Advancing the use of peer effects in retirement preparation

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THE ISSUE AT HAND
CHANGING PENSION SYSTEMS

Demographic change & low interest rate
Defined-benefit schemes with fixed payouts suffer
Multiemployer Pension Reform Act 2014, DB benefits cut

NEED FOR ACTIVE INVOLVEMENT

HOW'S OUR NEST EGG DOING?
CHANGING PENSION ENVIRONMENT

NEED FOR ACTIVE INVOLVEMENT
ENROLLMENT & SAVINGS TOO LOW

SAVING TOO LITTLE FOR RETIREMENT\(^1\)  
INDIVIDUALS AGED 55+ WITH NO PENSION SAVINGS\(^2\)  

SINCE 2005  AUTOMATIC ENROLLMENTS  INCREASED ENROLLMENT  LOWERED CONTRIBUTION RATES\(^3\)

NEED FOR ACTIVE INVOLVEMENT

COMMUNICATION IS KEY

\(^1\)Knoef et al., 2014; 2015; \(^2\)Towers Watson, 2014; \(^3\)Vanguard, 2015
CURRENT RESEARCH
SOCIAL NORMS

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

“norms...motivate...when...activated”

(Source: vizcraft.wordpress.com)

1 Goldstein & Cialdini, 2008; 2 Schultz, 1999; 3 Cialdini, Reno, & Kallgren, 1990
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)
SHOULD ALSO WORK IN LONG-TERM FINANCIAL DECISION-MAKING (LTFD)

Contra

Pro¹ (Uncertainty, Ambiguity)

¹Cialdini & Goldstein, 2004
WHAT ABOUT THE ANCHOR-AND-ADJUSTMENT HEURISTIC IN LTFD?

**Definition:** “[…] people make estimates by starting from an initial value that is adjusted to yield the final answer […]”

1. Percentage of African countries in U.N.?

<table>
<thead>
<tr>
<th>Anchor</th>
<th>Response</th>
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<tbody>
<tr>
<td>10</td>
<td>25</td>
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<tr>
<td>65</td>
<td>45</td>
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1Tversky & Kahneman, 1974, p. 1129
WHAT ABOUT THE ANCHOR-AND-ADJUSTMENT HEURISTIC IN LTFD?

Contra

Pro

Numerical

External party

Temp access to knowledge

Uncertainty, ambiguity

1Tversky & Kahneman, 1974; 2e.g. Northcraft & Neale, 1987; 3Epley & Gilovich, 2001; 4Festinger, 1954; Goldstein et al., 2008; 5Baden & Lecheler, 2012; Strack & Mussweiler, 2007
WHAT ABOUT THE ANCHOR-AND-ADJUSTMENT HEURISTIC IN LTFD?

(e.g. TVERSKY & KAHNEMAN, 1974)

(e.g. WANSINK, KENT, & HOCH, 1998)

(e.g. MUSSWEILER & ENGLICH, 2005)
Are peer effects mere anchoring effects (in contexts such as LTFD)?

Is the goal of affiliation absent as a motivator driving peer effects in LTFD?

What are the boundary conditions for when norm information elicits desirable peer/anchor effects?
THE 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.

• **amazon mechanical turk**\(^1\)  
• 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 Influence\(^2\)

\(^1\)Paolacci et al., 2010; \(^2\)Bearden et al., 1989; 1990
STUDY 1 MAIN EFFECT

**MEAN CONTRIBUTION RATE**
- CONTROL: 12.41%
- NORM 11%: 12.06%
- ANCHOR 11%: 10.27%

**DIFFERENT FROM 11%**
- CONTROL: 1.41%
- NORM 11%: 1.06%
- ANCHOR 11%: 0.73%

**MEAN ABSOLUTE DISTANCE FROM 11%**
- CONTROL: 6.14
- NORM 11%: 3.70*
- ANCHOR 11%: 3.73*

Anchor better?!

Similar reduction in variance
STUDY 1

CONSUMER SUSCEPTIBILITY TO INTERPERSONAL INFLUENCE (CSII)

Distance from 11% value

Control

Anchor 11%

Norm 11%

CSII score
STUDY 1
CONSUMER SUSCEPTIBILITY TO INTERPERSONAL INFLUENCE (CSII)

CAUSE FOR CONCERN: ANCHOR WORKS, TOO!

FOLLOW-UP STUDY NEEDED

REFERENCE POINT TOO CLOSE TO CONTROL MEAN

NORMATIVE

INFORMATIONAL*

CONTROL MEAN
CAUSE FOR CONCERN: ANCHOR WORKS, TOO!
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.

• **amazon mechanical turk**

• N = 665

• Conditions: control social anchor low/high norm low/high non-social anchor low/high

• Reference points: 8% (low) & 16% (high) [⁺⁻ 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 Influence

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

STIMULUS

CONTRIBUTION RATE

Control
Anchor
Norm
STUDY 2

GENDER EFFECT

CONTRIBUTION RATE (%)

FEMALES OUTPERFORM NORMS!
FINDINGS

• ARE PEER EFFECTS MERE ANCHORING EFFECTS (IN CONTEXTS SUCH AS LTFD)?
  ─ No clear evidence of an anchoring effect from an irrelevant anchor.

• IS THE GOAL OF AFFILIATION ABSENT AS A MOTIVATOR DRIVING PEER EFFECTS IN LTFD?
  ─ Some evidence (study 1) that this is indeed the case.

• WHAT ARE THE BOUNDARY CONDITIONS FOR PEER/ANCHOR EFFECTS?
  ─ Anchor effects disappear for more extreme values (distance from control mean), yet peer effects remain strong.
THEORETICAL CONTRIBUTIONS

• EVIDENCE THAT NORMS WORK IN DOMAIN SUCH AS LTFD THAT IS COMPLEX, DULL, LONG-TERM, AND PRIVATE!
  – STRONGER NORMS WORK

• DISENTANGLING ANCHORING EFFECT FROM NORM EFFECT

• NORM EFFECT DRIVEN BY CONSUMER SUSCEPTIBILITY TO INFORMATIONAL INFLUENCE IN LTFD

• SHOWING WEAK NORMATIVE COMPONENT OF CSII IN LTFD

• GENDER EFFECT
  – FEMALES CONTRIBUTE MORE, OUTPERFORM NORM
AVENUES FOR FUTURE RESEARCH

• TEST IN THE FIELD

• TEST OTHER RELEVANT BEHAVIORS IN LTFD
  – ENROLLMENT
  – E-MAIL PROVISION
  – INFORMATION SEARCH

• WHICH REFERENCE GROUP WORKS BEST
MANAGERIAL IMPLICATIONS

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

SOCIAL NORMS ESPECIALLY POWERFUL FOR WOMEN AND PEOPLE HIGH ON CONSUMER SUSCEPTIBILITY TO INFORMATIONAL INFLUENCE

NUDGE THROUGH COMMUNICATION:

- WEBSITES
- EMAIL
- MAILINGS
- YEARLY PENSION OVERVIEW
- PENSION CAMPAIGN
QUESTIONS & COMMENTS

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THE REFERENCES
REFERENCES

- Bartels & Sussman, 2016
- Knoef et al., 2015
- Towers Watson, 2014
- Vanguard, 2015
- Vizcraft.wordpress.com
Main Findings
LIMITATIONS & FUTURE RESEARCH
MANAGERIAL IMPLICATIONS
YET LIMITED EVIDENCE IN LONG-TERM FINANCIAL DECISION-MAKING (LTFD)

• Some indication that they may work\(^1\)
  – Self-report and correlations; no causal effect.

  
  • Mixed results\(^2\)
  – 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 effects\(^3\)

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