

# The ethics of risk profiling

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**FQAA**  
**CONGRESS**  
2023 ADELAIDE NOVEMBER 20-22





# The Ethics of Risk Profiling

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Dr Katherine Hunt







Risk profiling is  
essential for ethics





# Agenda

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Ethics and Psychological Tolerance  
for Risk

Ethics and Risk Capacity

Ethics and Risk Need

Communication

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# Psychological Tolerance for Risk

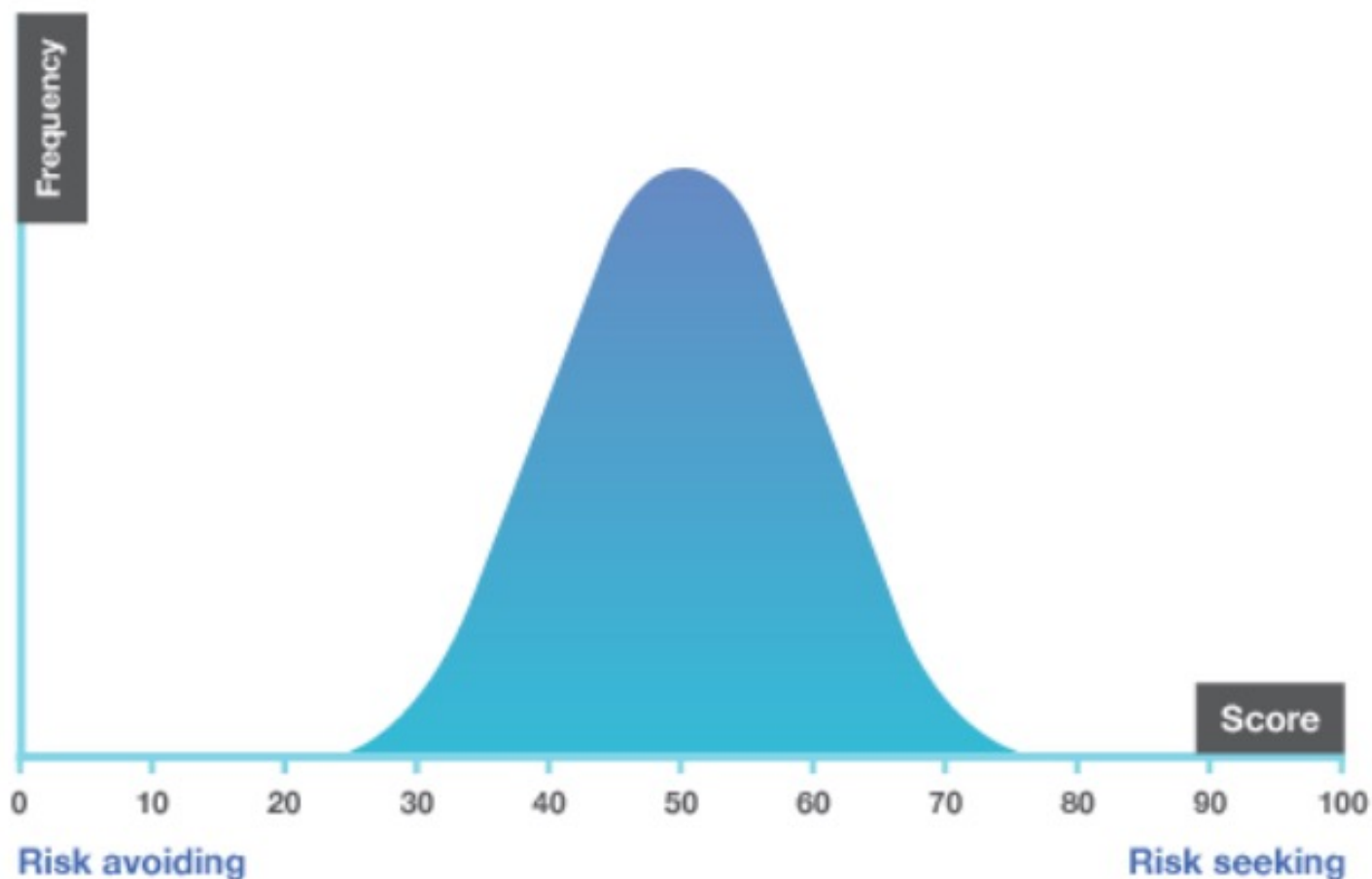
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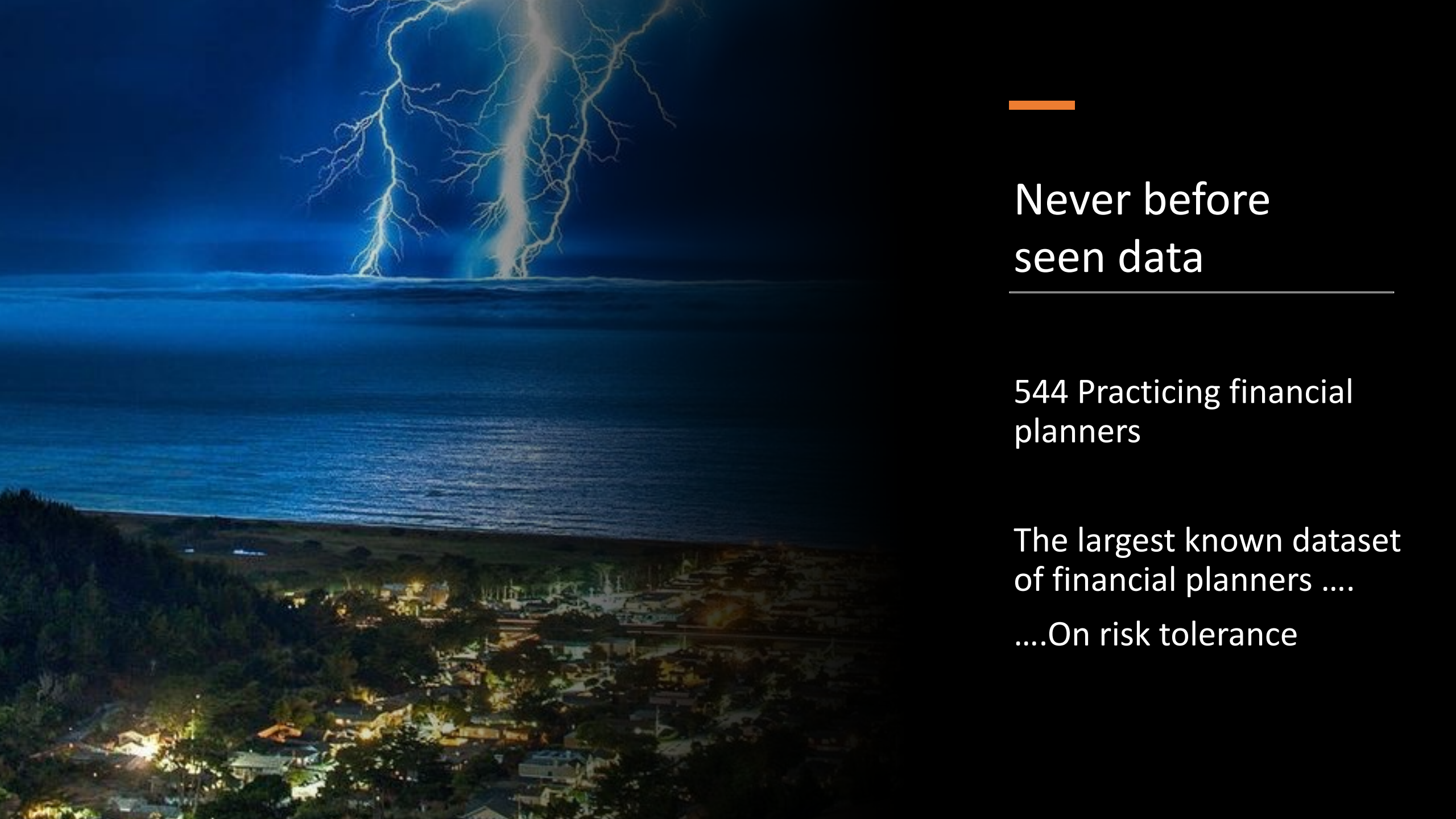




This questionnaire is scored on a scale of 0 to 100. When the scores are graphed they follow the familiar bell-curve of the Normal distribution shown below. The average score is 50. Two-thirds of all scores are within 10 points of the average. Only 1 in 1000 is less than 20 or more than 80.

What do you think your score will be?





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## Never before seen data

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544 Practicing financial  
planners

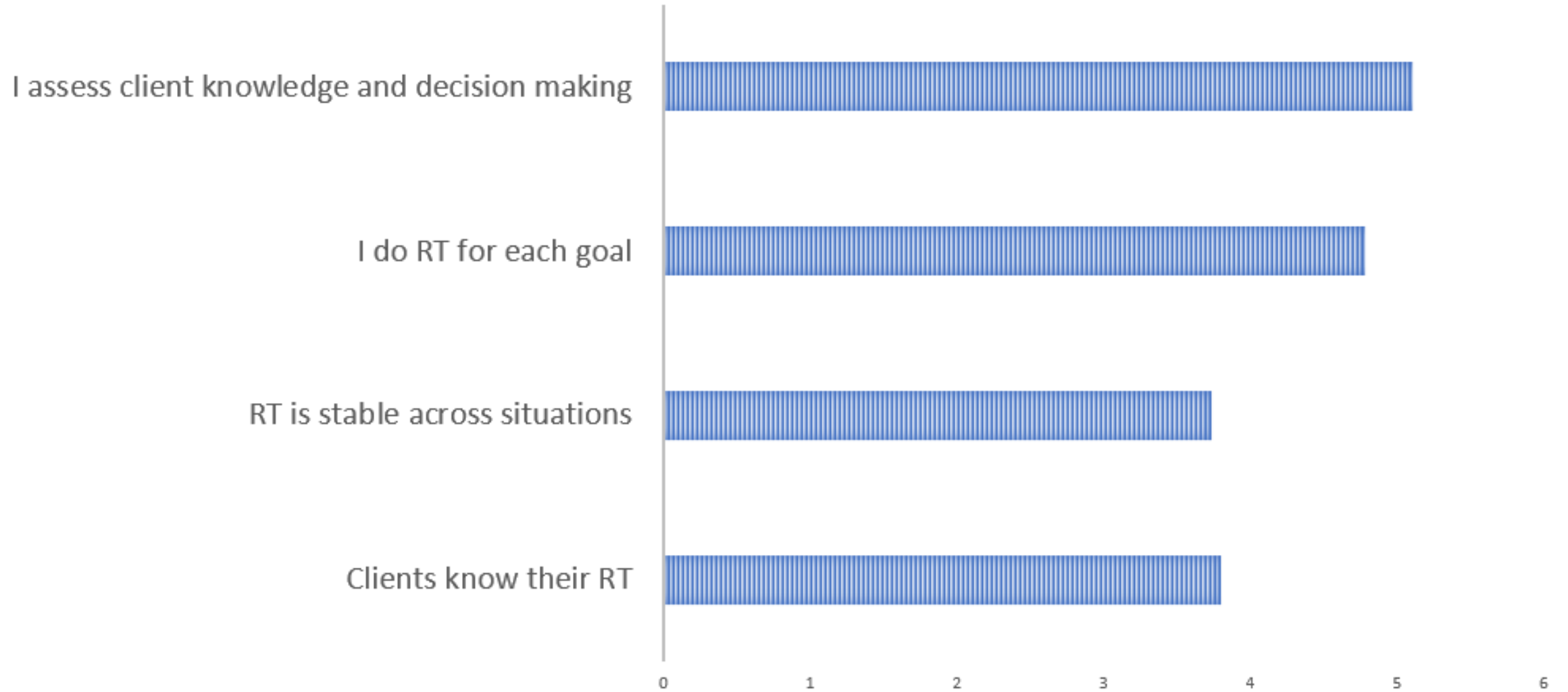
The largest known dataset  
of financial planners ....  
....On risk tolerance



# How about you?

- A) I assess client knowledge and decision making Disagree 1 2 3 4 5 6 7 Agree
- B) A do a risk tolerance survey for each goal Disagree 1 2 3 4 5 6 7 Agree
- C) Risk tolerance is stable across situations Disagree 1 2 3 4 5 6 7 Agree
- D) Clients know their risk tolerance Disagree 1 2 3 4 5 6 7 Agree

## COHORT ANALYSIS



Source: Portfolio Construction Forum (2023), n=544 practicing financial planners



# Are you Ready to Poll?

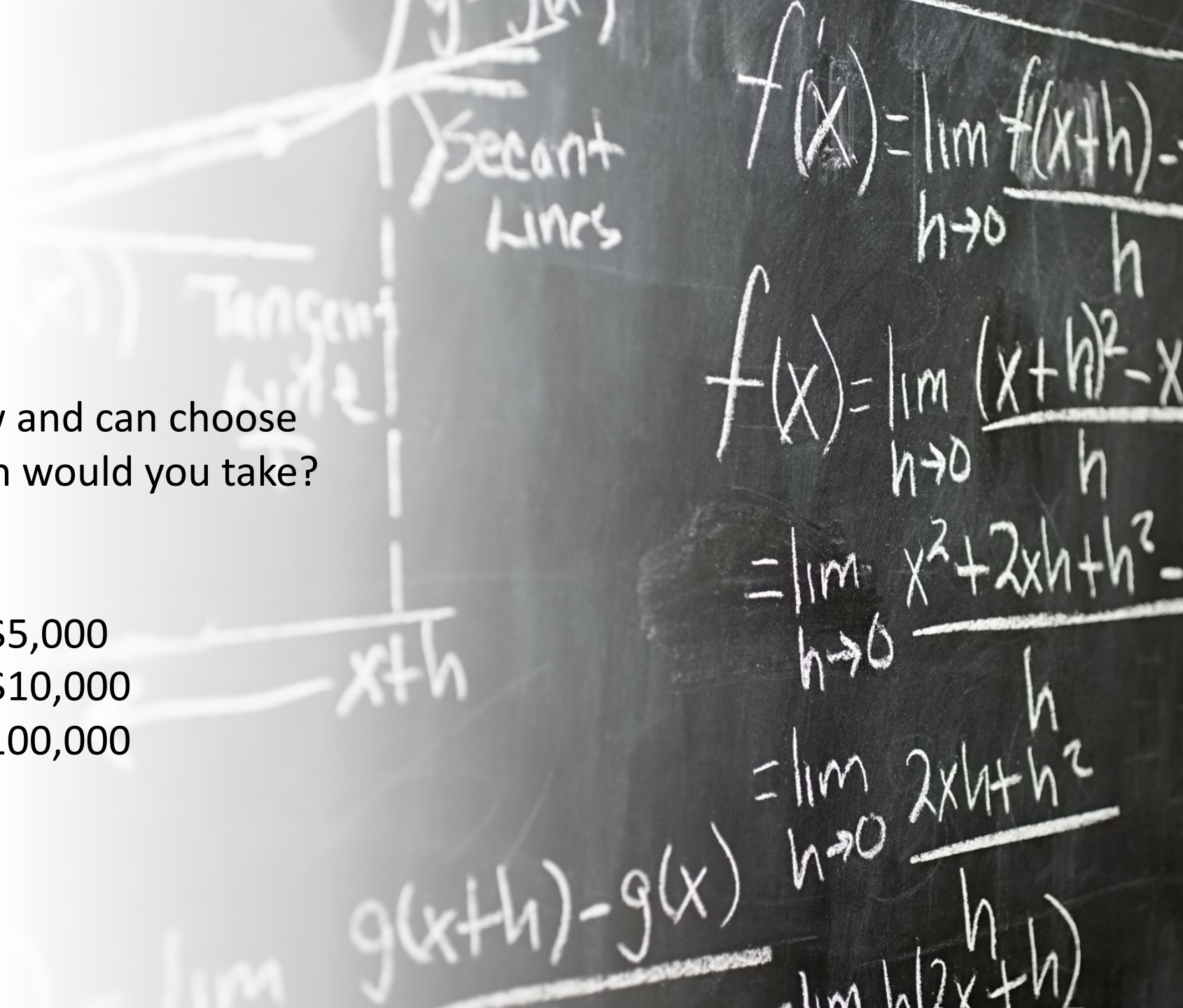




## Psychological Tolerance for Risk Self-Quiz

A) You are on a TV game show and can choose one of the following. Which would you take?

- 1 \$1,000 in cash
- 2 A 50% chance at winning \$5,000
- 3 A 25% chance at winning \$10,000
- 4 A 5% chance at winning \$100,000



## Psychological Tolerance for Risk: Self-Quiz

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- 1 \$1,000 in cash  
= Conservative
- 2 A 50% chance at winning \$5,000  
= Moderate
- 3 A 25% chance at winning \$10,000  
= Moderate
- 4 A 5% chance at winning \$100,000  
= High Growth

Secant  
Lines

$$f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$$

$$f(x) = \lim_{h \rightarrow 0} \frac{(x+h)^2 - x^2}{h}$$

$$= \lim_{h \rightarrow 0} \frac{x^2 + 2xh + h^2 - x^2}{h}$$

$$= \lim_{h \rightarrow 0} \frac{2xh + h^2}{h}$$

$$\lim_{h \rightarrow 0} \frac{g(x+h) - g(x)}{h}$$

$$= \lim_{h \rightarrow 0} \frac{h}{2x+h}$$



# Are you Ready to Poll?





Psychological  
Tolerance for Risk:  
Self-Quiz

B) I can benefit from even the most challenging life events

- 1 Strongly Disagree;
- 2 Disagree;
- 3 Somewhat Disagree;
- 4 Neutral;
- 5 Somewhat Agree;
- 6 Agree;
- 7 Strongly Agree



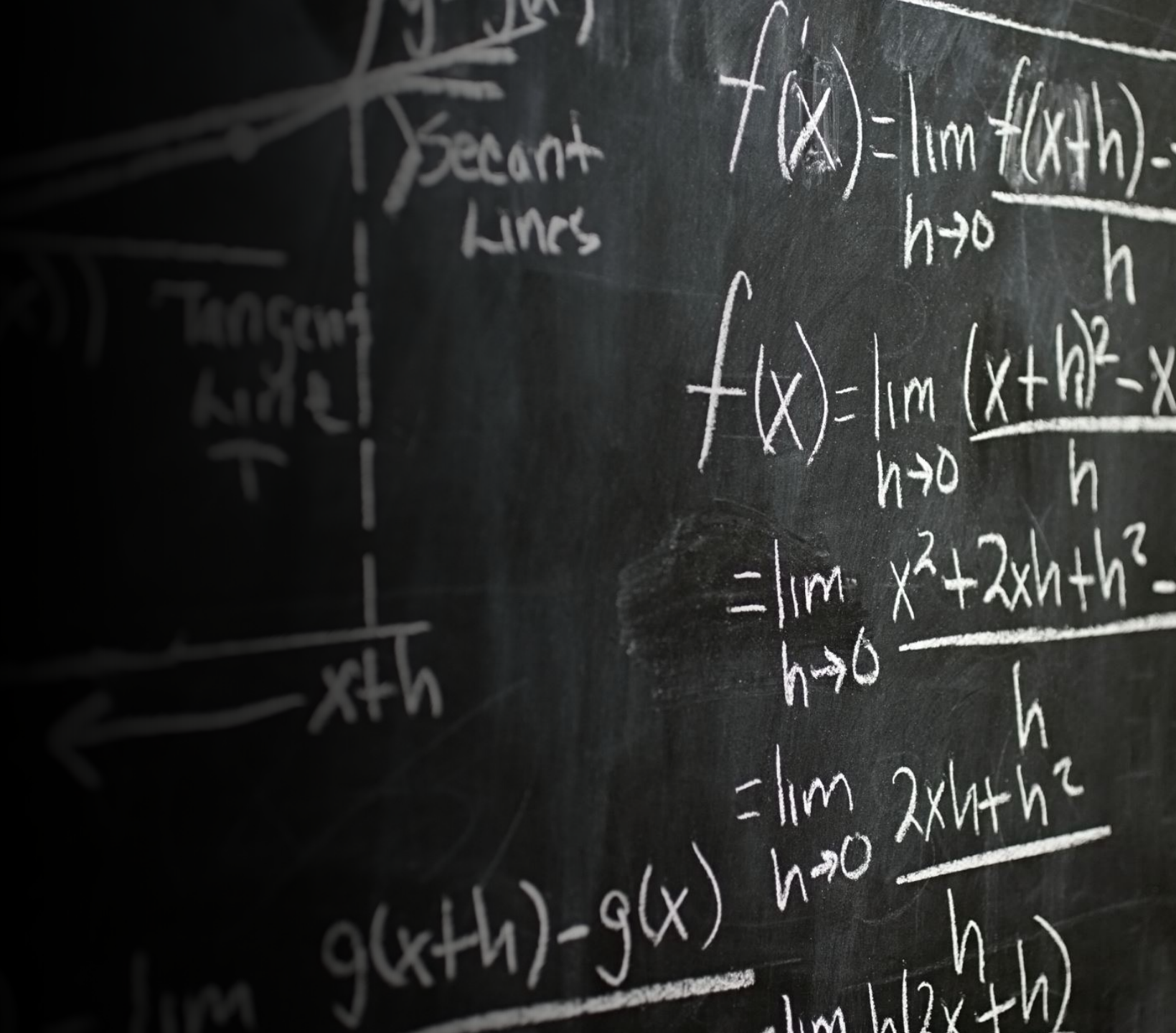
## Psychological Tolerance for Risk: Self-Quiz

### Optimism

1 - 3 = Low Optimism (fee sensitive)

4 Neutral

5 - 7 = High Optimism





# Are you Ready to Poll?





Psychological  
Tolerance for Risk:  
Self-Quiz

C) I am prepared to spend now  
and let the future take care of  
itself

- 1 Strongly Disagree;
- 2 Disagree;
- 3 Somewhat Disagree;
- 4 Neutral;
- 5 Somewhat Agree;
- 6 Agree;
- 7 Strongly Agree



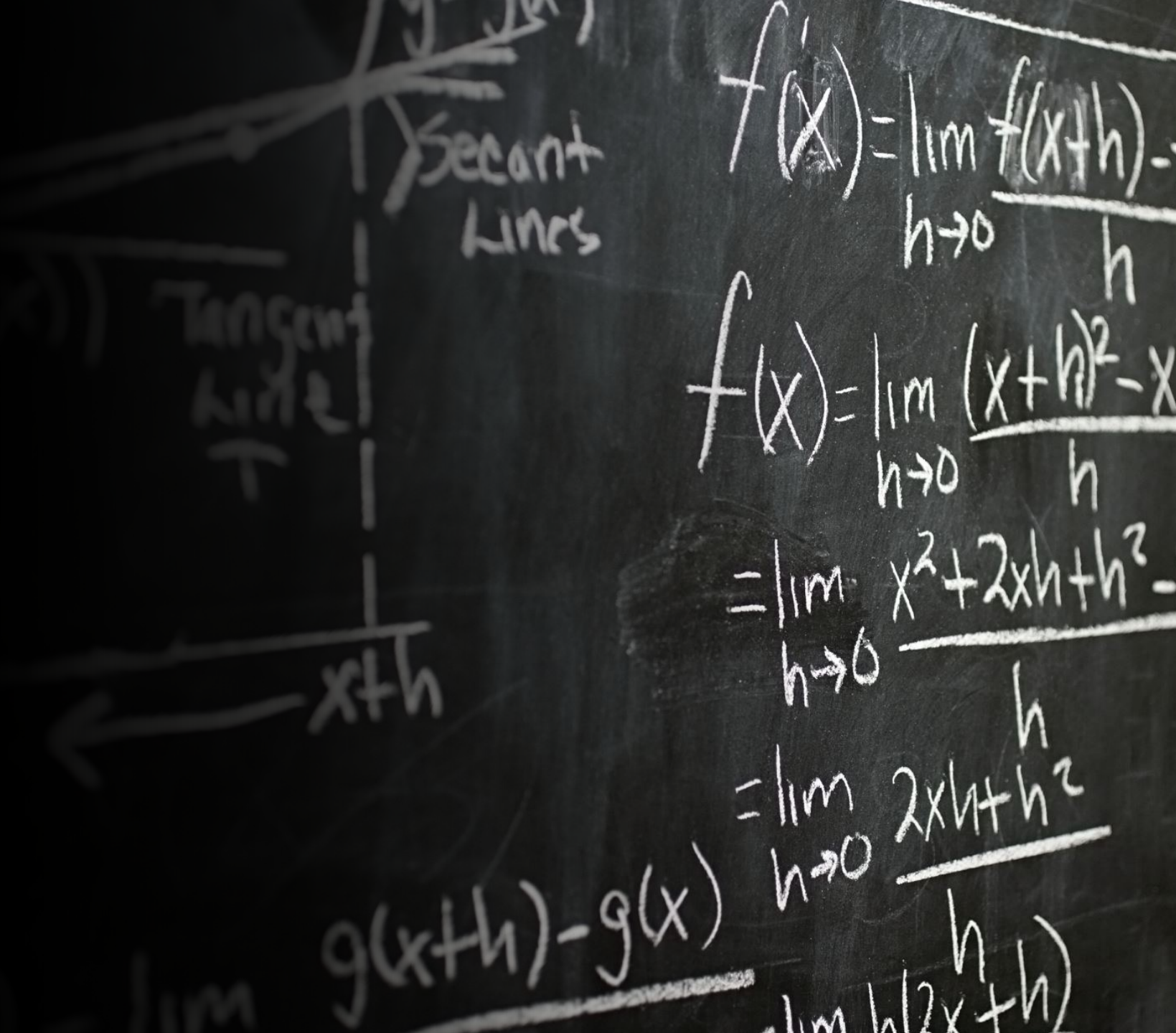
# Psychological Tolerance for Risk: Self-Quiz

## C) Stickability / Self- Control

1 -3 High Self-Control

4 Neutral;

5 - 7 Low Self-Control





Ethics v

Psychological Tolerance for Risk

+ Social Desirability

+ Informed consent

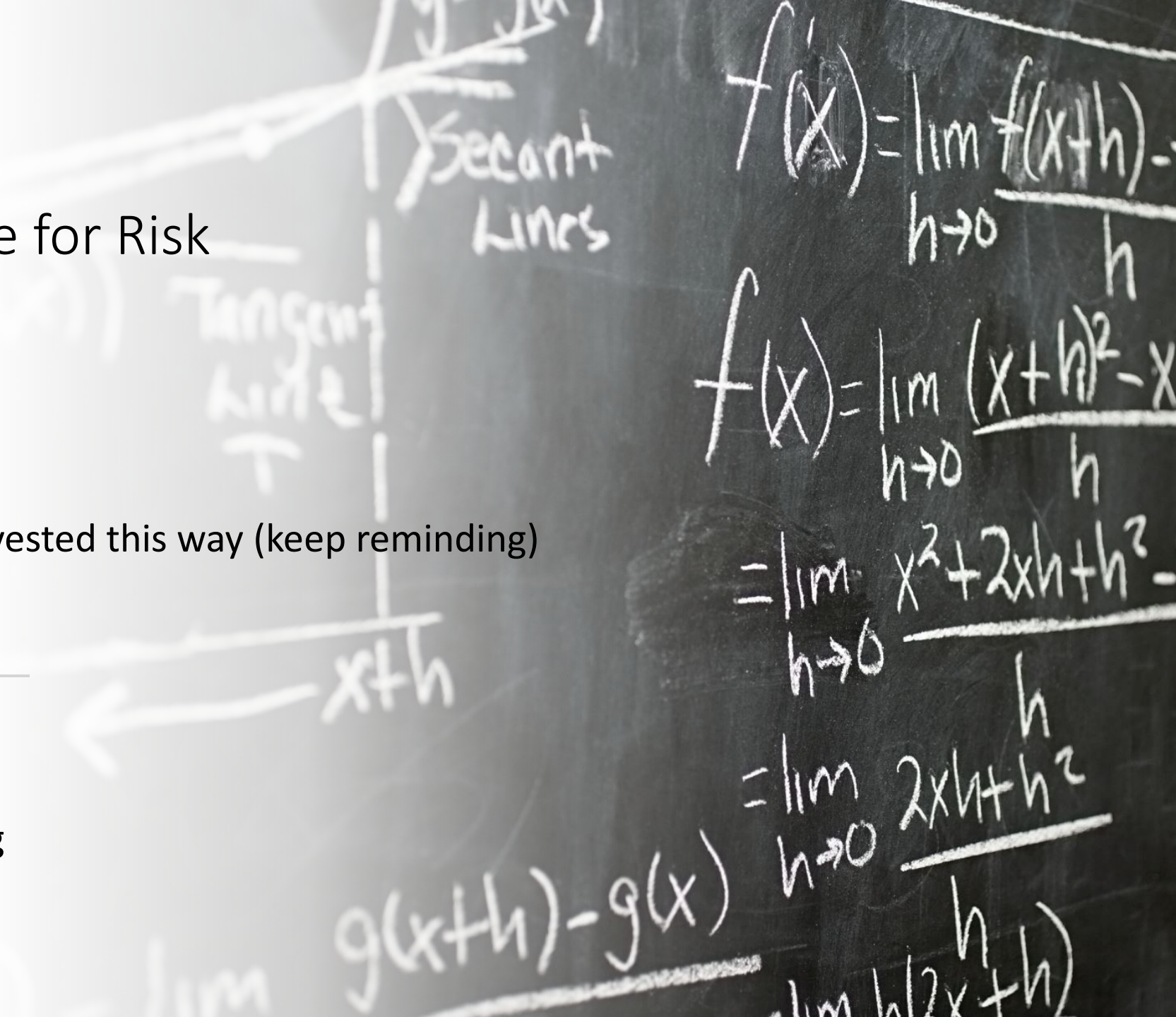
+ Conversation – why you are invested this way (keep reminding)

+ Rational v Emotional

+ Changes with time

+ Client leading v Adviser leading

+ Family groupings







# Research: Risk Capacity

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- Human Capital (decreases as we age)
  - Education
  - Years to retirement
  - Organisational hierarchy
  - Years of experience
- Financial Capital (increases as we age (hopefully))
  - \$\$\$\$\$



# Risk Capacity: Self-Test

- Human Capital Calculation

- + Education

- = 3 points for Bachelor degree

- = 10 points for Masters or above

- + Years to retirement

- = One point for each year until you're 67 (e.g. if you are now 47, you get 20 points)

- + Organisational hierarchy

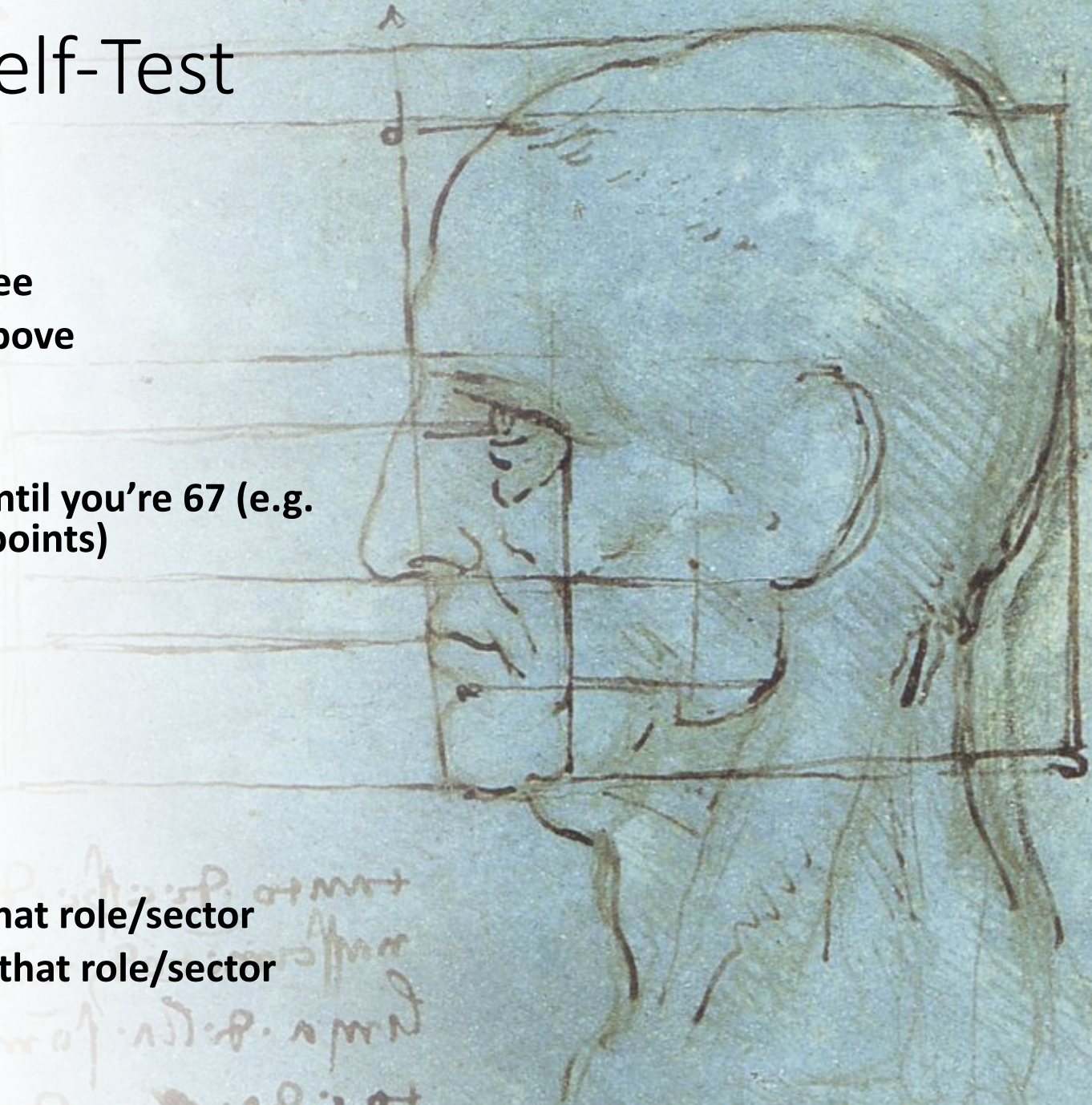
- = 5 points for junior

- = 10 points for senior

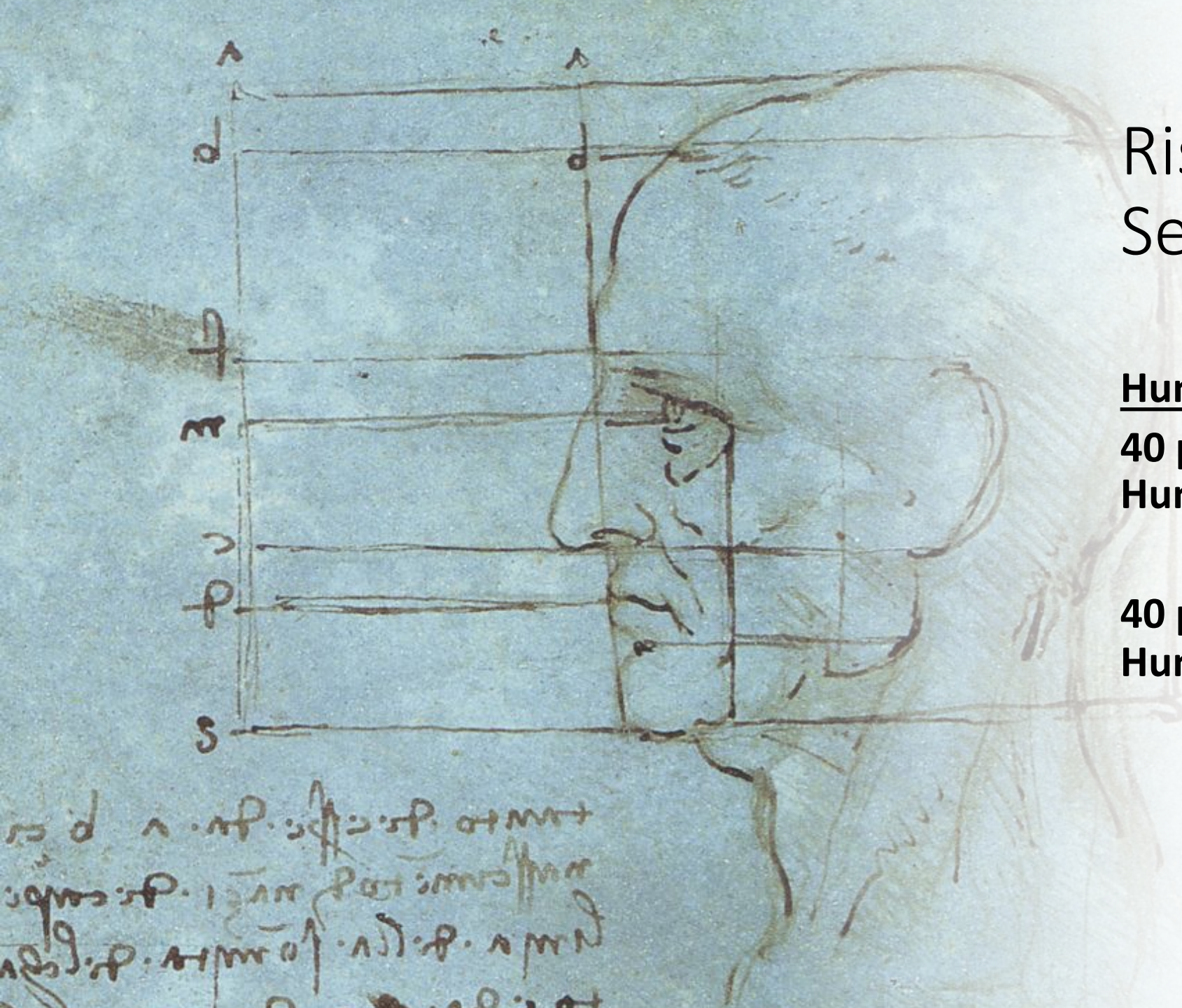
- + Years of experience

- = 5 points for 10+ years in that role/sector

- = 10 points for 20+ years in that role/sector







# Risk Capacity: Self-Test

## Human Capital Calculation

40 points or above = High  
Human Capital

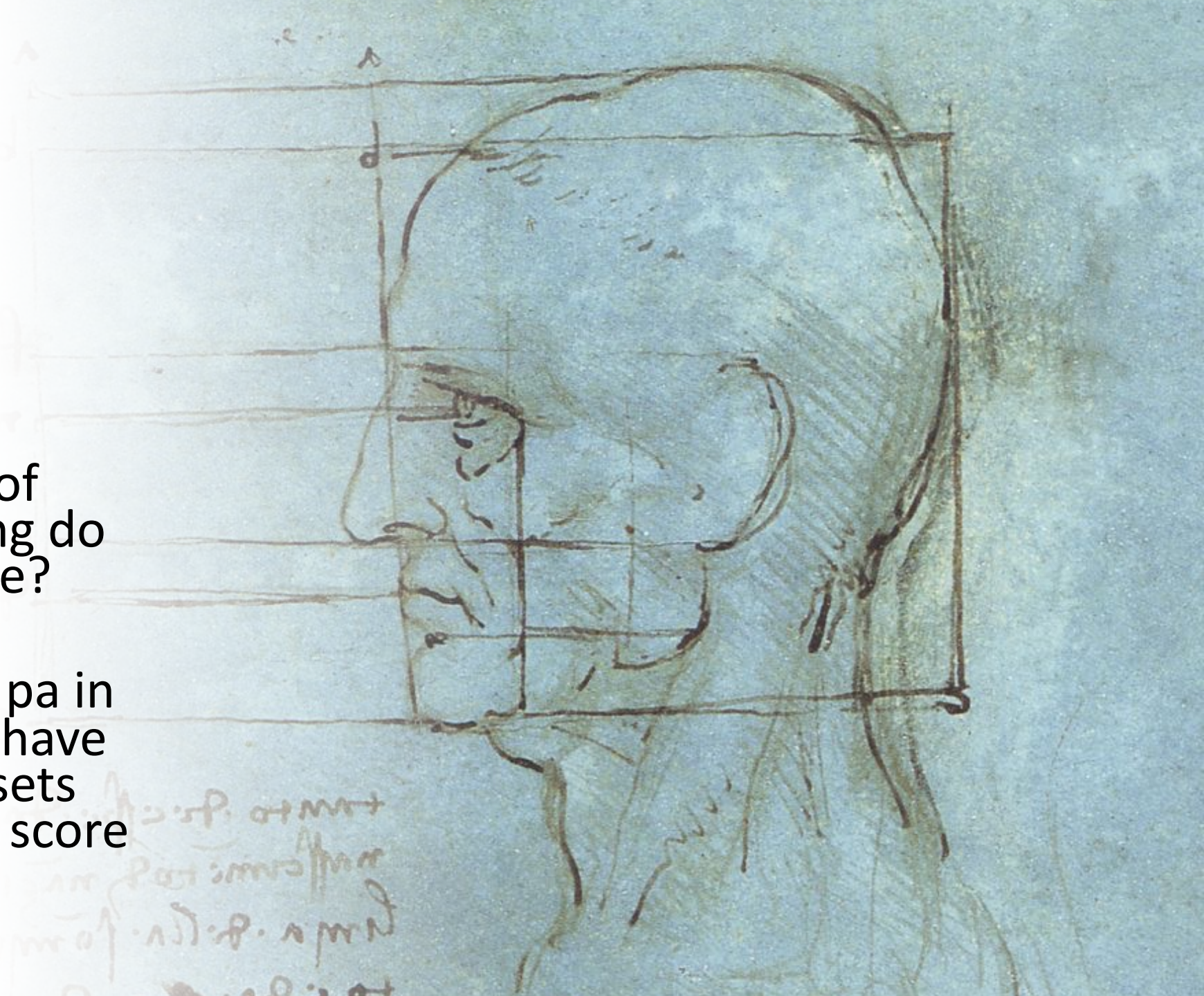
40 points or above = Lower  
Human Capital



# Risk Capacity: Self-Test

## Financial Capital Calculation

- How many years of retirement funding do you currently have?
- E.g. I need \$100k pa in retirement, and I have \$1mil in liquid assets (ex-home), so my score is 10.



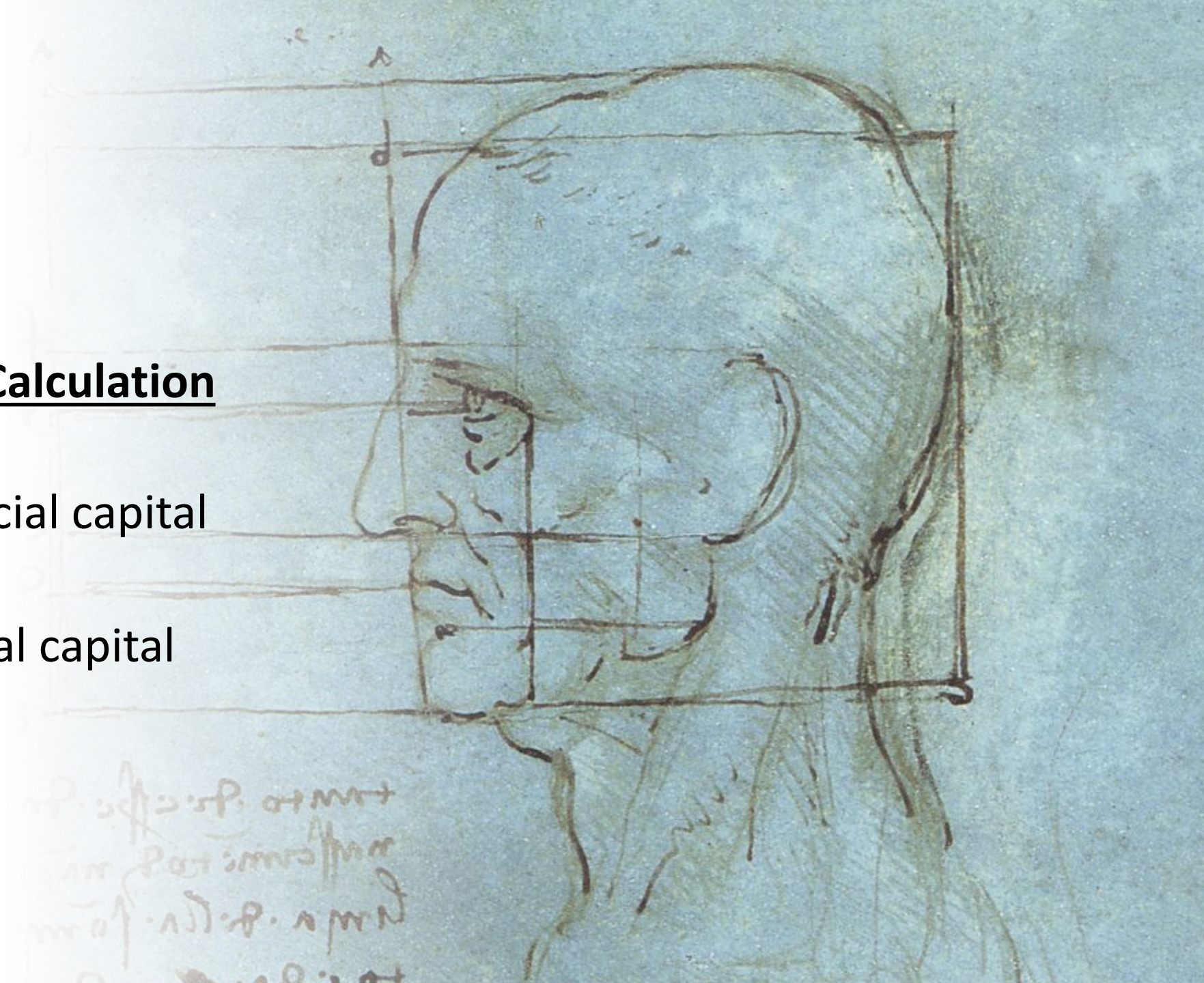


# Risk Capacity: Self-Test

- **Financial Capital Calculation**

< 10 = Lower financial capital

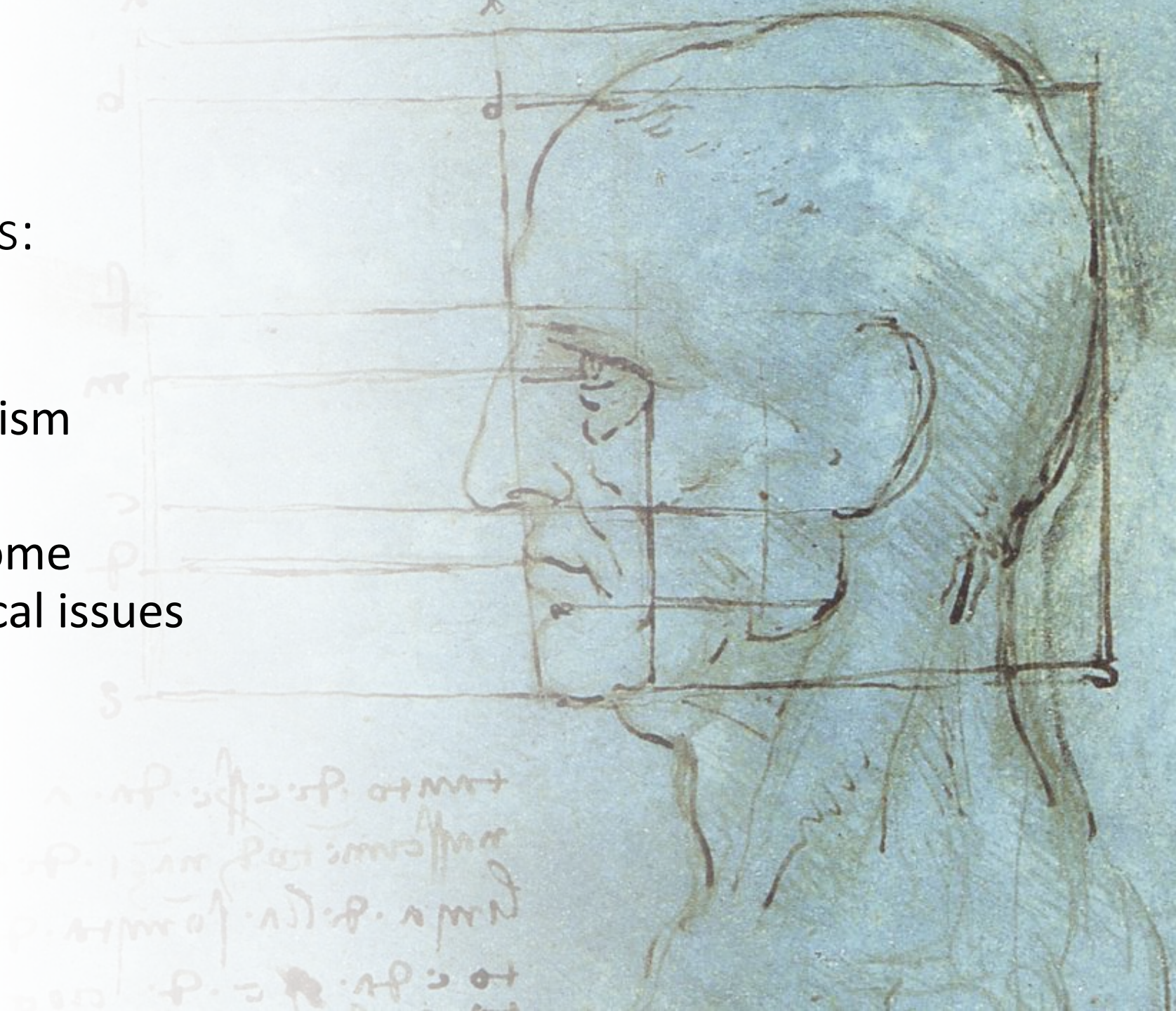
> 10 = High financial capital





## Risk Capacity and Ethics:

- Quantitative Reductionism
- Silo approach to overcome contradicting psychological issues





# Research: Risk Needed

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Theory followed by 99% of CFA / CIMA professionals:

- Portfolio construction depends on the quantitative risk/return matrix unique to the goal and timeframe

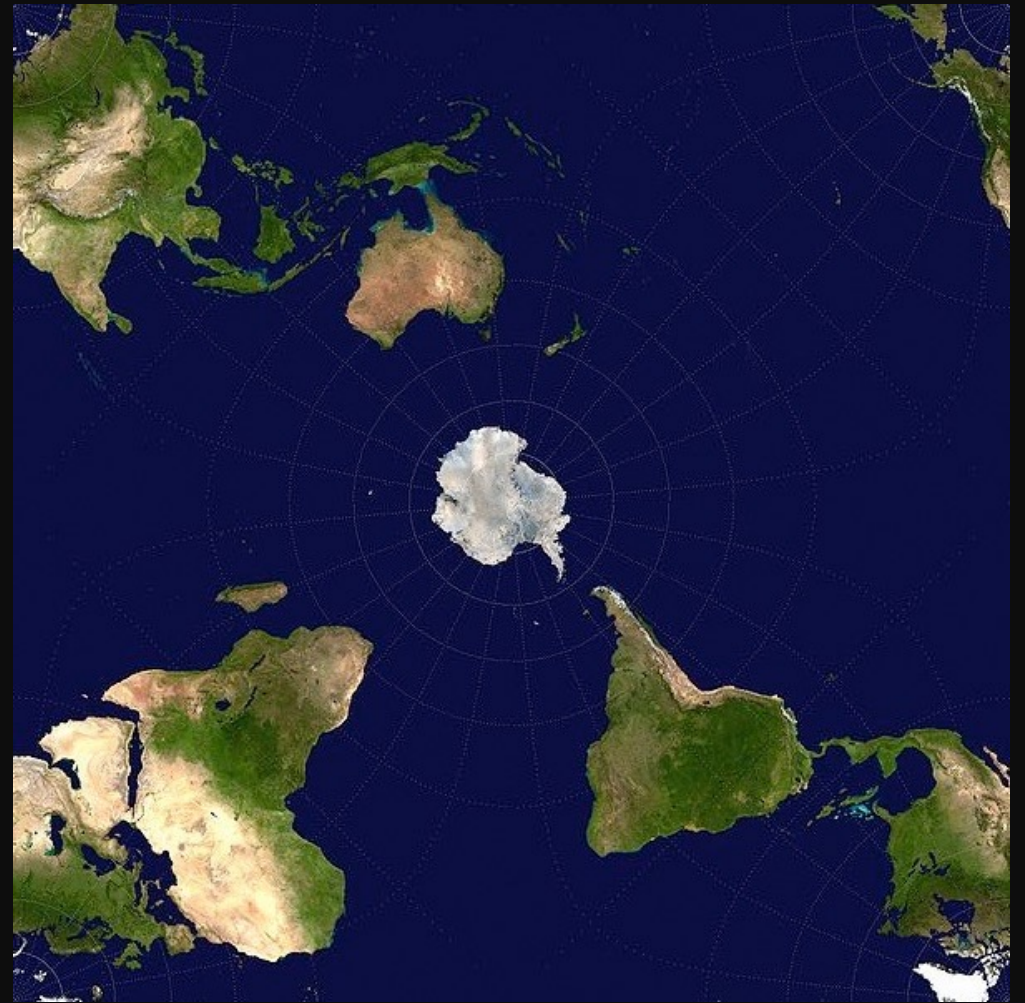
Calculation:

eg. Goal: \$375,000 in 10y

\$100k initial investment and \$1k pm available

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Risk needed = 7% return over 10 years



# Risk Needed: Reflection

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**What weight do you think each of these components should take?**

**Risk Tolerance (Psychological)**

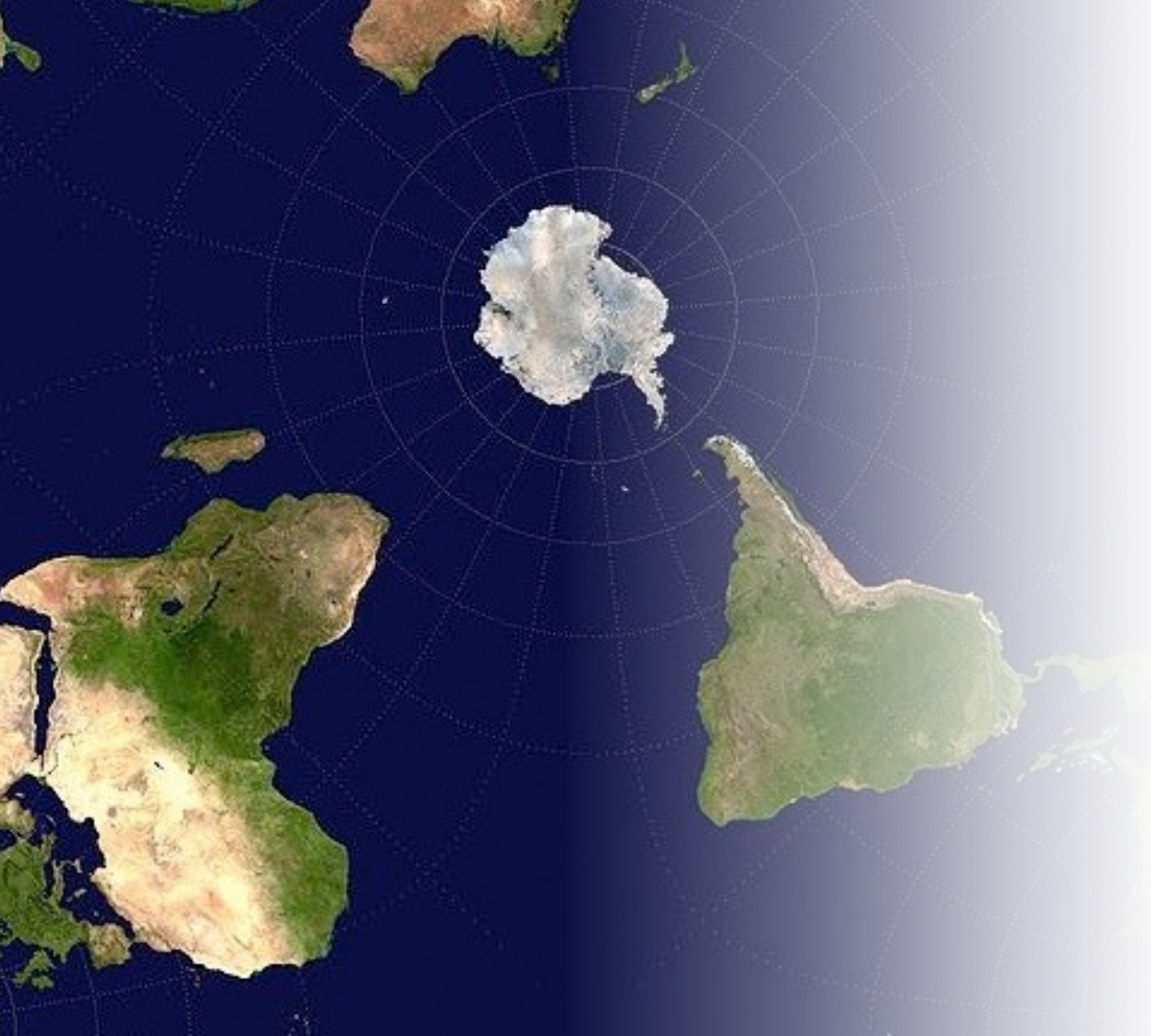
**Risk Capacity (Human capital and Financial capital)**

**Risk Needed (Quantitative)**

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# Risk Needed v Ethics

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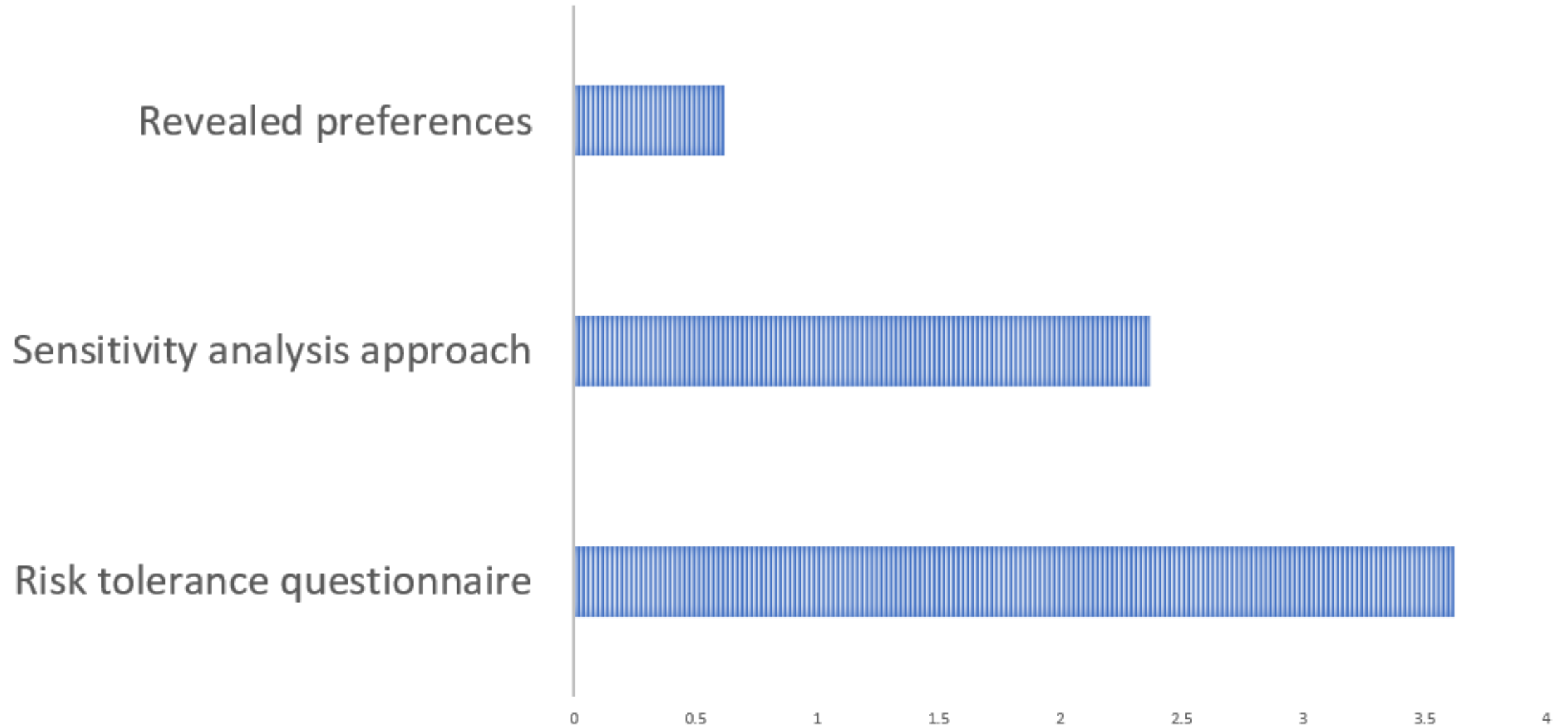
1. Clients insisting on staying invested when there's no need (Endowment Effect)
2. Sentimental share holdings

# Do you use ..... ?

- Revealed Preferences Y / N
- Sensitivity Analysis Approach Y / N
- Risk Tolerance Questionnaire Y / N



# I USE



Source: Portfolio Construction Forum (2023), n=544 practicing financial planners



Communication around risk






And you will read this last

**You will read  
this first**

And then you will read this

Then this one

A high-speed photograph of a bird, possibly a kingfisher, diving into clear blue water. The bird is captured mid-dive, with its wings spread and its body angled downwards. A large, dynamic splash of water surrounds the bird's head and neck, with many bubbles and droplets visible. The background is a deep, clear blue, suggesting an underwater environment. The overall scene conveys a sense of motion and impact.

## Ethical Communication around risk

- 1. Repeated reminders of why clients are invested the way they are**
- 2. Client conversation will show which area is most valued**
- 3. Cohort Benchmarking**
- 4. Silo's – different risk profiles for different goals**



	Psychological Risk Tolerance	Risk Capacity	Risk Needed	Stickability, Fee sensitivity, money beliefs	Available for individual advisers	Affordable < \$90pm
<u>Finametrica</u>	✓	✓	✓	x	✓	x
<u>Capital Preferences</u>	✓	✓	✓	x	x	x
MoneyMind.app*	✓	x	x	✓	✓	✓
<u>Amplify by Advantra Wealth*</u>	✓	✓	✓	✓	✓	✓
<u>Oxford Risk</u>	✓	✓	✓	✓	✓	x



5mb hard drive in 1956



# When you walk away today .....

1. You can communicate to clients about the components of risk profiling
2. You can implement ethical risk profiling practices
3. Reach out for a copy of the slides: [Katherine@ardentura.com](mailto:Katherine@ardentura.com)
4. Reach out for a demo of Money Mind
5. Learn more by enrolling in the Portfolio Construction Forum's CPD on this





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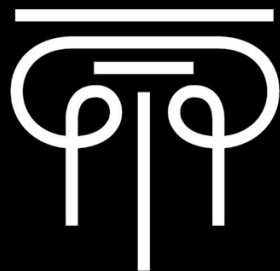


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Nov 2023

# On The Hunt: Ethical behaviour profiling

Katherine Hunt, PhD  
Principal, Ardentura Consulting (Byron Bay)



Portfolio  
Construction  
**Forum**



Q & A

FQQQ  
**CONGRESS**

**2023 ADELAIDE** NOVEMBER 20-22





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session**

MELBAIDE CONVENTION CEN



# Meet the speaker zone





**Thank you for  
attending this  
session**

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