- To incorporate the body (Somatic Marker Hypothesis), we needed a decision-making test that brought emotion prominently into the cognitive process of decision making.
- Thus, the Iowa Gambling Task was created, which factors in uncertainty, reward, loss, and risk.

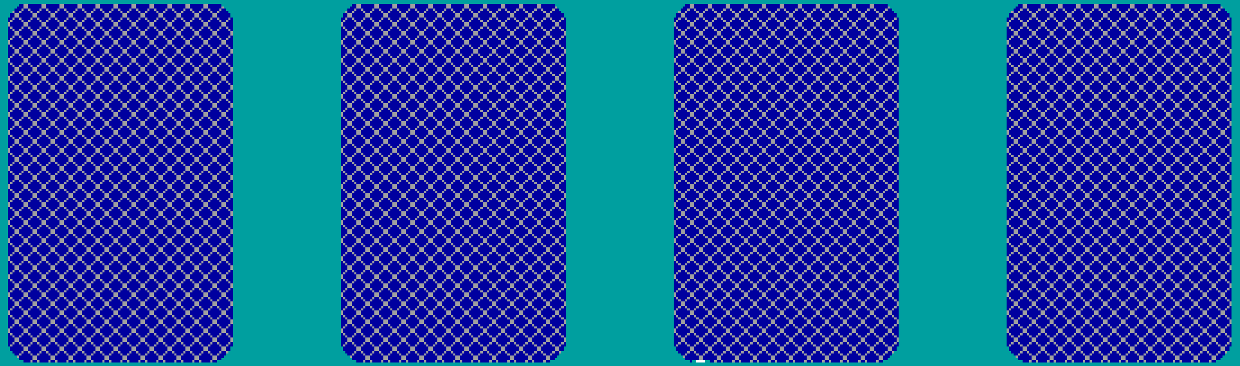
Iowa Gambling Task

(Bechara, Damasio, Damasio, & Anderson, 1994)

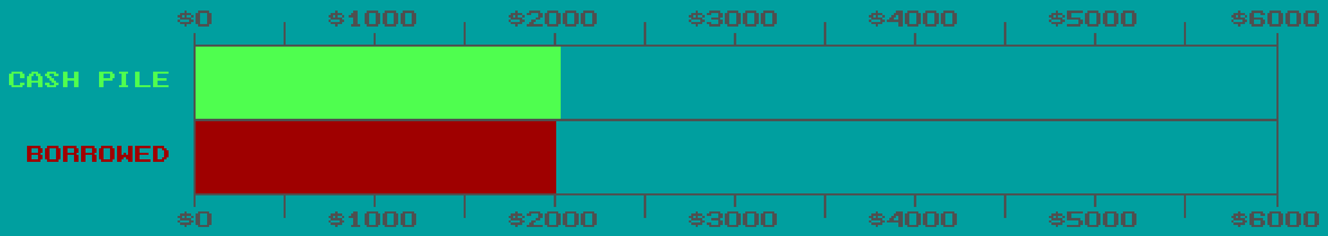




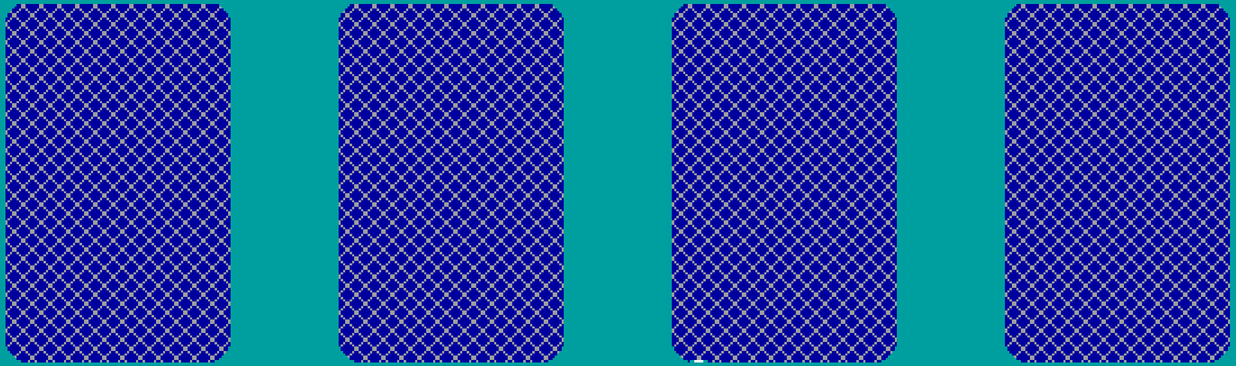
But you lose $1250!



A *B* *C* *D*



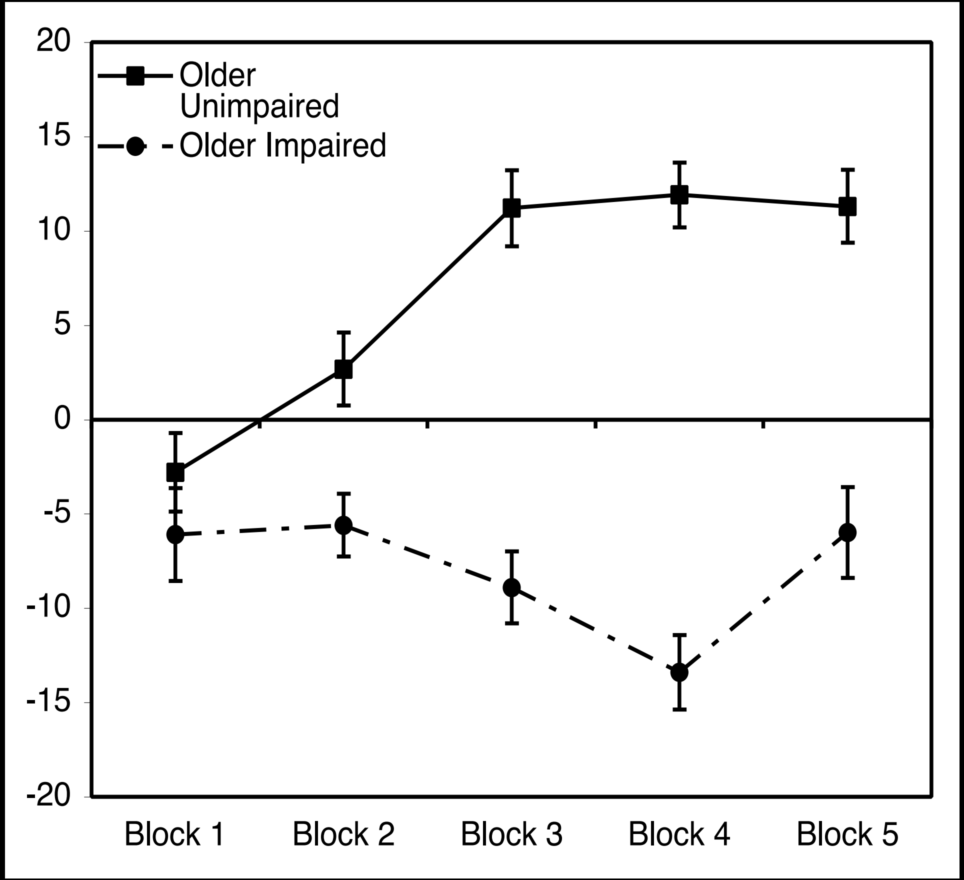
But you lose $25!



A *B* *C* *D*

The Iowa Gambling Task

(Denburg, Tranel, & Bechara, 2005)



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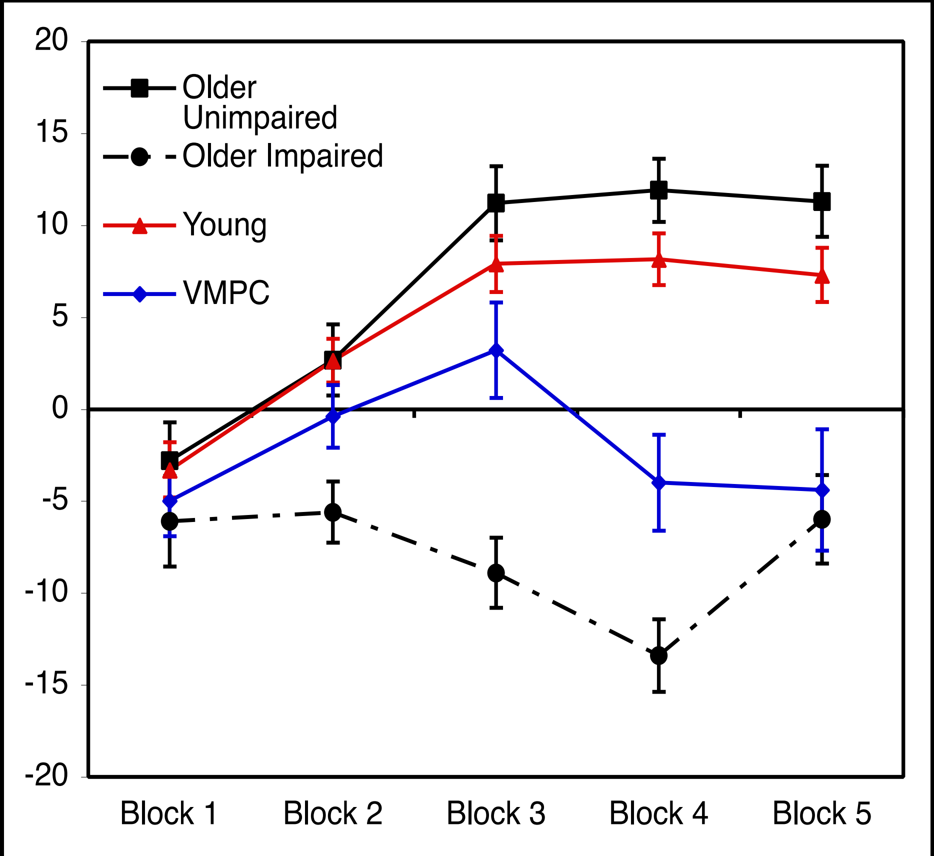


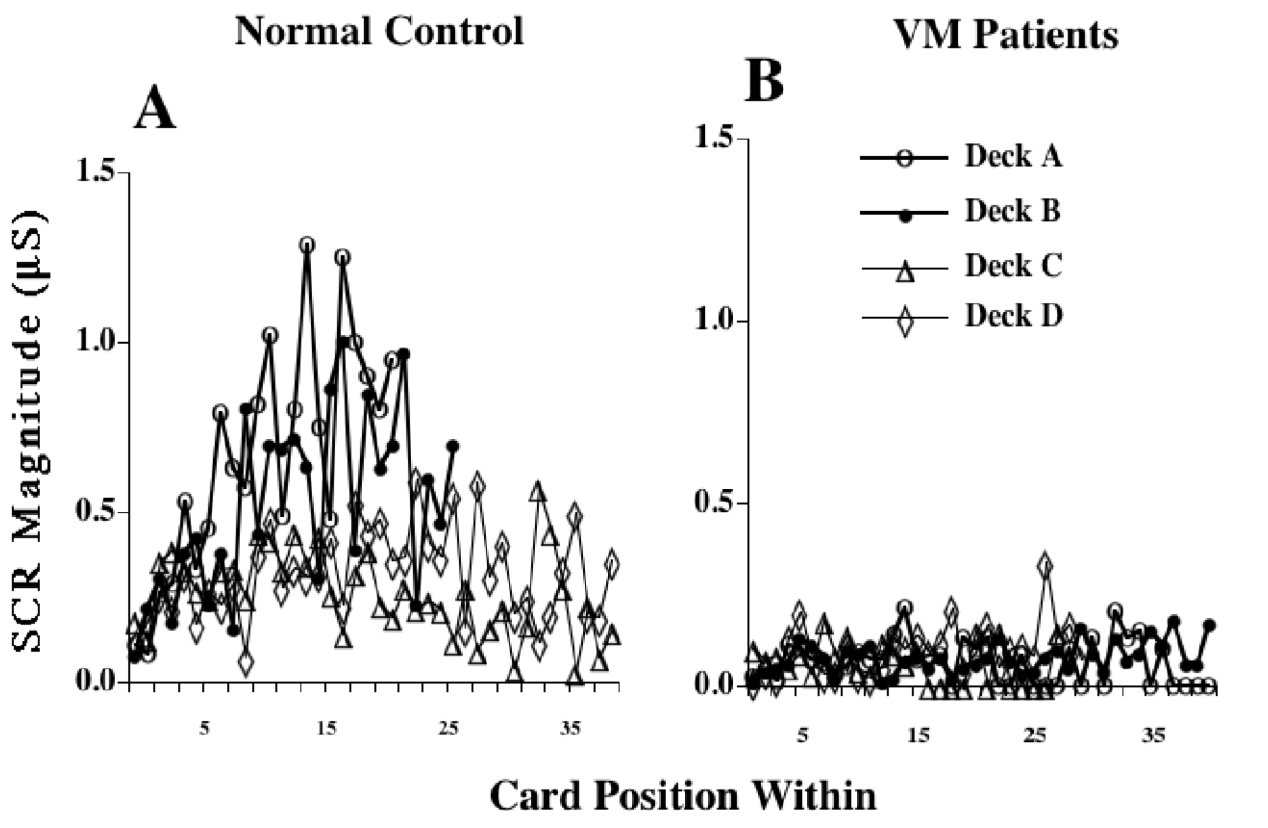
Demographic and cognitive characteristics of older participants

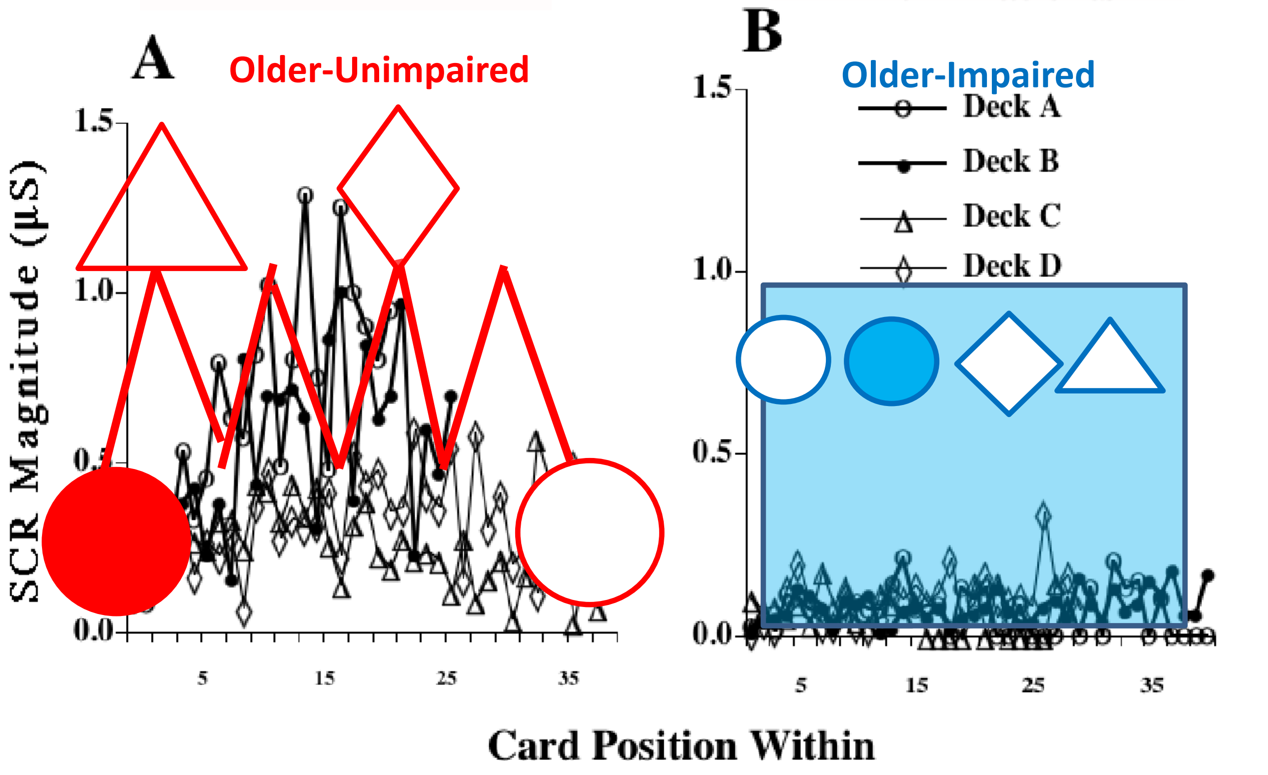
Characteristic[a]	Statistic[b]	Participant group		p[c]	Effect size[d] (d statistic)	Confidence interval[d] (95% CI)	Correlation with CD–AB[e] in older participa
		Older–Unimpaired	Older–Impaired				
Age	M	70.3	71.1	ns	.10	−.63 to .82	.07
	S.D.	8.3	8.0				
Education	M	15.6	14.2	ns	−.58	−1.31 to .17	.21
	S.D.	1.8	2.9				
Gender	% Females	40	50	–	–	–	–
Handedness	% RH	93	100	–	–	–	–
Health status	M	1.60	1.64	ns	−.06	−.67 to .79	.09
	S.D.	0.6	0.7				
Riskiness	M	0.6	0.7	ns	−.15	−.70 to .98	−.06
	S.D.	0.8	0.5				
BDI	M	4.9	4.9	ns	−.00	−.74 to .74	−.18
	S.D.	4.2	3.8				
WAIS-III digit span	M	16.0	17.3	ns	−.29	−.46 to 1.03	−.08
	S.D.	4.6	4.3				
Benton faces	M	22.4	21.9	ns	−.20	−.95 to .56	.17
	S.D.	2.3	1.6				
WRAT-3 reading	M	51.0	48.9	ns	−.63	−1.35 to .14	.25
	S.D.	3.1	3.6				
AVLT 30 min delay	M	10.6	9.3	ns	−.46	−1.20 to .30	.12
	S.D.	2.7	2.9				
BVRT errors	M	3.3	4.5	ns	−.65	−.15 to 1.40	−.30
	S.D.	1.6	2.1				
Verbal fluency	M	41.6	38.7	ns	−.33	−1.07 to .42	.17
	S.D.	7.8	9.0				
Trail making test A	M	33.1	34.9	ns	−.21	−.54 to .95	−.01
	S.D.	10.4	12.6				
Trail making test B	M	74.5	82.8	ns	−.28	−.47 to 1.02	−.03
	S.D.	27.8	31.3				
WCST perseverative errors	M	7.3	9.7	ns	−.67	−.20 to 1.48	−.23
	S.D.	4.0	3.1				
WCST categories	M	6.0	5.8	ns	−.48	−1.29 to .36	.13
	S.D.	0.0	0.6				

Measurement of Emotion (gut reaction)

- Skin conductance response (or SCR) as an index of emotion.

- <u>Anticipatory SCRs</u>: SCRs generated immediately prior to the point at which the subject turned a card from a given deck, i.e., during the time period the subject was pondering which deck to choose


Normal Control
VM Patients
A
B
1.5
1.0
0.5
0.0
SCR Magnitude (µS)
Deck A
Deck B
Deck C
Deck D
5
15
25
35
Card Position Within


A
Older-Unimpaired
B
Older-Impaired
Deck A
Deck B
Deck C
Deck D
SCR Magnitude (µS)
1.5
1.0
0.5
0.0
5
15
25
35
Card Position Within

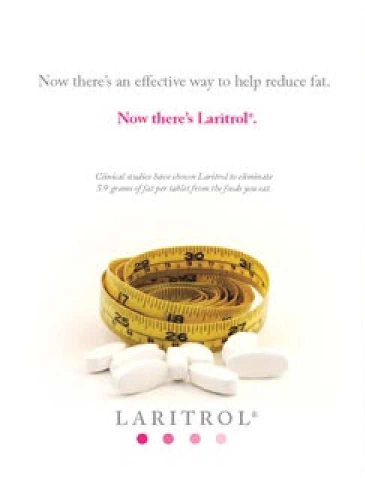
Real-World Decision-Making and Vulnerability to Fraud

Creation of Ad Stimuli

- Deceptive advertising claims were drawn from those cases rendered problematic by the Federal Trade Commission (FTC) during the last 20 years as published in their journal, *FTC Decisions*.

- For each FTC advertisement, non-deceptive counterparts were created.

- Deceptive and non-deceptive advertisements were admixed to create advertising booklets.

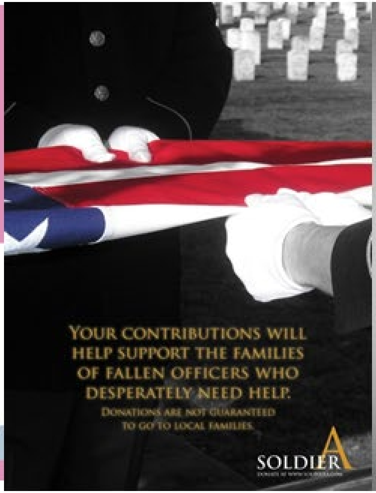

Now there's an effective way to help reduce fat.
Now there's Laritrol®.
Clinical studies have shown Laritrol to eliminate 5.9 grams of fat per tablet from the foods you eat.
LARITROL®


Not only does Healthy Bread
contain the calcium that the body needs to make
strong bones, but also tastes great!
Healthy Bread
Calcium has been shown to help you grow healthy!

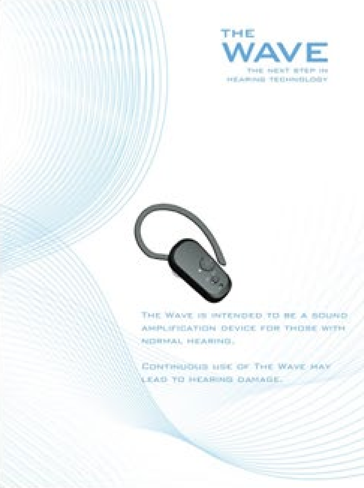

Sleep better.
Enjoy the warmth and comfort of our luxurious Eider Duck Down Comforters, containing 75% down and 25% feathers.
EIDERDUCK


Finally.
A three-piece luggage set that meets the unique needs of the American Traveler! After being manufactured each piece is carefully inspected in Tennessee at our corporate headquarters before it is shipped to you!
THIS LEGACY 3 PIECE SET INCLUDES
LEGACY
LUGGAGE
Brings you the finest American Quality luggage


Can you pirouette so sweet?
Or, swing up high right off your feet?
My Bouncing Doll can
My Bouncing Doll can
So much fun to take a ride...
And can you skate like this outside?
My Bouncing Doll can
My Bouncing Doll can
Bouncing Dolls
Bouncing Dolls are available at toy stores everywhere.

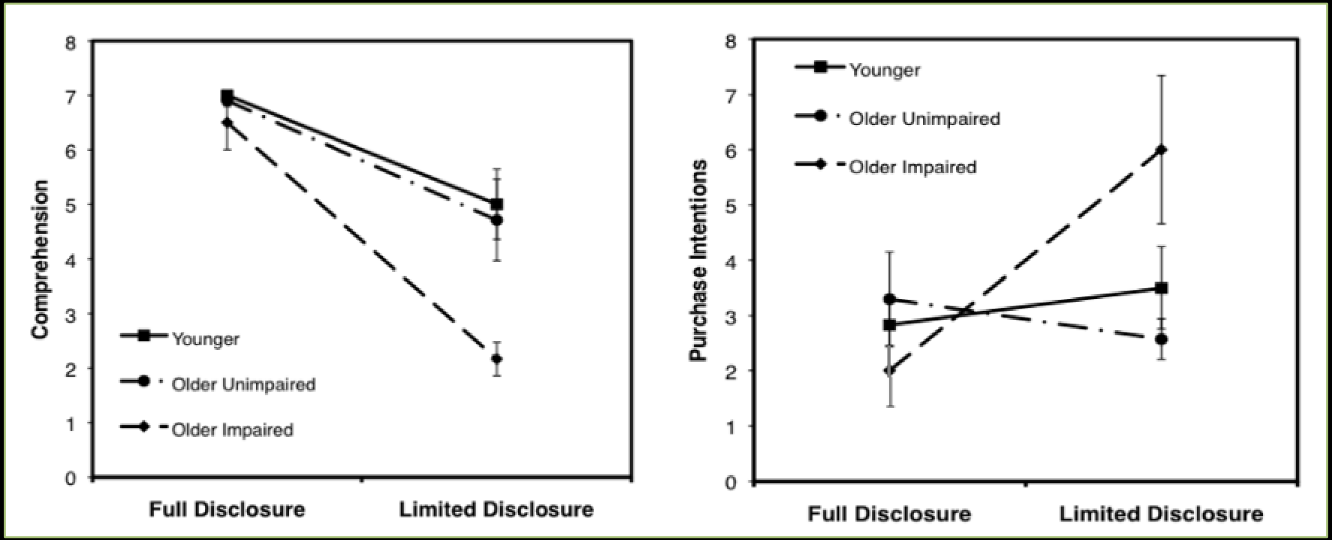

YOUR CONTRIBUTIONS WILL HELP SUPPORT THE FAMILIES OF FALLEN OFFICERS WHO DESPERATELY NEED HELP.
DONATIONS ARE NOT GUARANTEED TO GO TO LOCAL FAMILIES.
A SOLDIER


Automizer
now only $1.49
The Automizer improves fuel economy by 20%


THE WAVE
THE NEXT STEP IN HEARING TECHNOLOGY
THE WAVE IS INTENDED TO BE A SOUND AMPLIFICATION DEVICE FOR THOSE WITH NORMAL HEARING.
CONTINUOUS USE OF THE WAVE MAY LEAD TO HEARING DAMAGE.

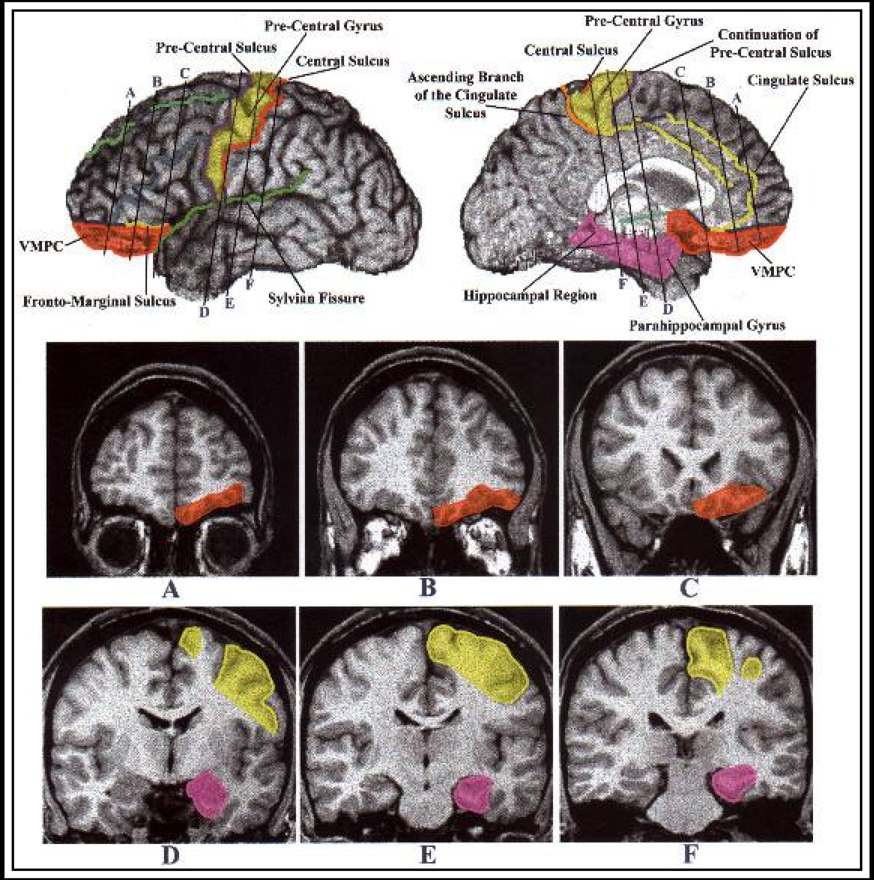
The Advertising Study

(Denburg, Cole, Hernandez, Yamada, Tranel, Bechara, & Wallace, 2007)

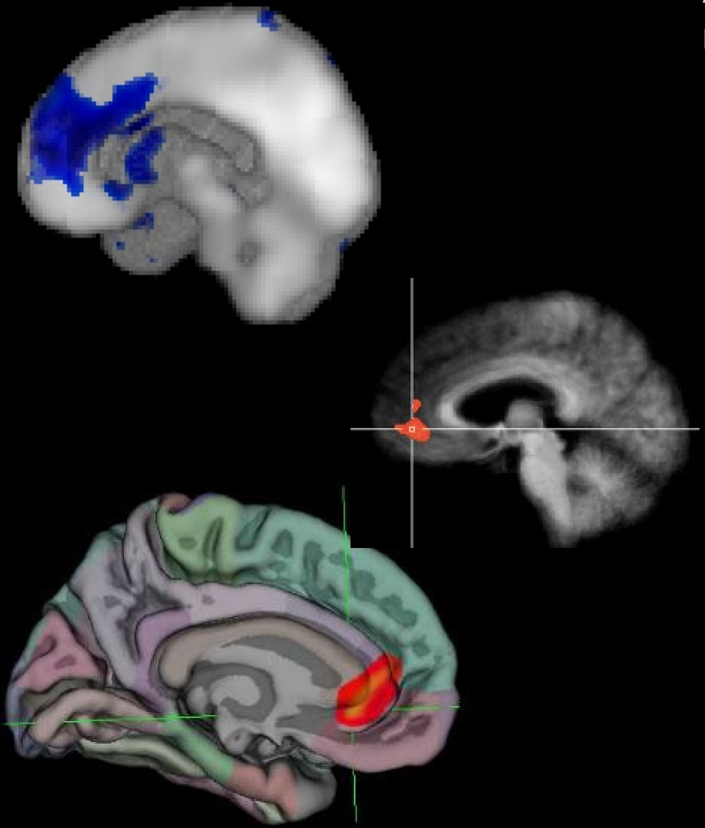


Brain Correlates of Impaired Decision-Making

What is happening in the brains of our Older-Impaired group?



Denburg & Harshman, 2010
Asp, Denburg, et al., 2013
Koestner, Hedgcock, & Denburg, 2016



- FDG-PET (metabolism)
- Functional MRI (activation)
- Structural MRI (cortical thickness)

TO SUMMARIZE:
Why do some normally-aging older adults make poor decisions and fall prey to fraud?

Cognitive vulnerability, involving a decline in reasoning and judgment, in combination with flawed emotional responses stemming from abnormalities that develop in the brain's frontal lobe, lead to poor decision making and risk for Victimization.

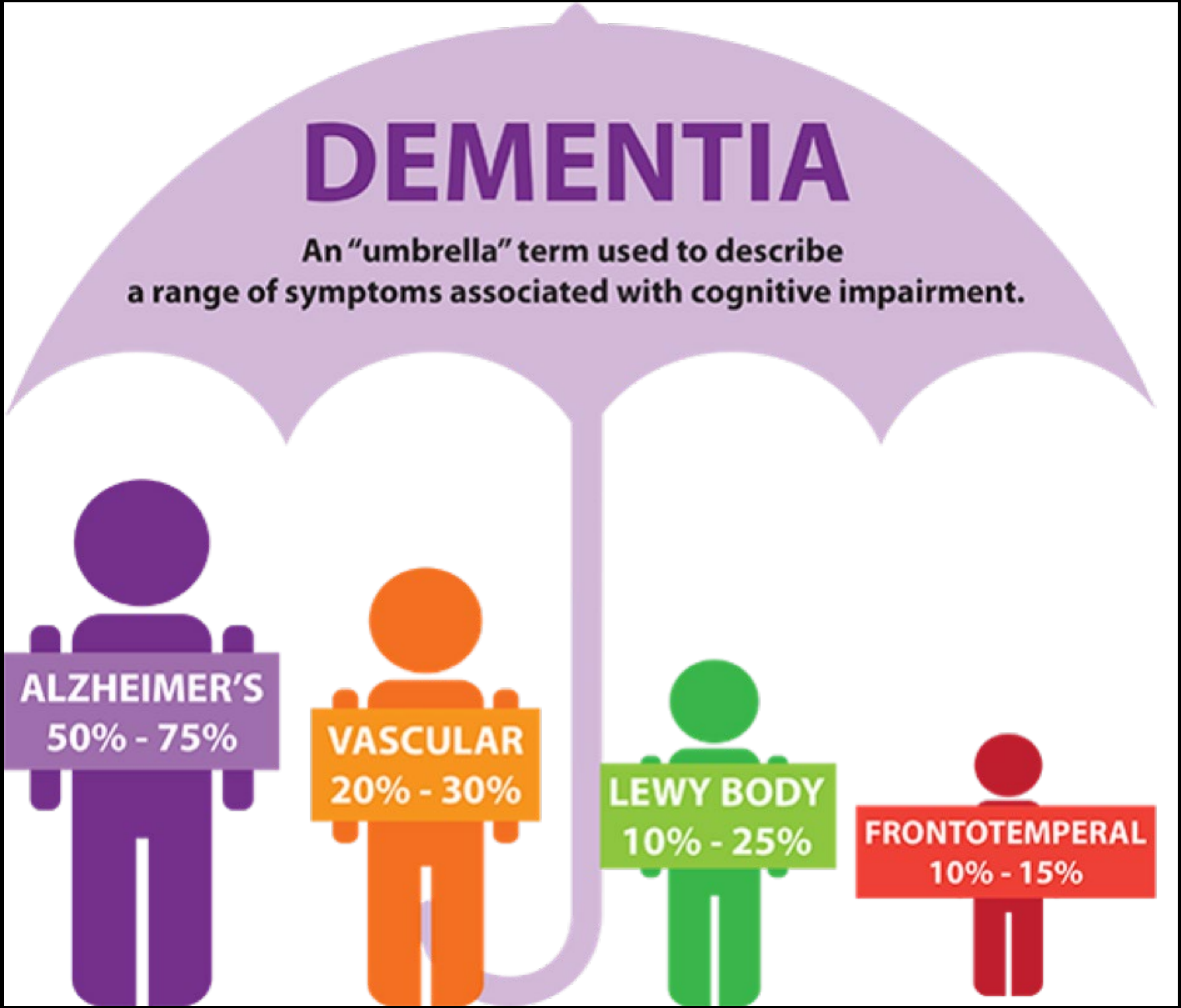
Others At Risk for Susceptibility to Scams?

- Older adults diagnosed with mild cognitive impairment (MCI)

- Older adults diagnosed with "dementia"

Mild Cognitive Impairment (MCI)

- MCI is the transitional stage of cognitive impairment between normal aging and dementia
- Characterized by subjective and objective memory problems, but otherwise intact cognition and daily activities (ADLs)
- Prevalence of upwards of 18% of those aged 60 years and older
- MCI progresses to dementia at a rate of ~15% per year; cumulative rate of AD about 80% by 6 years


DEMENTIA
An "umbrella" term used to describe
a range of symptoms associated with cognitive impairment.
ALZHEIMER'S
50% - 75%
VASCULAR
20% - 30%
LEWY BODY
10% - 25%
FRONTOTEMPERAL
10% - 15%

Warning Signs of Dementia

- Memory loss that affects normal activities
- Disorientation to time or place
- Difficulty performing familiar tasks
- Excessive word finding problems
- Changes in mood, behavior, or personality

Epidemiology of Dementia

- Dementia affects ~15% of persons aged 70-84
- Dementia affects ~40% of persons $\geq$ age 85
- ~5 million persons in the US have dementia
- By 2050, lifetime incidence expected to approach 50%

How is Dementia Defined?

1. Development of multiple cognitive deficits, including
   - Memory impairment
   - One or more of
     - Language impairment
     - Visuospatial impairment
     - Executive functioning impairment
2. These cognitive deficits
   - Cause significant impairment in daily living skills
   - Represent a significant decline from a previous level of functioning

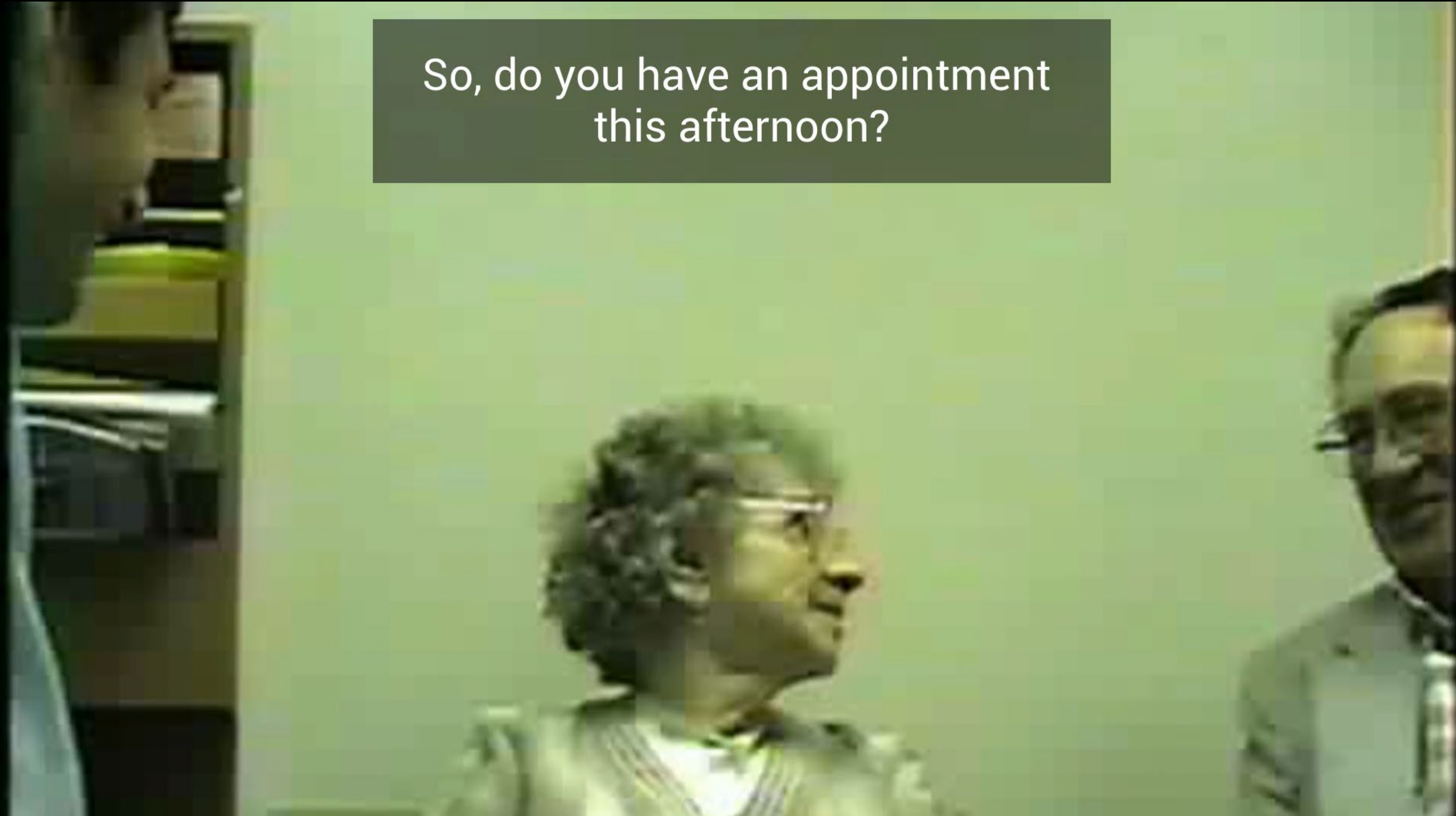
Alzheimer's Disease (AD)

- The most prevalent dementia
- Onset: anterograde amnesia
- Dysfunction in everyday life
- Impaired insight is characteristic
- Course 8-10 years; no remissions
- Risk factors: age, family history, vascular conditions, minimal formal schooling

Other Forms of Dementia

1. Vascular dementia
2. Lewy Body dementia
3. Parkinson's dementia
4. Posterior cortical atrophy
5. Primary progressive aphasia
6. Pick's disease
7. Fronto-temporal dementia
8. Normal pressure hydrocephalus
9. Creutzfeldt-Jakob disease
10. Alcohol dementia
11. Major Neurocognitive Disorder

All have a degree of anosognosia, or lack of insight, associated with them.

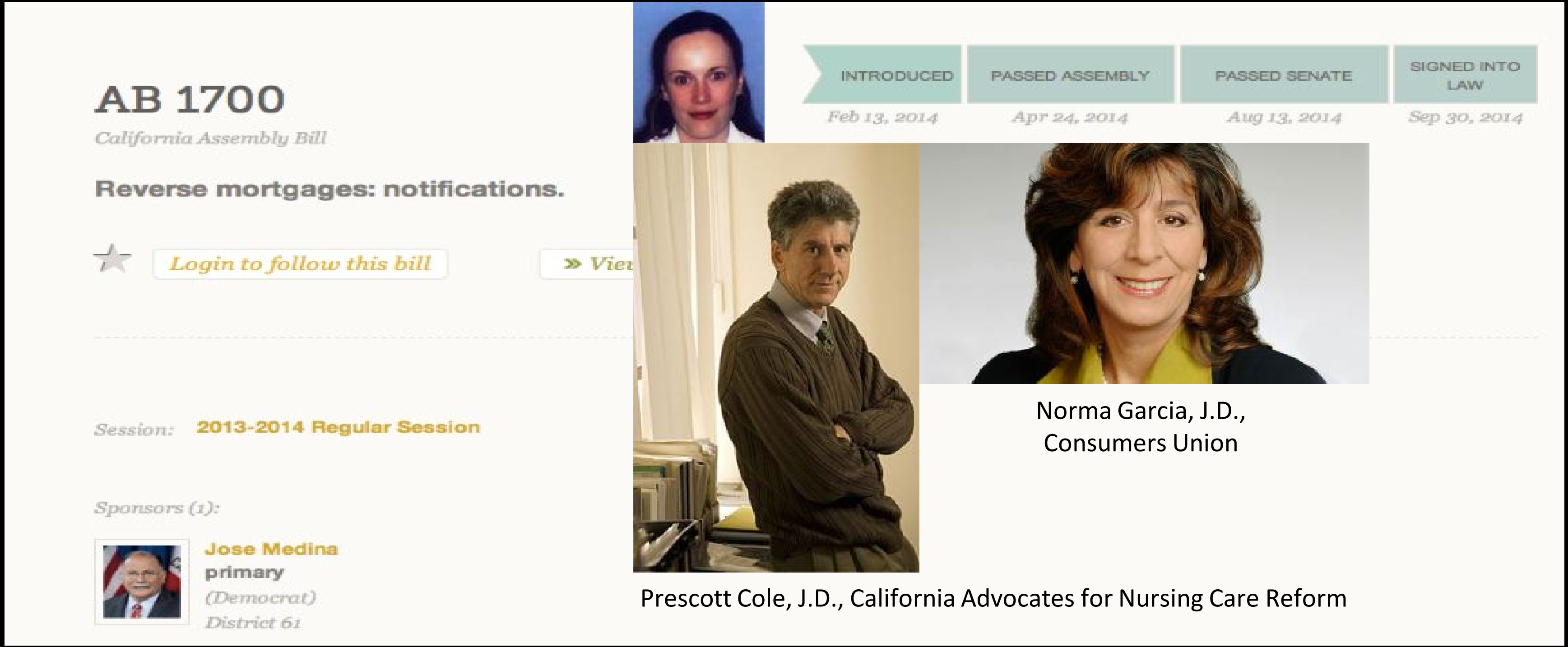

So, do you have an appointment
this afternoon?

Recent Public Policy Work

Informing the Elderly: Reverse Mortgages and the Effects of an Enhanced Disclosure Form

California Assembly Bill 1700

(Denburg, Collins, Garcia, & Cole)



Norma Garcia, J.D., Consumers Union

Prescott Cole, J.D., California Advocates for Nursing Care Reform

Aim of Study

(Denburg, Collins, Garcia, & Cole)

- The aim of our study was to test an implementable form of public policy.
- In particular, we tested whether an *enhanced* disclosure form (i.e., worksheet) would significantly improve consumers' understanding of the reverse mortgage product.
- The worksheet was meant to prompt older adults to attend to the negative or risky aspects of the financial product.

Participants

	Control (*n* = 20) *M (SD)*	Manipulation (*n* = 20) *M (SD)*
Age	77.25 (5.39)	73.88 (3.68)
Sex (% Female)	63 %	63 %
Education	15.25 (1.75)	16.63 (2.56)
Intellect	119.88 (10.16)	124.38 (9.88)
Verbal Memory	10.63 (2.20)	11.00 (1.85)
Non-Verbal Memory	19.19 (6.58)	18.38 (7.31)
Language	49.25 (13.76)	51.25 (5.18)

Stimuli – Control and Manipulation

Please respond as honestly as possible.

For each of the 4 questions below, choose any number from 0 to 100 that best describes how much of each emotion you feel right now, at the present moment.

1) How happy do you feel right now? _______

0	25	50	75	100
I don't feel happy or amused at all	I feel a little bit happy or amused	I feel moderately happy or amused	I feel quite a bit of happiness or amusement	I feel extremely happy or amused

2) How scared do you feel right

0	25
I don't feel scared at all	I feel a little bit scared

Knowledge Questionnaire

1. What is the minimum age for a reverse mortgage borrower?
   a. 50
   b. 62
   c. 65
   d. 72

2. True or False (please circle) – Proceeds from reverse mortgage proceeds are taxable?

3. True or False (please circle) – A borrower can do what ever they want with the proceeds from a reverse mortgage.

4. When is the reverse mortgage loan due?
   a. When the borrowers moves from the home

Stimuli – Control and Manipulation

IMPORTANT NOTICE
TO REVERSE MORTGAGE LOAN APPLICANT

A REVERSE MORTGAGE IS A COMPLEX FINANCIAL
TRANSACTION. IF YOU DECIDE TO OBTAIN A REVERSE
MORTGAGE LOAN, YOU WILL SIGN BINDING LEGAL DOCUMENTS
THAT WILL HAVE IMPORTANT LEGAL AND FINANCIAL
IMPLICATIONS FOR YOU AND YOUR ESTATE. IT IS THEREFORE
IMPORTANT TO UNDERSTAND THE TERMS OF THE REVERSE
MORTGAGE AND ITS EFFECT
TRANSACTION, YOU ARE RE
INDEPENDENT LOAN COUNSE
COUNSELORS WILL BE PROV
SENIOR CITIZEN ADVOCACY
THE PROCEEDS OF A REVER
ANNUITY OR RELATED FINA
CONSIDERING USING YOUR
SHOULD DISCUSS THE FINA
WITH YOUR COUNSELOR AND

WRITTEN CHECKLIST

BEFORE MOVING ON, HAVE YOU THOUGHT ABOUT THE FOLLOWING?

(A) How unexpected medical or other events that cause the prospective borrower to move out of the home, either permanently or for more than one year, earlier than anticipated will impact the total annual loan cost of the mortgage.

(B) The extent to which the prospective borrower's financial needs would be better met by options other than a reverse mortgage, including, but not limited to, less costly home equity lines of credit, property tax deferral programs, or governmental aid programs.

(C) Whether the prospective borrower intends to use the proceeds of the reverse mortgage to purchase

Stimuli – Manipulation Only

APPLICANT REVERSE MORTGAGE COMPREHENSIVE WORKSHEET

PLEASE ASK YOURSELF THE FOLLOWING QUESTIONS AND ANSWER EACH ONE USING THE REVERSE MORTGAGE DISCLOSURE AND CHECKLIST AS A REFERENCE. A WORD BANK IS PROVIDED AT THE BOTTOM.

1. Prior to applying for my reverse mortgage, I am required to receive this ____________________ from my lender.

2. In order to obtain a reverse mortgage loan, you are required to sign ____________________ legal documents.

3. A reverse mortgage loan requi
out a document that will have im

WORD BANK

ly	legal	financial	acc
ing	important notice	equity	
nt	medical	options	

Stimuli – Control and Manipulation

Please respond as honestly as possible.

For each of the 4 questions below, choose any number from 0 to 100 that best describes how much of each emotion you feel right now, at the present moment.

1) How happy do you feel right now? _______

0	25	50	75	100
I don't feel happy or amused at all	I feel a little bit happy or amused	I feel moderately happy or amused	I feel quite a bit of happiness or amusement	I feel extremely happy or amused

2) How scared do you feel right now? _______

0	25	50
I don't feel scared at all	I feel a little bit scared	I feel moderat scared

REVERSE MORTGAGE COMPREHENSIVE ASSESSMENT

PLEASE ANSWER THE FOLLOWING QUESTIONS TO THE BEST OF YOUR ABILITY.

1) This lender is required to give me an important notice prior to accepting my reverse loan mortgage application.

(a) True (b) False

2) Committing to a reverse mortgage loan is a safe investment with minimal negative impact on my finances as well as my estate.

(a) True (b) False

Reverse Mortgage Results

- Groups comparable:
  - baseline financial knowledge
  - baseline emotional state
  - purchase of financial products over the last 5 years
  - self-report of being content with the financial decisions they have made to date
  - self-reported interest in financial products

- Groups differed (Manipulation in relation to Control):
  - lower feelings of "happy" post-WS
  - lower feelings of "calm" post-WS
  - higher feelings of "irritable" post-WS
  - higher comprehension scores on comprehensive assessment at end of experiment
  - less likely to purchase a reverse mortgage
  - less well informed about the various considerations that are a part of a reverse mortgage

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Prevention:
The Million Dollar Question

- Many have raised the potential of using motivational interviewing (MI) to combat elder financial fraud (e.g., DeLiema & Sommers, 2025; Lichtenberg & Peck, 2018; MacNeil et al., 2023; Yan et al., 2024)
- MI, a psychological intervention, has four tasks:
  - Engaging: establishing collaborative relationship
  - Focusing: moving towards a goal; directional (not directive)
  - Evoking: guiding conversation to counteract **ambivalence** and move towards change
  - Planning: how to change
- Important to avoid "traps": "expert" (authority stance; solving problem *for* person), "persuasion" (trying to convince), and "time" (rushing conversation)

Prevention: An Example with Motivational Interviewing (MI)

- Victim: I’m looking forward to seeing my girlfriend at Christmas when she comes to the US. Until then, I need to send her this money to support her and her grandmother.
- Bank: Oh, I see. You are supporting her by sending her your paycheck.
- Victim: Yes, exactly. Without it, she will be evicted.
- Bank: And that is certainly concerning. You have a lot on your plate, it seems.
- Victim: Yeah, I guess so. She just means the world to me. I’d be lost without her. She does so much for me.
- Bank: You support her by sending money, and she supports you by listening to you.
- Victim: Exactly! I don’t have anyone else in the world.
- Bank: She’s really important to you, and it’s important that other people understand that.
- Victim: Yeah, but they just don’t understand us.
- Bank: I can see how that would be really frustrating. I wonder why they don’t understand.
- Victim: They think she’s scamming me.

Prevention: MI Example, continued

- Bank: And there's no way she's doing that?
- Victim: No, she's not. But I get why they'd think that.
- Bank: Ok, so she's not scamming you, but you can see why your family is worried.
- Victim: Yeah, they think she's just stealing my money and that she won't actually come at Christmas. They said there's been reports of similar things in the news.
- Bank: So, they've seen similar stories in the news, and they're worried that you are losing all your money by sending it to her as a scam. Can I ask if you've talked about this with your girlfriend?
- Victim: Well, I just don't want to upset her. She means so much to me. She's threatened to stop talking to me in the past.
- Bank: It kind of seems like you're stuck between a rock and a hard place. On the one hand, your family is worried about you and wants to keep you safe. And, on the other hand, if you ask your girlfriend about this, she will get upset and possibly break up with you. What do you think about all this?
- Victim: It's tiring, really. I don't want to make anyone upset, but I also want to be happy, and she makes me happy.
- Bank: That makes a lot of sense. Would you ever consider talking to someone else, like a neutral, third party about these concerns? That way you can let your family know you're taking them seriously while not upsetting your girlfriend?

Answers to Key Questions

1. In normal aging, the greatest decline in thinking occurs in the areas of judgment, reasoning, problem solving, and decision making (frontal lobe). Emotion is also impacted vis-à-vis a positivity bias.
2. In dementia, cognitive impairments and dysfunction in everyday life are necessary for diagnosis. There are many forms of dementia aside from Alzheimer's disease (AD), but AD constitutes ~80% of cases of dementia. All have some degree of compromised insight.
3. In AD, the individual can seem cognitively intact because of preserved social graces, preserved attention and concentration, and often preserved physical abilities.

Acknowledgements

Funding

National Institute on Aging/National Institutes of Health (NIH)

Dana Foundation Program in Brain and Immuno-Imaging

Takeda Pharmaceuticals

University of Iowa Internal Funding

Questions?

natalie-denburg@uiowa.edu

Suggested Readings

1. Denburg, N. L., & Harshman, L. (2010). Why so many seniors get swindled: Brain anomalies and poor decision-making in older adults. The Dana Foundation's *Cerebrum: Emerging Ideas in Brain Science* (pp. 123-131). New York: Dana Press.
2. Denburg, N. L., & Hedgcock, W. (2015). Age-associated executive dysfunction, the prefrontal cortex, and complex decision making (pp. 79-101). In T. Hess, C. Loeckenhoff, & J. Strough (Eds.), *Aging and Decision-Making: Empirical and Applied Perspectives.* New York: Elsevier.
3. Yamada, T. H., Denburg, N. L., & Tranel, D. (2017). Approach to the patient with memory impairment. In Biller, J. (Ed.), *Practical Neurology* (5th ed.). Philadelphia: Lippincott-Raven.
4. Denburg, N. L., Collins, S. M., Garcia, N., & Cole, P. (2022). Self-evaluation worksheets enhance elder financial decision making. *Frontiers in Psychology, 13,* 790088. doi.org/10.3389/fpsyg.2022.790088

Breaking the Scam Spell

Michelle Pilsworth
Head of Fraud & Complaints
Santander Bank UK

Chris Ainsley
Head of Fraud Risk Management
Santander Bank UK

Nikki Bargains
Senior Vice President, Aging &
Vulnerable Client Program Manager
Bank of America

Navigating the Double-Edged Sword: AI, Fraud and Banking

Lisa Matthews
Senior Director
Ally Bank

Howard Tischler
CEO
EverSafe

Ari Redbord
Global Head of Policy
TRM Labs

John Carlson
SVP, Cybersecurity Regulation and Resilience
American Bankers Association

Elder Financial Exploitation SARs and Enforcement Actions

Andrea Higgens
Inspector, Elder Protection Unit, San Mateo County District Attorney's Office

Laura Richardson
Independent Consultant

Heather Trew
SVP & Counsel (Bank Secrecy Act, Anti-Money Laundering, Sanctions)
American Bankers Association

Making Cross-Sector Collaboration Work

Andrea Higgens
Inspector, Elder Protection Unit,
San Mateo County District
Attorney's Office

David Aumiller
VP Fraud Risk Manager
HSBC Bank

Sherry Camacho
Adult Protective Services
Specialist
York/Poquoson Social Services

- Include all witnesses' & investigators' contact information in the APS/law enforcement referral – this allows the agency to contact those individuals with direct knowledge of the circumstances.
- Include the filer's mailing address and/or email address in the APS/law enforcement referral – this enables the states who reply in writing to notify the correct location.
- Provide your FI's subpoena and warrant process in the APS/law enforcement referral – this will expedite the resolution of the case.
- On your FI's public website, include instructions to submit a subpoena or warrant.
- Invite APS and law enforcement to provide training or do a Q&A with your front-line staff – this fosters a working relationship with your local APS/law enforcement partners.
- Invite APS and law enforcement to a client gathering to share safety tips – builds good will with your client and the APS/law enforcement partners.
- Encourage staff to report all unusual activity/elder exploitation/abuse red flags.
- On your public FI's website, include elder abuse information, a link to your local APS website, and national organizations that provide support to consumers.
- When filing a SAR that indicates Elder Financial Exploitation ensure you have submitted your local APS/law enforcement referral.
- When following up on a referral, consider asking for a general statement on the resolution – not all states can share specific details.

Guardians at the Gate: Empowering Staff to Spot and Stop Scams and Financial Abuse

Darius Kingsley
Head of Consumer
Banking Practices
JPMorgan Chase

Laurel Sykes
EVP, Chief Risk Officer
American Riviera Bank

Ray Olsen
SVP, Senior Director of
Enterprise Fraud Management
Wintrust Financial Corporation

Jim Hitchcock
VP, Fraud Mitigation
American Bankers Association

ABA Foundation Resources

Training to Empower Bankers

It's essential for bank personnel to identify elder financial exploitation (EFE). Learn how to prevent EFE, support victims of financial crimes, file Suspicious Activity Reports (SARs) and more.

LEARN MORE ›

Consumer Outreach and Awareness

Educate consumers so they can safeguard their financial assets and identities. Engage with your community using free programs like Safe Banking for Seniors.

LEARN MORE ›

Partnerships with Law Enforcement and APS

Bankers don't have to fight elder financial exploitation alone. We have resources to help you foster relationships with law enforcement and adult protective services to protect older customers.

LEARN MORE ›

Leveraging Technology for Good

Harness the power of tech innovations and solution providers from the ABA Partner Network to protect your customers and your bank.

LEARN ABOUT OUR PARTNERS ›

Aba.com/OlderAmericans

ABA 100 YEARS FOUNDATION