



Advancing the use of peer effects in retirement preparation

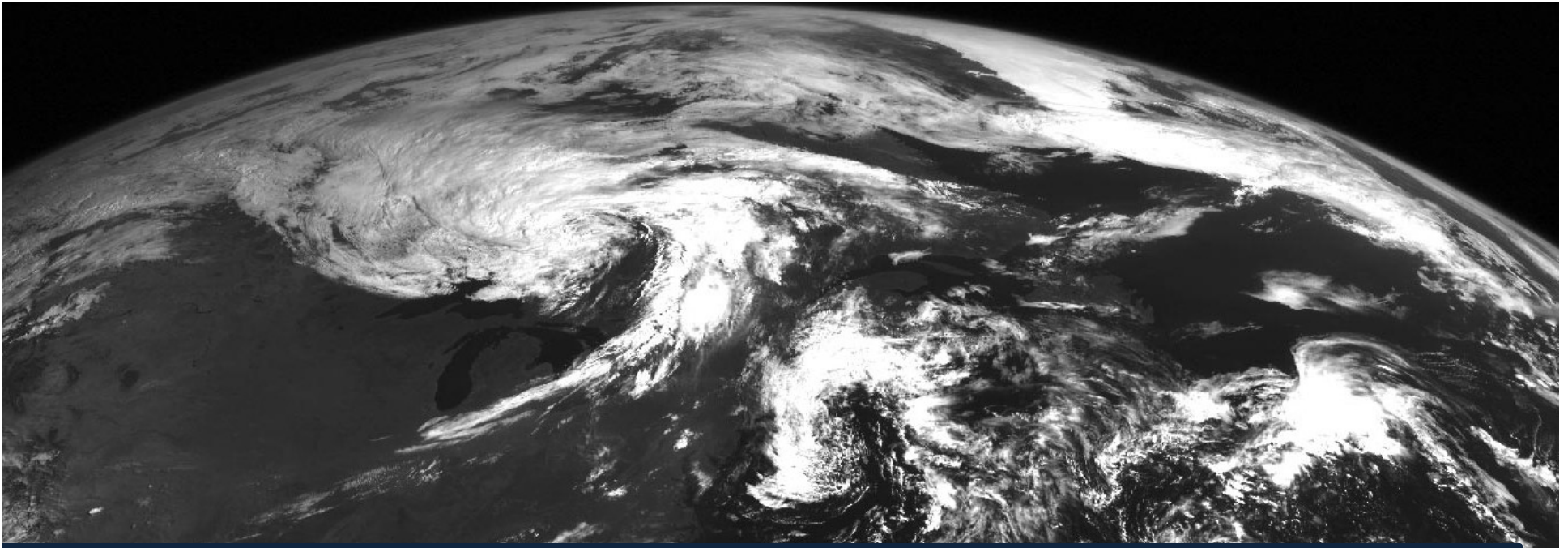
Pieter Verhallen

Elisabeth Brüggem

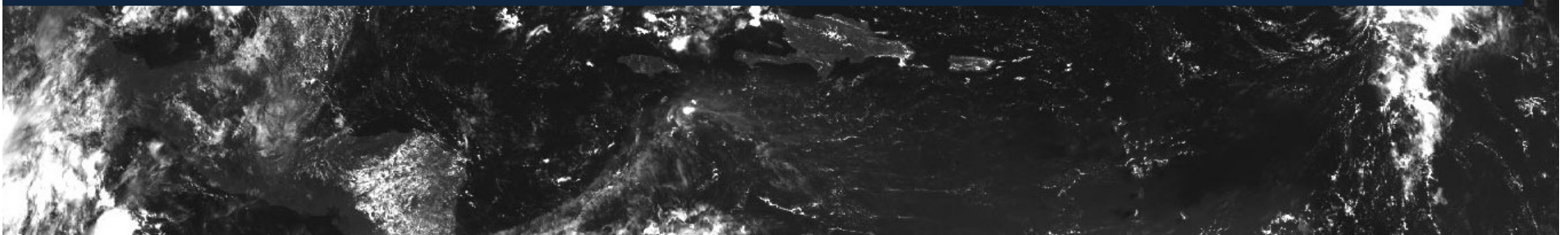
Thomas Post

Gaby Odekerken-Schröder





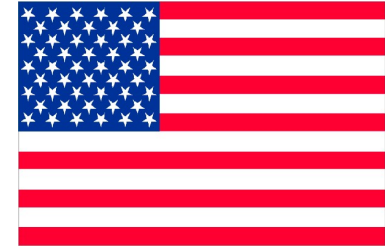
THE ISSUE AT HAND



HOW'S OUR
NEST EGG
DOING?



CHANGING PENSION ENVIRONMENT



NEED FOR ACTIVE INVOLVEMENT

ENROLLMENT & SAVINGS TOO LOW

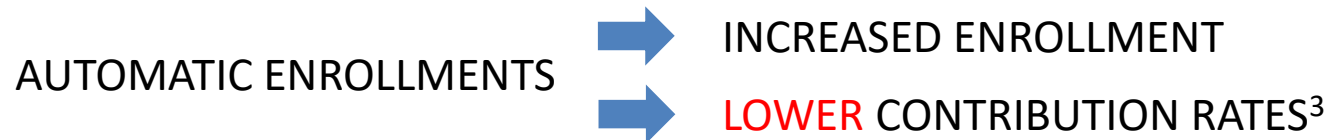
SAVING **TOO LITTLE** FOR RETIREMENT¹

(NL)



INDIVIDUALS AGED 55+ WITH **NO** PENSION SAVINGS²

(USA)



NEED FOR ACTIVE INVOLVEMENT

COMMUNICATION IS KEY

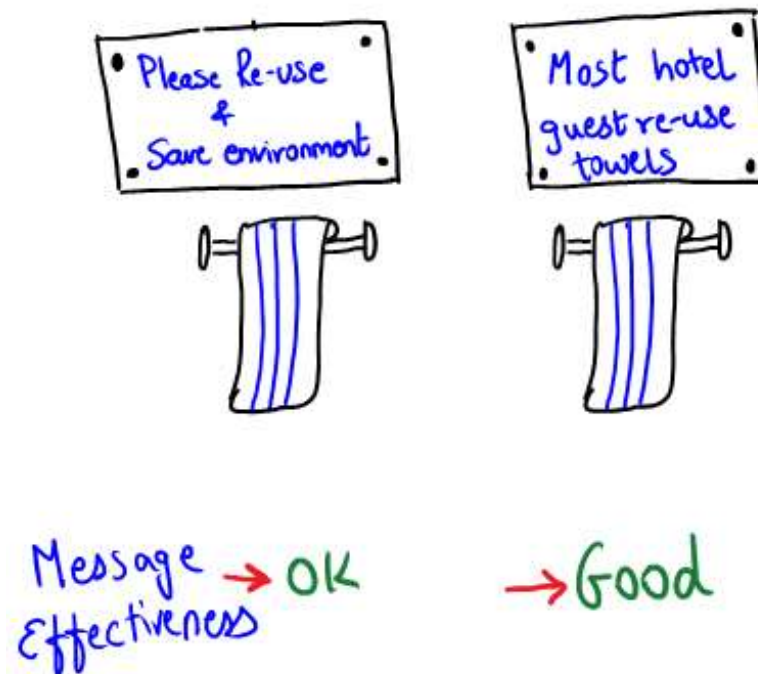
A hand is shown placing a puzzle piece into a larger blue puzzle. A bright light source is shining through the holes of the puzzle, creating a glowing effect. The puzzle pieces are interlocking and the overall scene is in shades of blue.

CURRENT RESEARCH

SOCIAL NORMS¹

Definition: sets of beliefs about what others do or what they approve or disapprove of doing²

"norms...motivate...when...activated"³



WHAT DRIVES THE PEER EFFECT

GOAL OF AFFILIATION

&

GOAL OF ACCURACY



(Cialdini & Goldstein, 2004)



SUPPORTIVE EMPIRICAL EVIDENCE FROM MANY CONTEXTS



(e.g. ALLCOTT, 2011)



(e.g. CLARK, 2003; STUTZER & LALIVE, 2004)



(e.g. PERKINS, 2002; CAMPO, 2006)



(e.g. AZMAT & IRIBERRI, 2010)



(e.g. CIALDINI ET AL., 1990; SCHULTZ, 1999)



(e.g. GERBER & ROGERS, 2009)

ADVANCING PEER EFFECTS IN LTFD

1st

Project

- Peer vs. anchor effect.

2nd

Project

- Identifying which peer group(s) works best.

WHAT ABOUT THE ANCHOR-AND-ADJUSTMENT HEURISTIC LTFD?

Definition: starting information, or an anchor, tends to exert drag on the subsequent adjustment process, leaving final estimates too close to the original anchor¹



Percentage of African countries in U.N.?²

Anchor

Response

10 →

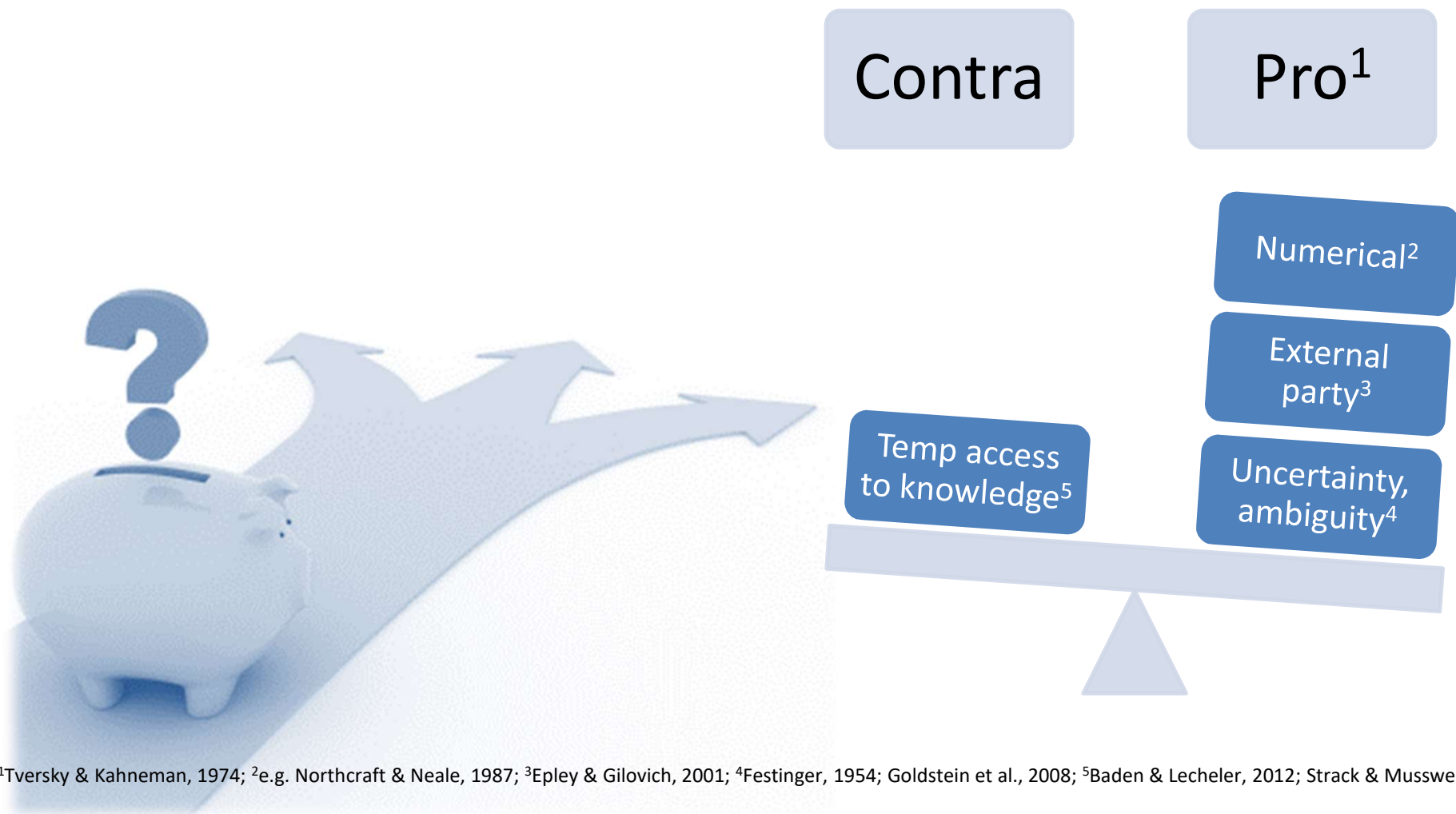
25

65 →

45

¹Epley & Gilovich, 2006; ²Tversky & Kahneman, 1974

WHAT ABOUT THE ANCHOR-AND-ADJUSTMENT HEURISTIC IN LTFD?



¹Tversky & Kahneman, 1974; ²e.g. Northcraft & Neale, 1987; ³Epley & Gilovich, 2001; ⁴Festinger, 1954; Goldstein et al., 2008; ⁵Baden & Lecheler, 2012; Strack & Mussweiler, 2007



PROJECT 1: EXPERIMENTS

STUDY 1


Please imagine the following:

You have just graduated from ABC college and have landed your first job, earning you an annual gross salary of USD 45,000. You are single and have no children, and are therefore able to allocate this salary as you wish.

The 401(k) pension scheme that you are enrolled in allows you to define your own contribution rate for your pension. The contribution rate is the percentage of your annual salary that you invest into your pension. Assume that your company does not provide any contribution to your pension.

Among ABC college graduates, 11% have a similar job.

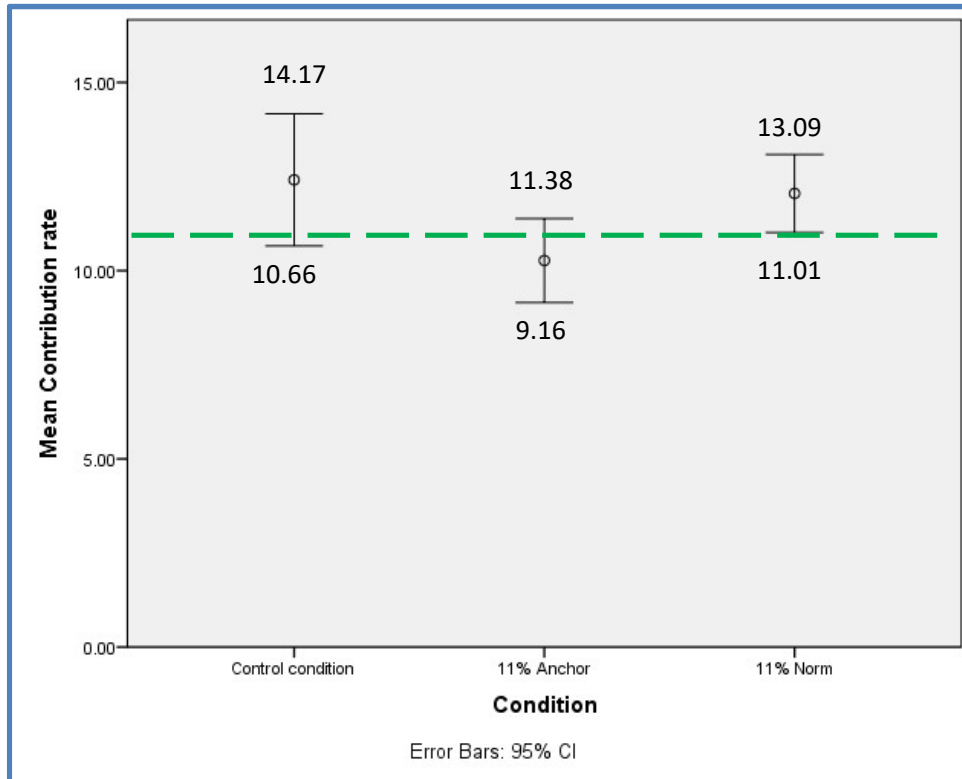
Other recent ABC college graduates contribute 11% of their salary to their pension fund.

-  ¹
- N = 295
- Conditions: *control* *anchor* *norm*
- Reference point: 11% *[based on pre-test BEElab]*
- Dependent variable:

What percentage of your salary would you contribute to your pension?
- Testing for Consumer Susceptibility to Interpersonal Influence²

¹Paolacci et al., 2010; ²Bearden et al., 1989; 1990

STUDY 1 MAIN EFFECT

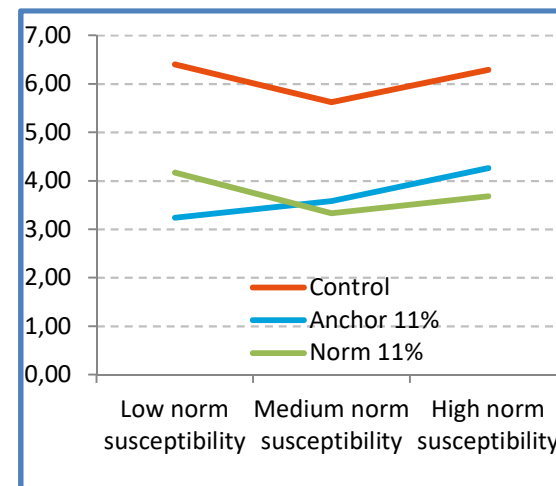
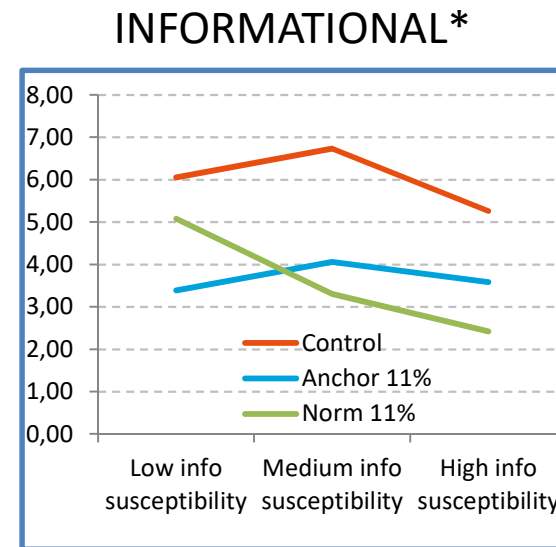
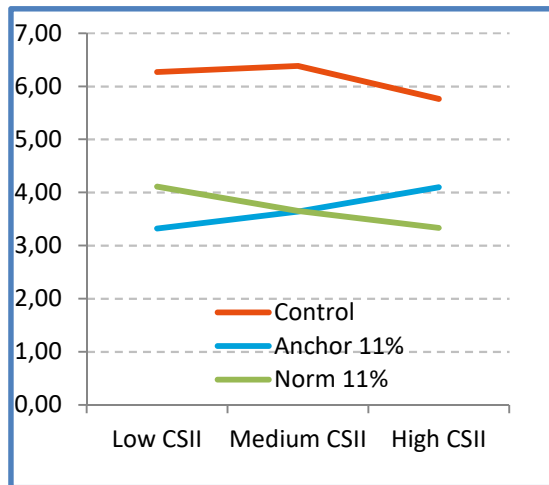


	CONTROL	NORM 11%	ANCHOR 11%
MEAN CONTRIBUTION RATE	12.41%	12.06%	10.27%
DIFFERENT FROM 11%	1.41%**	1.06%**	0.73%

Anchor better?!

STUDY 1

CONSUMER SUSCEPTIBILITY TO INTERPERSONAL INFLUENCE



NORMATIVE

CAUSE FOR
CONCERN:
ANCHOR
WORKS, TOO!

FOLLOW-UP
STUDY
NEEDED

REFERENCE
POINT TOO
CLOSE TO
CONTROL MEAN

STUDY 2

Please imagine the following:

You have just graduated from ABC college and have landed your first job, earning you an annual gross salary of USD 45,000. You are single and have no children, and are therefore able to allocate this salary as you wish.

The 401(k) pension scheme that you are enrolled in allows you to define your own contribution rate for your pension. The contribution rate is the percentage of your annual salary that you invest into your pension. Assume that your company does not provide any contribution to your pension.

Among ABC college graduates, 16% have a similar job.

Other recent ABC college graduates contribute 16% of their salary to their pension fund.

You have completed 16% of the survey so far.

- amazonmechanical turk¹
Artificial Artificial Intelligence

- N = 665

- Conditions:

<i>control</i>	<i>social anchor low/high</i>
<i>norm low/high</i>	<i>non-social anchor low/high</i>

- Reference points: 8% (low) & 16% (high) [\pm 4% from prior mTurk control mean (12%)]

- Dependent variable: What percentage of your salary would you contribute to your pension?

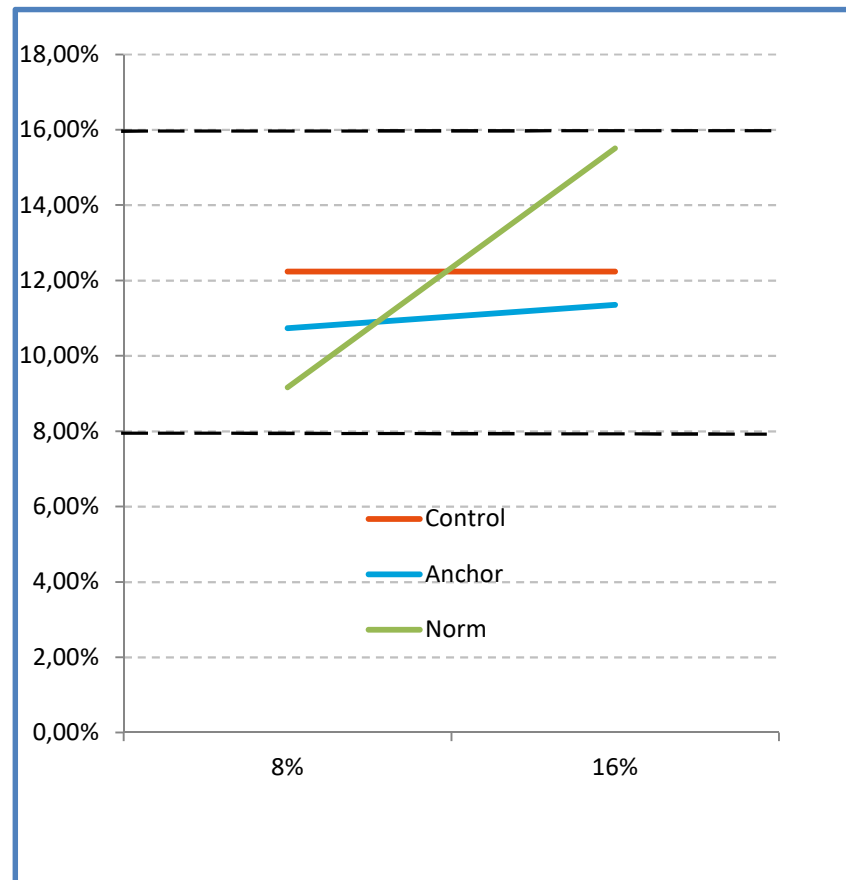
- Testing for Consumer Susceptibility to Interpersonal Influence²

¹Paolacci et al., 2010; ²Bearden et al., 1989; 1990

STUDY 2

MAIN EFFECT

CONTRIBUTION
RATE

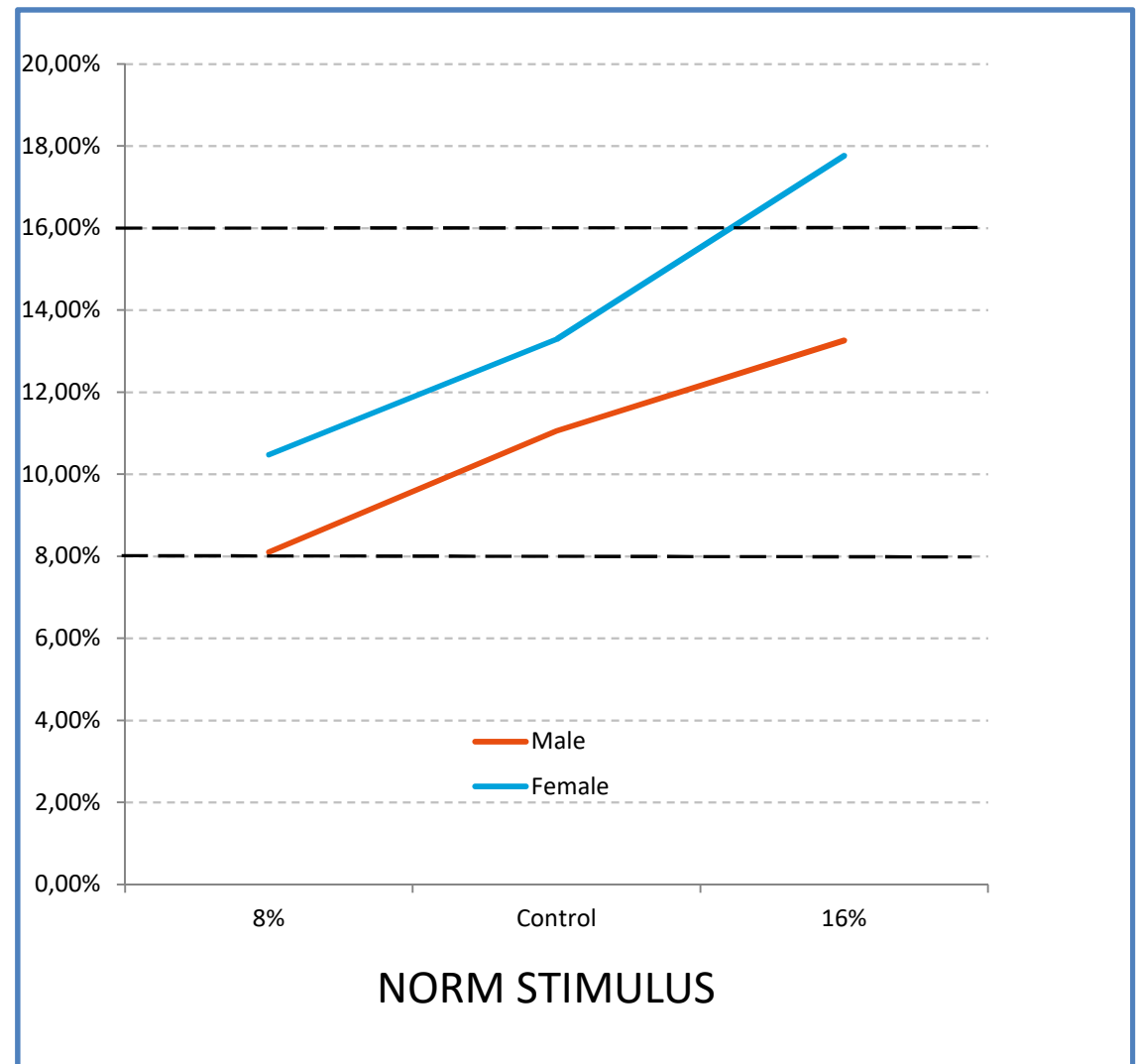


STIMULUS

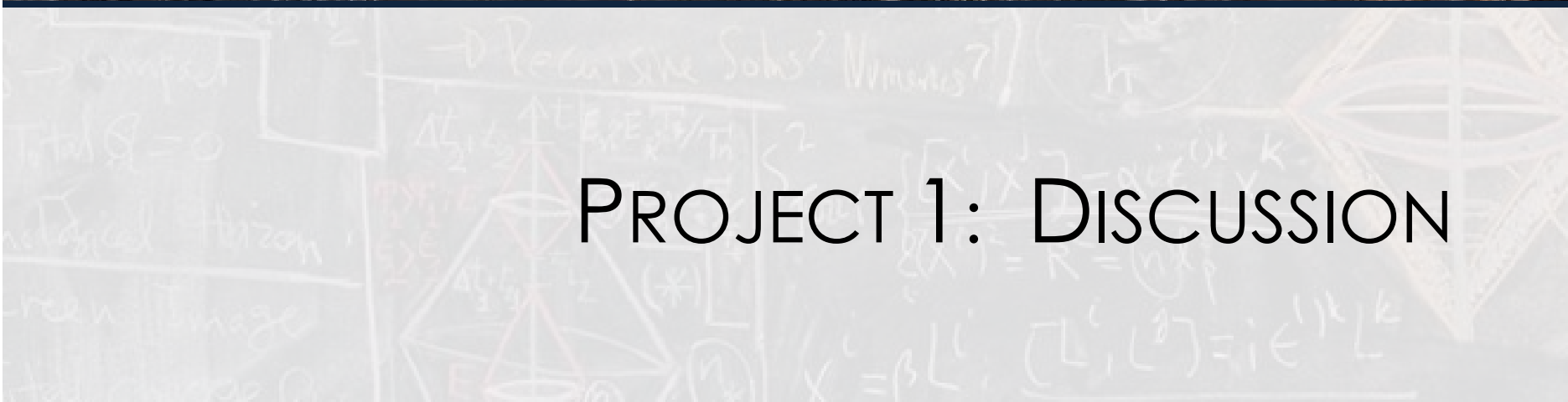
STUDY 2

GENDER EFFECT

CONTRIBUTION RATE (%)



FEMALES OUTPERFORM NORMS!



$$\{l(l) - l(l+1) \quad L_2 = -l \dots l \quad J_x = \dots$$

FINDINGS

No clear evidence of an anchoring effect.

Some evidence (study 1) that goal of accuracy is only driver.

Peer effects remain strong.

MANAGERIAL IMPLICATIONS

NORMS CAN HELP POLICY MAKERS, SOCIAL PARTNERS & PENSION PROVIDERS TO INCREASE (OPTIMAL) SAVINGS

SOCIAL NORMS ARE POWERFUL FOR WOMEN AND PEOPLE HIGH ON CONSUMER SUSCEPTIBILITY TO INFORMATIONAL INFLUENCE IN LTFD

NUDGE THROUGH COMMUNICATION:

- WEBSITES
- EMAIL
- MAILINGS
- YEARLY PENSION OVERVIEW
- PENSION CAMPAIGN





PROJECT 2



Which reference (peer) group (e.g. age, gender, income) works best?

In general?

For specific demographics?

For specific preferences?

WHAT DRIVES THE PEER EFFECT

GOAL OF AFFILIATION

&

GOAL OF ACCURACY



(Cialdini & Goldstein, 2004)



SOCIAL IDENTIFICATION

vs.

SOURCE CREDIBILITY

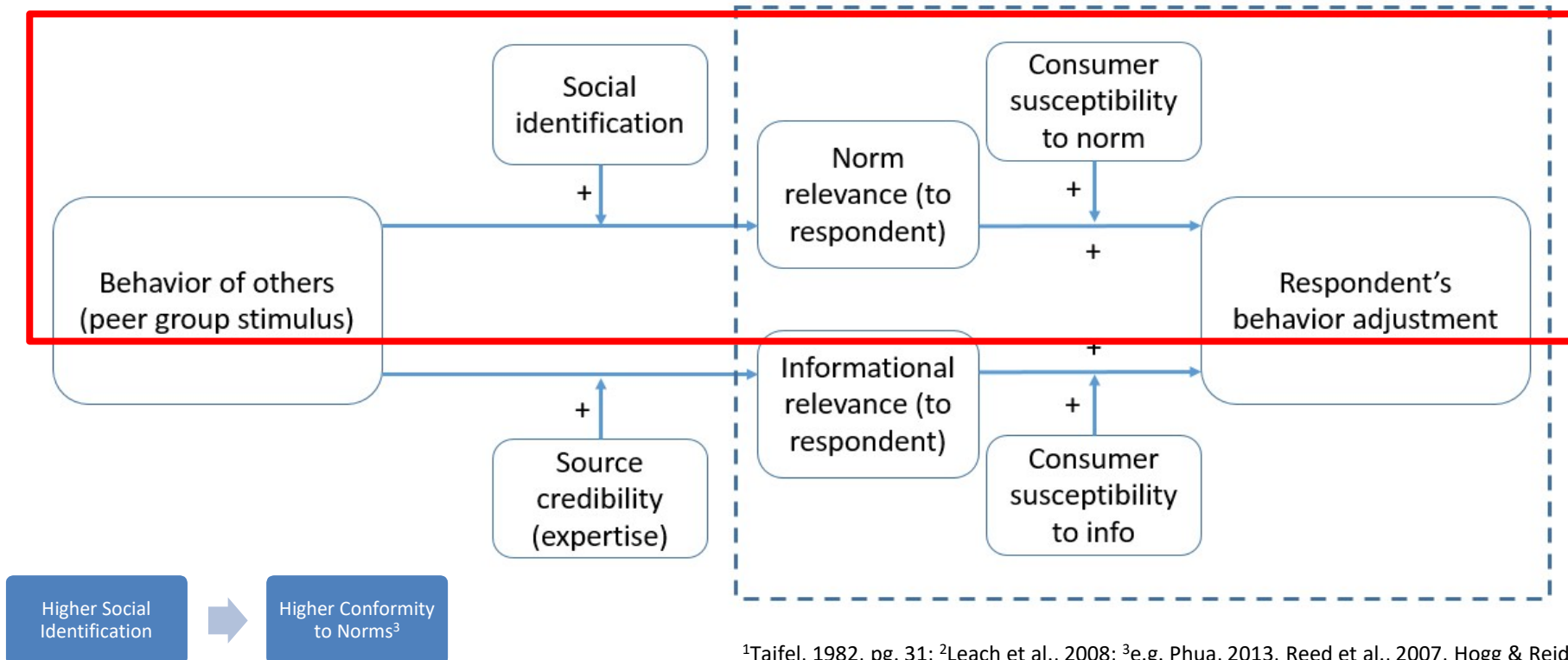


SOCIAL IDENTIFICATION

- *Definition:* “the individual’s knowledge that he/she belongs to certain social groups.”¹

Founded on similarity to the group’s average/prototypical members²

Field experiment (high/low norm & info relevance)



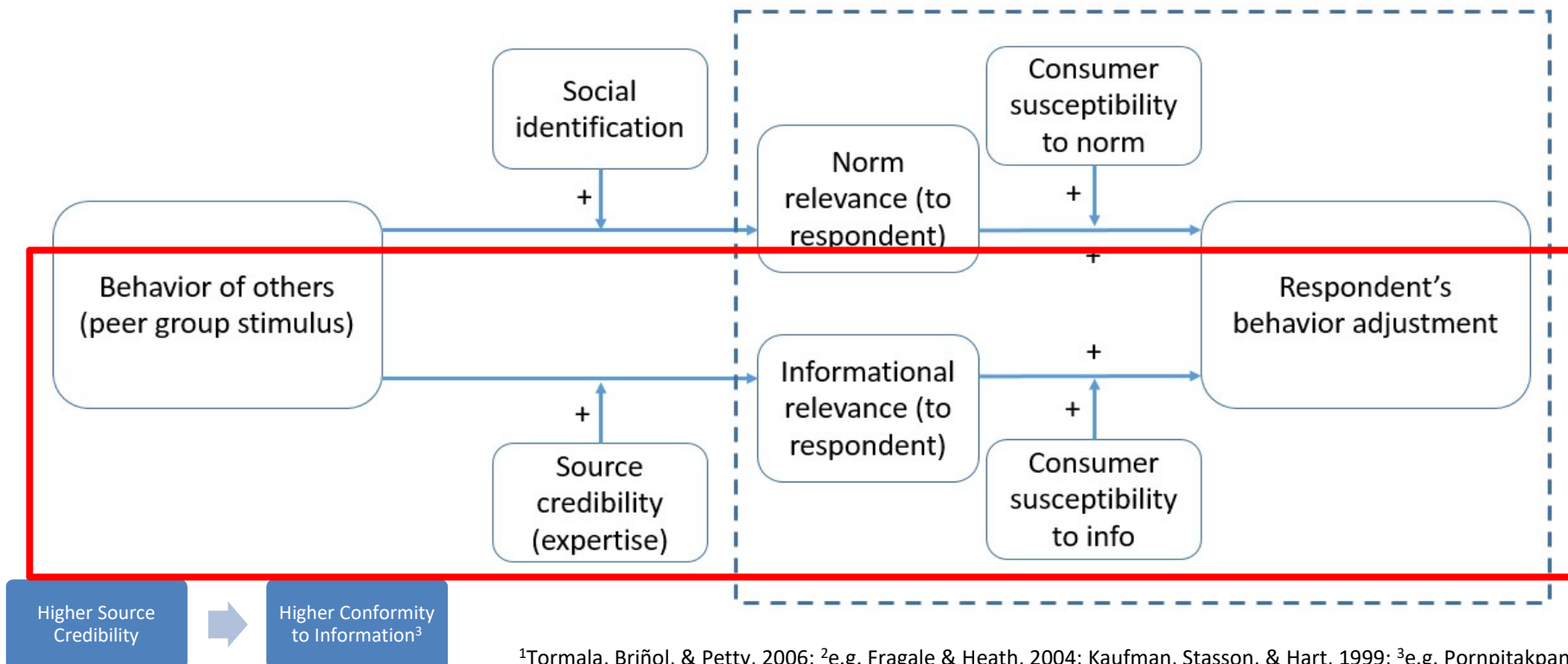
¹Tajfel, 1982, pg. 31; ²Leach et al., 2008; ³e.g. Phua, 2013, Reed et al., 2007, Hogg & Reid, 2006

SOURCE CREDIBILITY

- *Definition:* a source's credibility, primarily measured by trust and expertise scores¹

Increases perceived validity of information²

Field experiment (high/low norm & info relevance)



¹Tormala, Briñol, & Petty, 2006; ²e.g. Fragale & Heath, 2004; Kaufman, Stasson, & Hart, 1999; ³e.g. Pornpitakpan, 2004

RESEARCH DESIGN

Phase 1

Identify groups high/low on dimensions

Phase 2

Test predictions in field

MANAGERIAL IMPLICATIONS

THE FINDINGS OF PROJECT 2:

- HELP INCREASE PEER EFFECT STRENGTH FOR NUDGING PARTICIPANTS TOWARDS OPTIMAL BEHAVIOR
 - Through using optimal reference group
 - Through targeted reference groups
- HELP TAILOR COMMUNICATION TO AVOID INEFFECTIVE NUDGES





TAKEAWAYS

ADVANCING PEER EFFECTS IN LTFD

No evidence for anchor effect

Peer effect consistently works,
even at more extreme values

Some evidence that only goal of
accuracy drives peer effect in LTFD

Focus on social identification for individuals
high on susceptibility to normative infl.

Focus on source credibility for individuals high
on susceptibility to informational infl.

QUESTIONS & COMMENTS +



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A background image of red stage curtains with bright stage lights visible through the folds on the right side.

MAIN FINDINGS

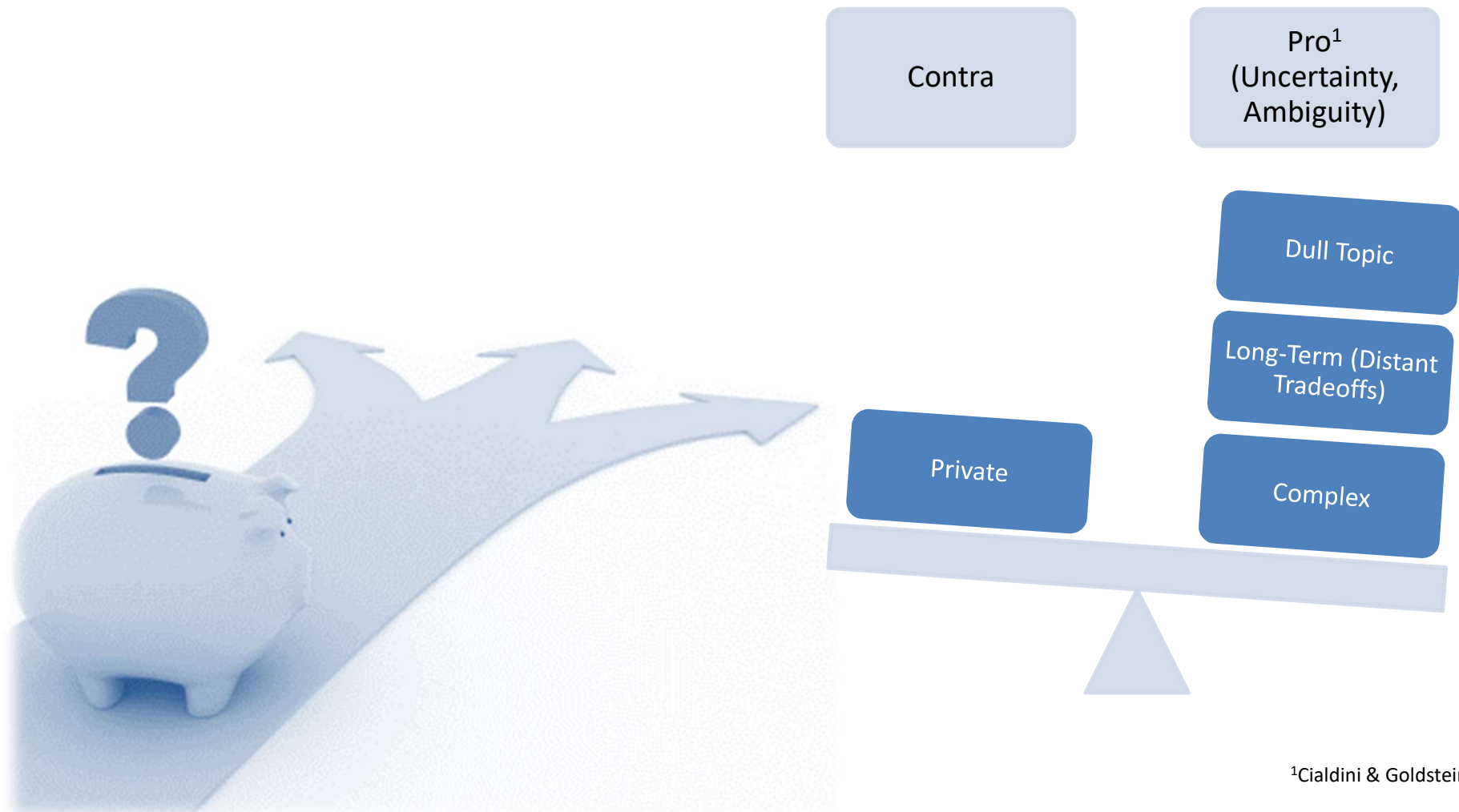


LIMITATIONS & FUTURE RESEARCH

A blue-tinted background image showing a hand moving a chess piece. The hand is in the upper left, and the piece is being moved towards the center. Other chess pieces are visible in the background, out of focus.

MANAGERIAL IMPLICATIONS

SHOULD ALSO WORK IN LONG-TERM FINANCIAL DECISION-MAKING (LTFD)



¹Cialdini & Goldstein, 2004

LIMITED EVIDENCE IN FINANCIAL SERVICES DOMAIN

- Some indication that they may work¹
 - Only self-report and correlations; no causal effect.
- Mixed results²
 - Only single, low norm for contribution rate (6%) vs. no norm tested
 - What about higher values? More desirable contribution rates? Still viable?
 - Disentangling anchor vs. motivational target effects³

¹e.g. Duflo & Saez, 2003; Brown et al., 2008; Lusardi & Mitchell, 2011; Hastings et al., 2010; ²Beshears et al., 2015; ³Bartels & Sussman, 2016