



Developing effective communications for aging audiences

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Aging

- Population age is increasing worldwide
- Older adults face difficult pension decisions
- New literature on aging and decision-making competence
 - 4 emerging findings
 - implications for pension communications

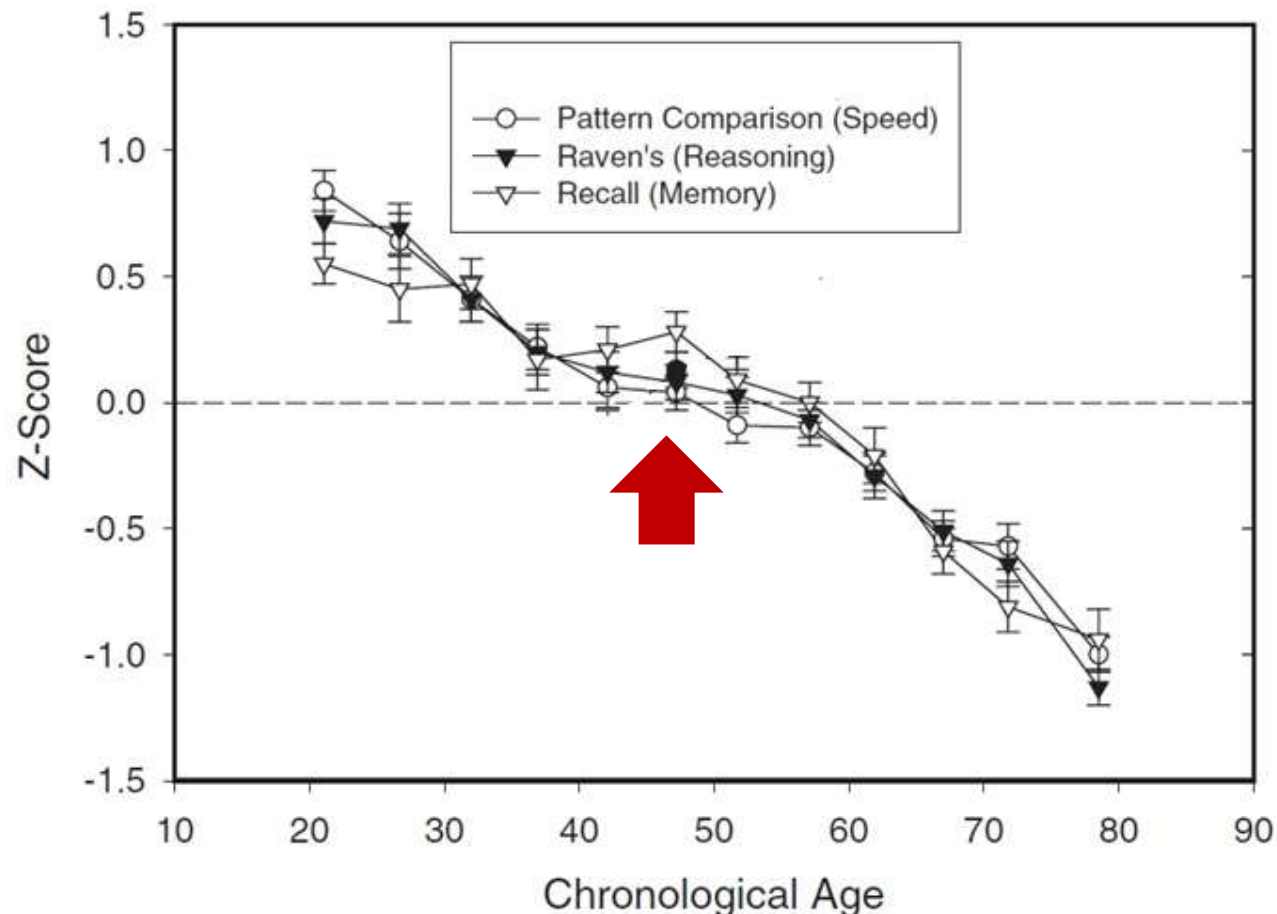


Overview

1. Key findings from literature on aging
2. Suggestions for pension communications
3. Take-home messages

Finding 1:

Decline in 'fluid' cognitive abilities

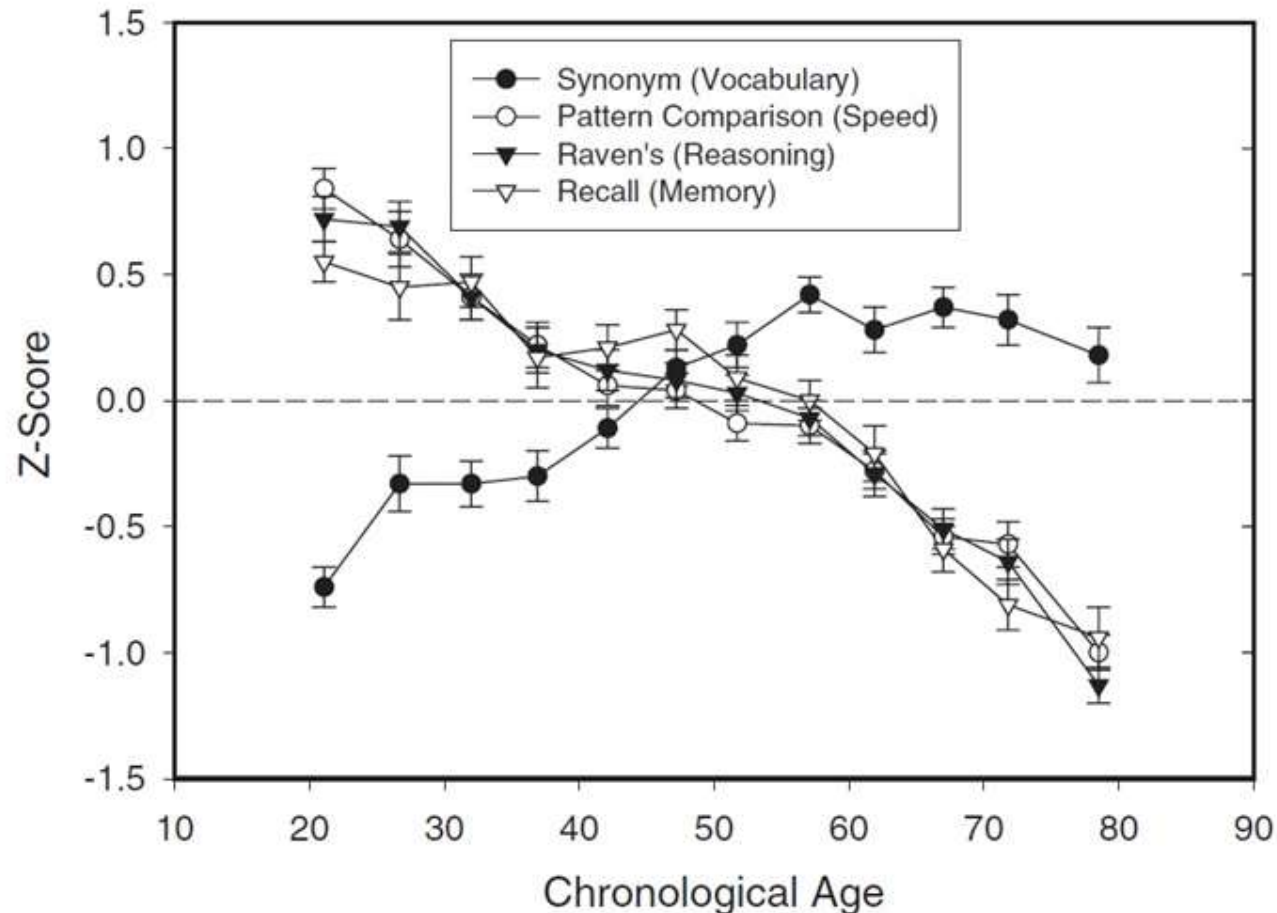


(figure from Salthouse, *Current Directions in Psychological Science*, 2004)

- Older adults do worse than younger adults on complex decision tasks
- But they do *just as well* on simple decision tasks

See: Bruine de Bruin et al., *Journal of Behavioral Decision Making*, 2012

Finding 2: Increased experience



(figure from Salthouse, *Current Directions in Psychological Science*, 2004)

- Experienced decision makers may not have to think as hard about their decisions

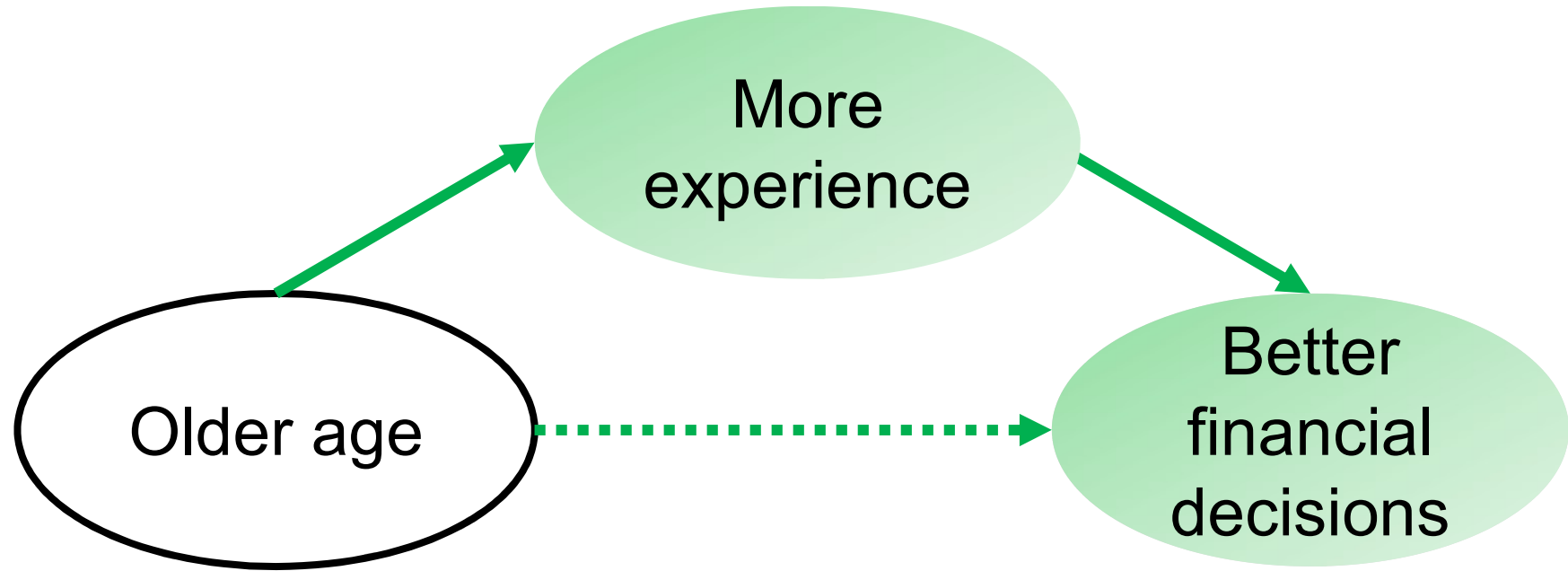
Bruine de Bruin et al., *Journal of Behavioral Decision Making*, 2012

2: Experience-based knowledge



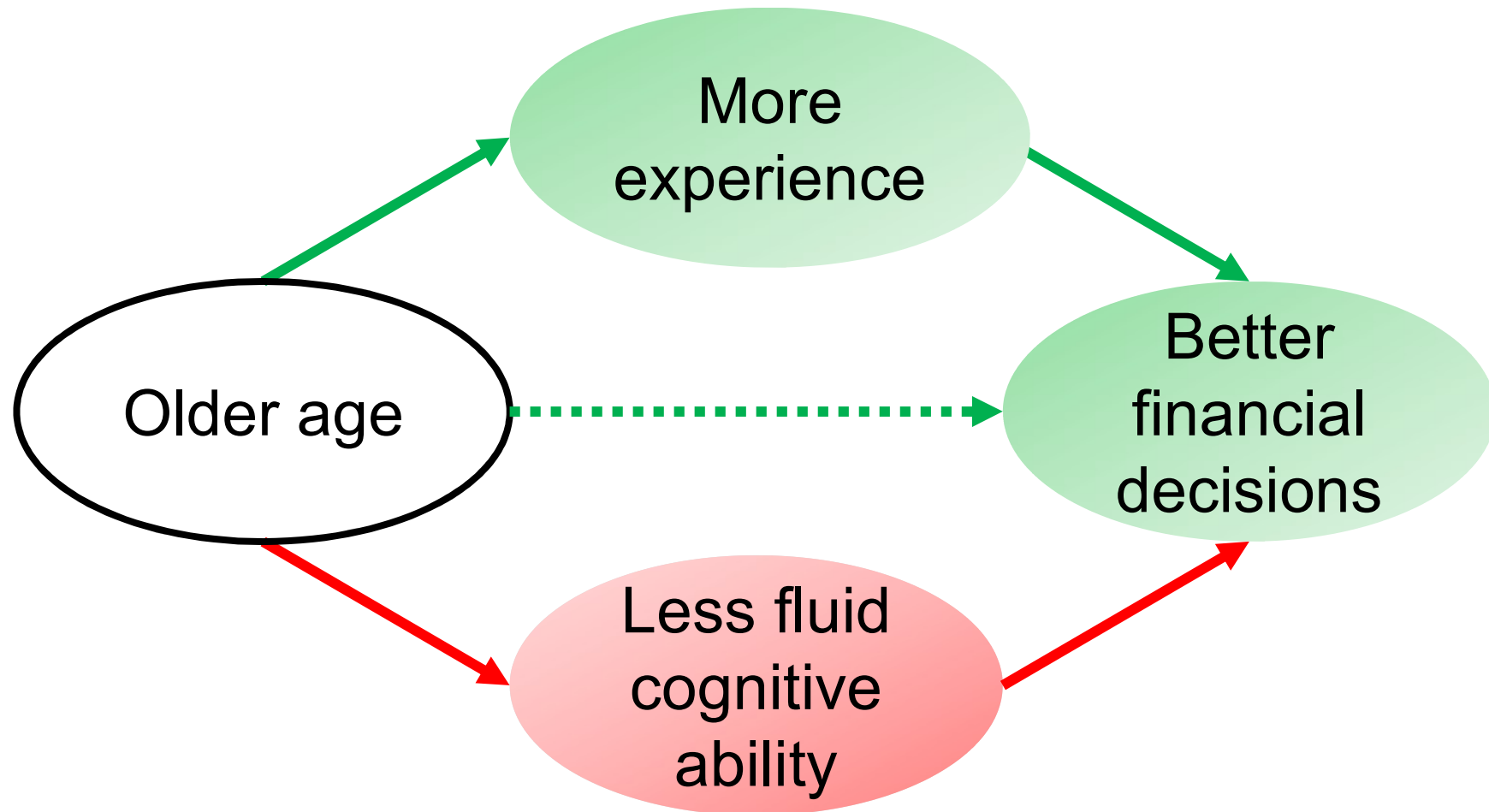
Li et al, *Psychology and Aging*, 2013; *PNAS*, 2015

2: Experience-based knowledge



Li et al, *Psychology and Aging*, 2013; *PNAS*, 2015

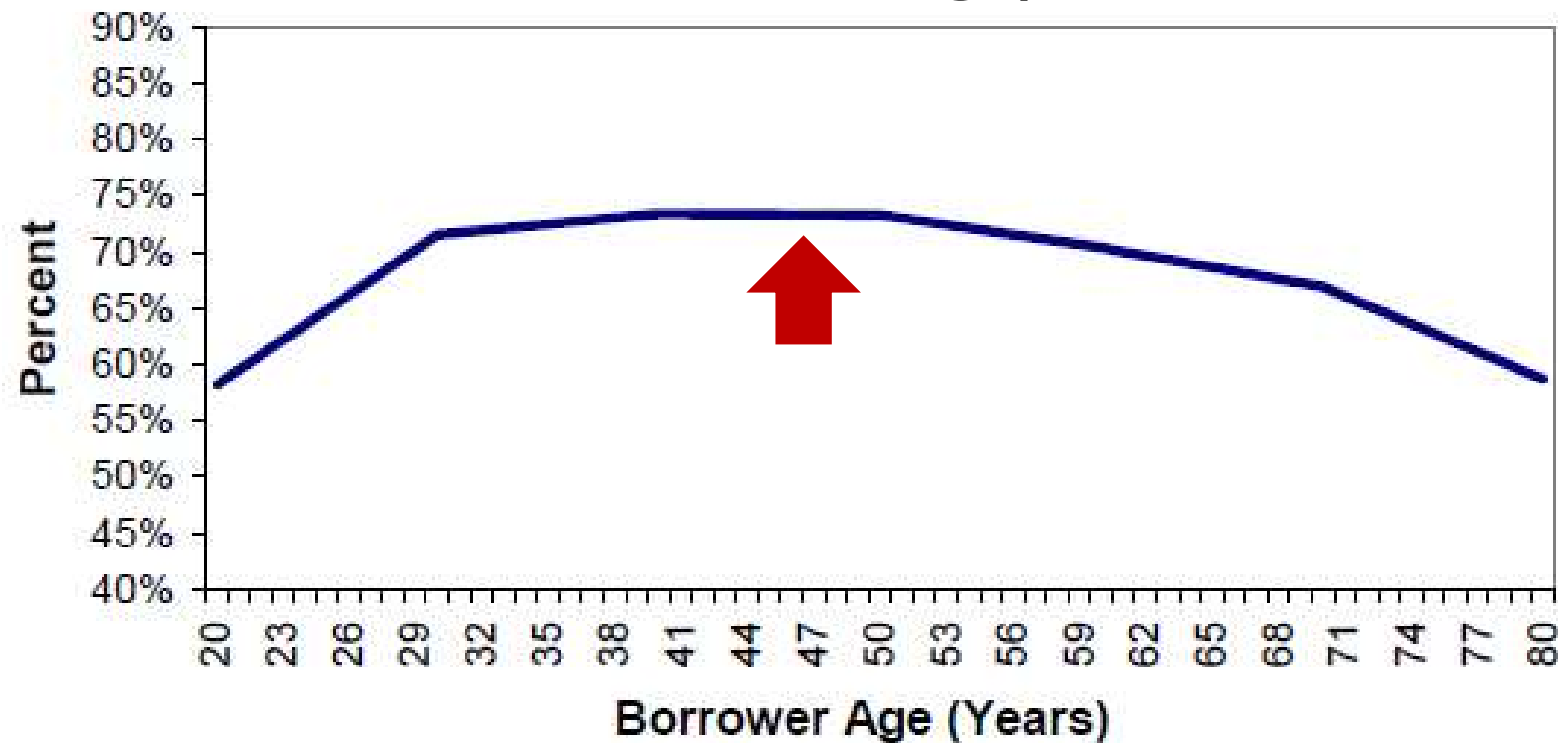
2: Experience-based knowledge



Li et al, *Psychology and Aging*, 2013; *PNAS*, 2015

Finding 2: Increased experience

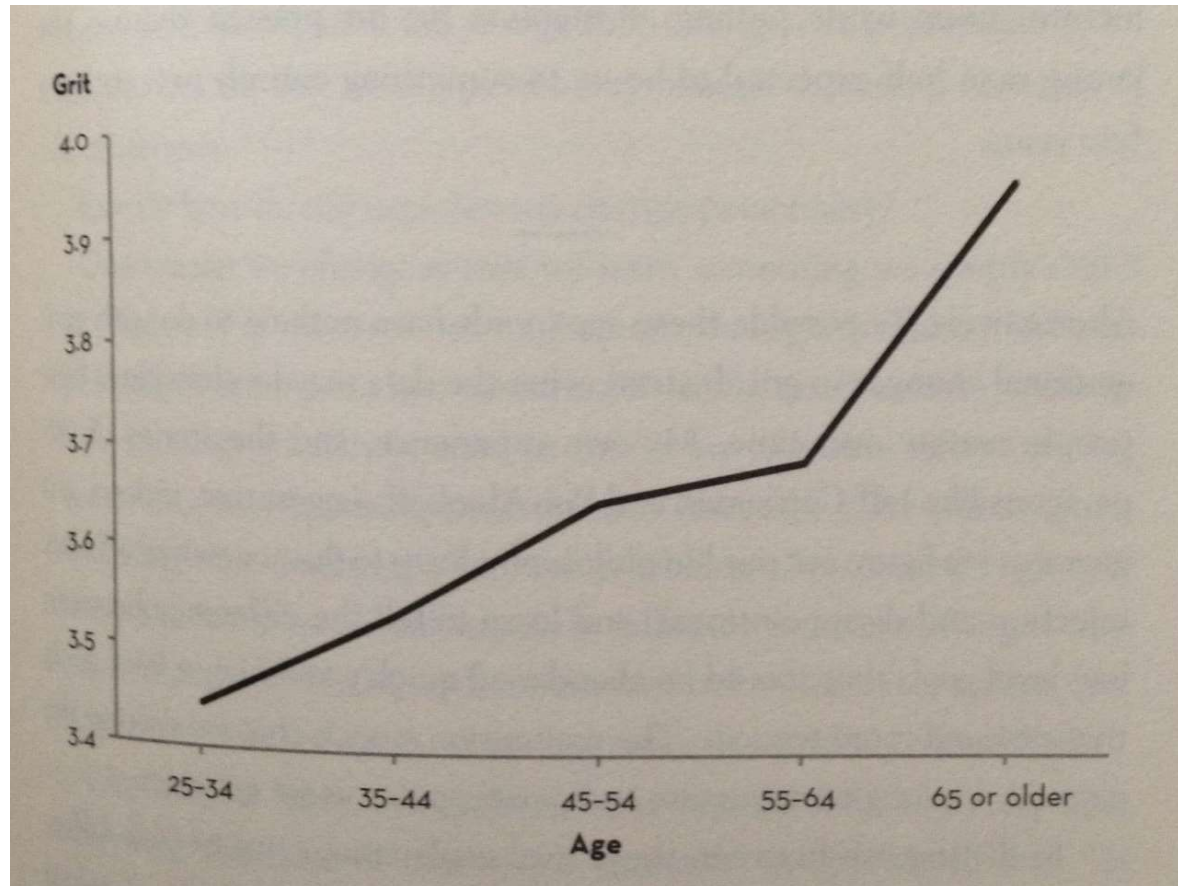
Financial decision making (about credit cards)



Agarwal et al., *Brookings Papers on Economic Activity*, 2009

Finding 3:

Age-related change in motivation



- Grit means *selective* motivation for personal goals (vs. other goals)

Duckworth, "*Grit*", 2016

Finding 3:

Age-related change in motivation

Table 1—Variable Return Investments								
Name/ Type of Option	Average Annual Total Return as of 12/31/XX				Benchmark			
	1yr.	5yr.	10yr.	Since Inception	1yr.	5yr.	10yr.	Since Inception
Equity Funds								
A Index Fund/ S&P 500 www. website address	26.5%	34%	-1.00%	9.25%	26.46%	42%	-95%	9.30%
					S&P 500			
B Fund/ Large Cap www. website address	27.6%	.99%	NA	2.26%	27.80%	1.02%	NA	2.77%
					US Prime Market 750 Index			
C Fund/ Int'l Stock www. website address	36.73%	5.26%	2.29%	9.37%	40.40%	5.40%	2.40%	12.09%
					MSCI EAFE			
D Fund/ Mid Cap www. website address	40.22%	2.28%	6.13%	3.29%	46.29%	2.40%	-3.52%	4.16%
					Russell Midcap			
Bond Funds								
E Fund/ Bond Index www. website address	6.45%	4.40%	6.08%	7.08%	5.93%	4.97%	6.33%	7.01%
					Barclays Cap. Aggr. Bd.			
Other								
F Fund/ GICs www. website address	.72%	3.36%	3.11%	5.56%	1.8%	3.1%	3.3%	5.75%
					3-month US T-Bill Index			
G Fund/ Stable Value www. website address	4.26%	4.64%	5.07%	3.75%	1.8%	3.3%	3.0%	4.99%
					3-month US T-Bill Index			
Generations 2020/ Lifecycle Fund www. website address	27.94%	NA	NA	2.45%	26.46%	NA	NA	3.0%
					S&P 500			
					20.95%	NA	NA	3.74%
					Generations 2020 Composite Index ^a			

- Many older adults *dislike* complex numerical information
- But they will spend effort, *if information is relevant*

Bruine de Bruin et al., *Medical Decision Making*, 2015

Finding 4:

Better emotion regulation

- Emotional well-being improves with age
- Older adults are more focused on maintaining positive emotions
- Positive emotion focus affects decisions



Bruine de Bruin et al., *Psychology & Aging*, 2014, 2015

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Suggestions for communications

1. Target cognitive decline
 - Provide decision aids
 - Reduce number of options
 2. Build on experience
 - Build on familiar examples
 3. Improve motivation
 - Increase personal relevance
 - Set default
 4. Build on emotions
 - Frame information positively
- Diagrammatic groupings on the right side of the list:
- Same for younger adults (grouping items 1 and 2)
 - Give younger 'safe' experiences (grouping item 2)
 - Provide monetary incentives? (grouping item 3)
 - ? (grouping item 4)

See for reviews:

Bruine de Bruin, *Pension Research Council Publications*, in press;
Strough, Bruine de Bruin, & Peters *Frontiers in Psychology*, 2015

Existing communications

- Many communications are disseminated without testing their effectiveness
- Those that are tested are often found to be ineffective, perhaps due to
 - Providing information that is too complex
 - Not covering what recipients want or need to know
 - Not involving psychologists



Behavioral decision research approach to developing communications

1. Normative: What should people know to make more informed decisions?
 - Literature review and expert panel
2. Descriptive: What do people already know and how are they making their decisions?
 - Interviews and surveys
3. Prescriptive: What do people still need to know to make more informed decisions?
 - Compare step 1 and 2 to develop message
4. Evaluation: Does the communication help people to make more informed decisions?
 - Evaluate message effectiveness

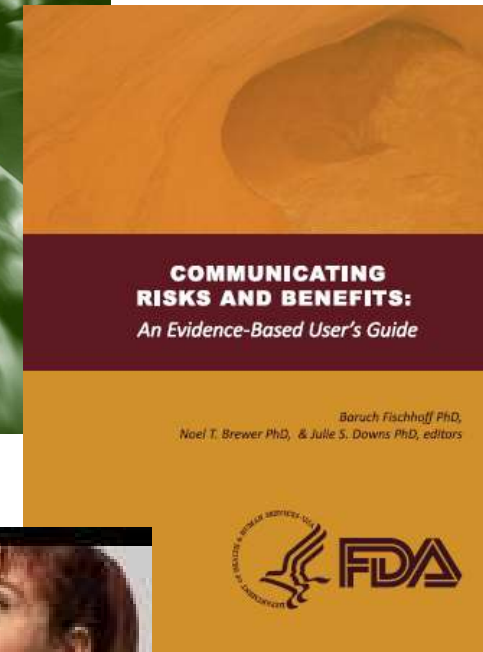
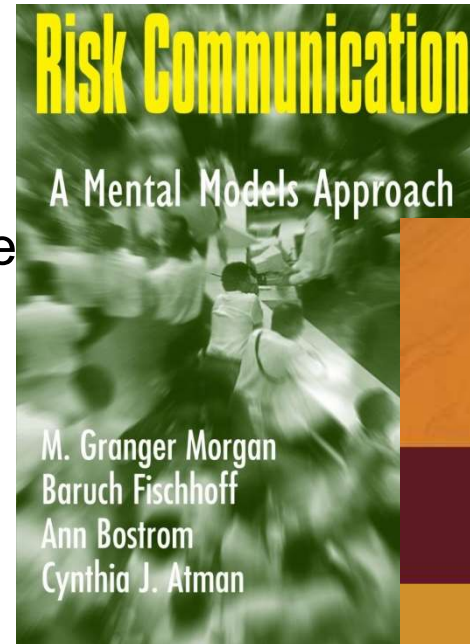
More about the methodology

Morgan, M.G., Fischhoff, B., Bostrom, A., & Atman, C. (2002). *Risk communication: A mental models approach*. New York, NY: Cambridge University Press.

Fischhoff, B., Brewer, N.T., & Downs, J.S. (2011). *Communicating risks and benefits: An evidence-based user's guide*. USFDA.

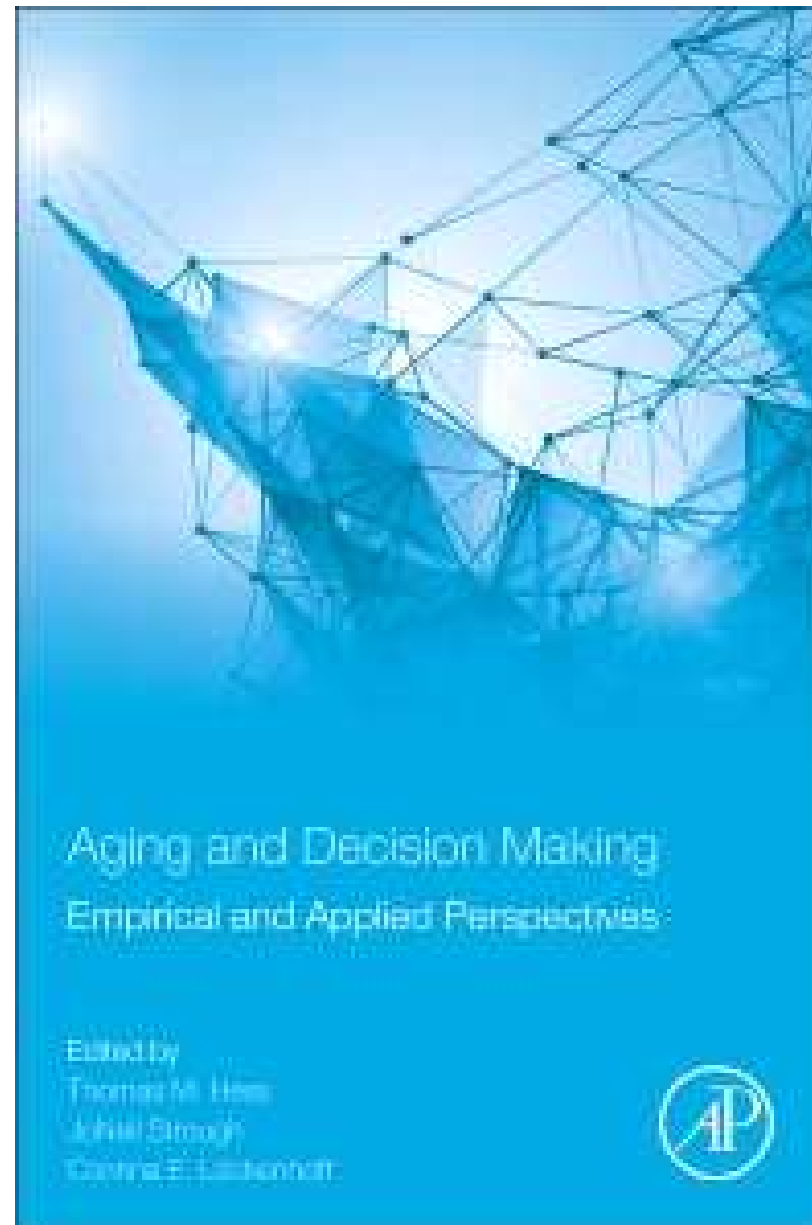
(www.fda.gov/oc/advisory/OCRCACACpg.html)

Bruine de Bruin, W., & Bostrom, A. (2013). How to assess what to address in science communication. *Proceedings of the National Academy of Sciences*, 110, 14062-14068.



Also on YouTube

More about aging audiences



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Take-home messages

- Older adults face cognitive decline
- Age is also related to more experience, changes in motivation and emotions
- Communication should be designed with audience members' strengths and weaknesses in mind
- *Collect data to understand your audience*
- *Test messages before disseminating them*
- *Psychologists can help*

Related projects in Centre for Decision Research

- Understanding age differences in financial decision making (with Wiebe Eberhardt, funded by EU)
- Helping people in financial distress (funded by Leverhulme Fellowship to Simon McNair)
- Using graphs to improve communications (funded by Cancer Research UK Fellowship to Yasmina Okan)
- Understanding patients' preferences for health information (funded Swedish Riksbanken Jubileumsfond)





Website:

[www.leeds.ac.uk/
decision-research/](http://www.leeds.ac.uk/decision-research/)

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