

# THE DIVERGENT EFFECTS OF EXTERNAL SYSTEMS OF CONTROL ON EARLY STAGE GOAL PURSUIT

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Long-term  
goals



2 types of  
goals



One-episode  
goals



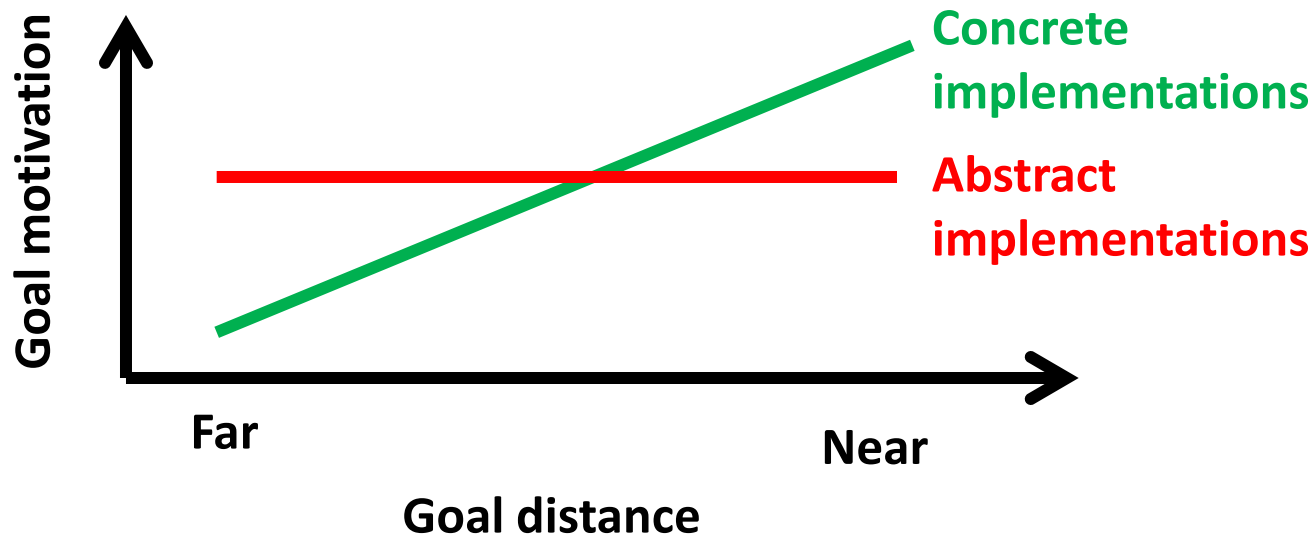
... require  
making  
plans



## THEORETICAL BACKGROUND: Motivational consequences of specificity of planning

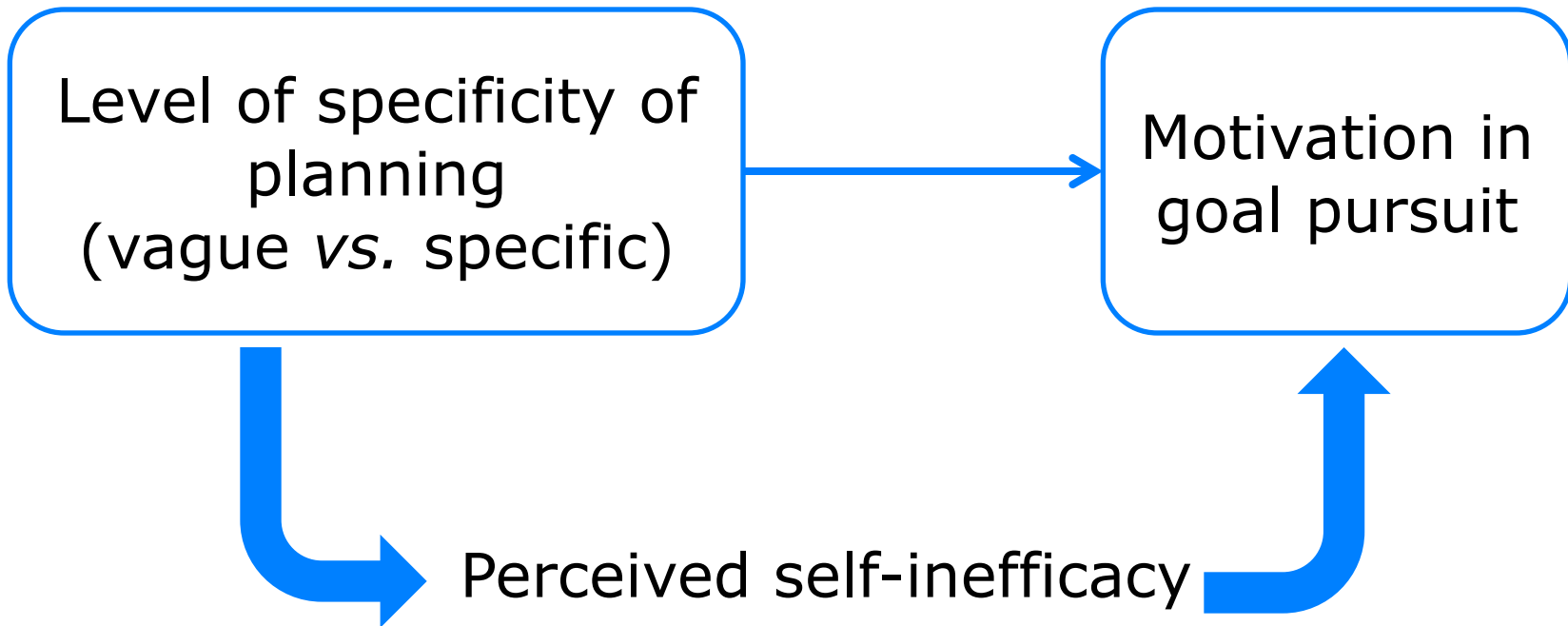
**Negative effect of planning goal pursuit – e.g., Ulkumen and Cheema (2011), Dalton et Spiller (2012), Scott et Nowlis (2013)**

**Interaction between concrete implementation intentions and goal distance (Townsend and Liu 2012)**



## THEORETICAL BACKGROUND: Motivational consequences of specificity of planning

### During early stage goal pursuit



## THEORETICAL BACKGROUND: Compensatory Control Theory (Kay et al. 2008; 2009)

**How to reverse the negative effect of specific plan formats in early stage goal pursuit?**

**By using beliefs in external systems of control...**

Definition: The overarching institutions, rule-based organizations, and norms within which individuals live their daily life (Cutright et al. 2011; Kay et al. 2008)

**... ranging from religion to brand**

- ⊙ Religions and secondary control (Kay et al. 2008, Sasaki and Kim 2011)
- ⊙ Brands and corporate power (Herman 1981; Stevenson 1985)

# THEORETICAL BACKGROUND: Compensatory Control Theory (Kay et al. 2008; 2009)

Perception of  
randomness and  
chaos



Personal control

Perception of  
randomness and  
chaos

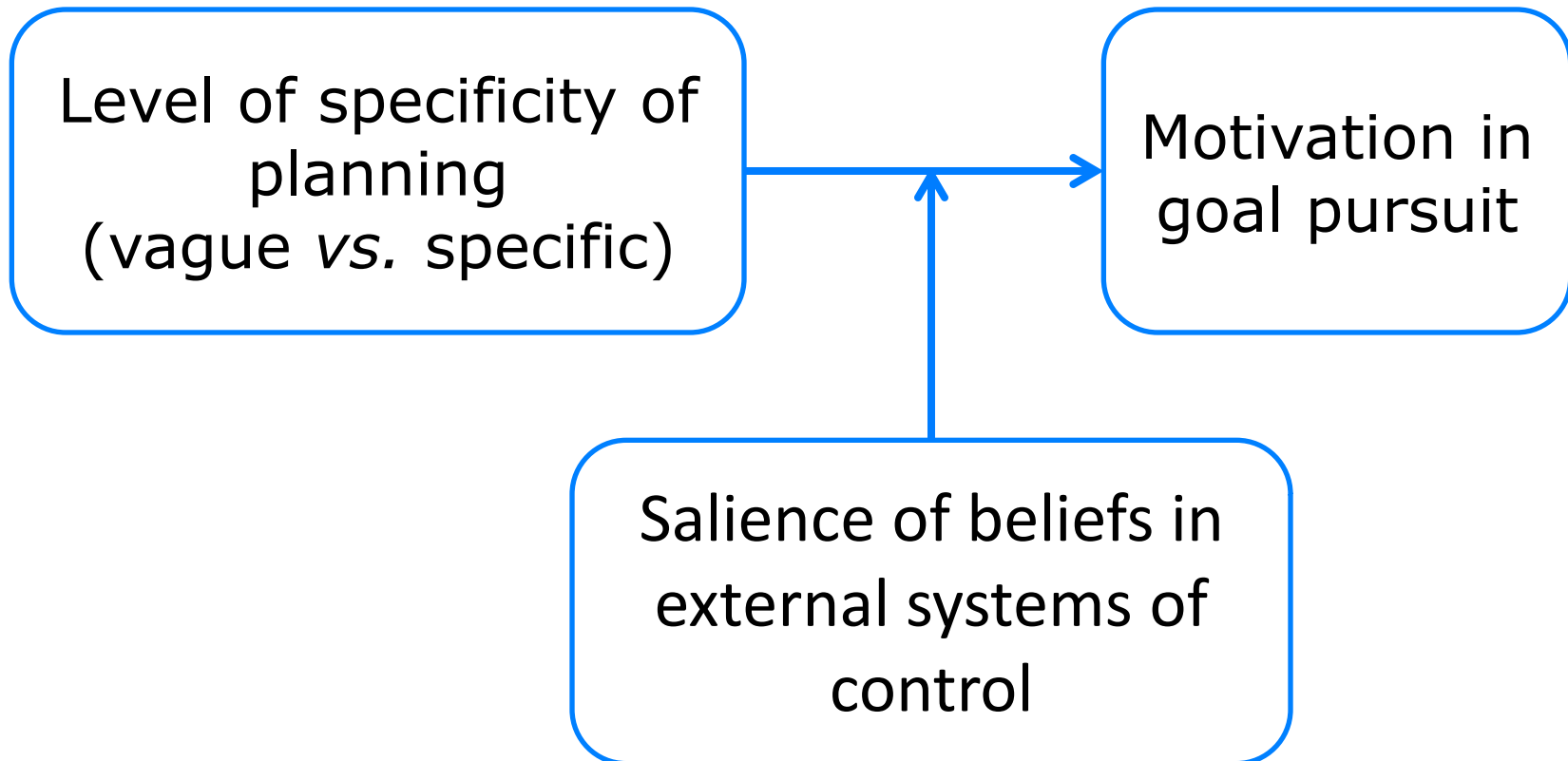


Endorsement of  
external systems of  
control

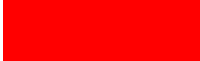




Lack of personal  
control

## THEORETICAL BACKGROUND: Compensatory Control Theory (Kay et al. 2008; 2009)

### During early stage goal pursuit



## HYPOTHESES:

Levels of specificity of plan formats	Beliefs in external systems of control	
	Neutral	Salient
<p><b>Very specific</b> = target + specific implementation intentions</p>		
<p><b>Moderately specific</b> = target + vague implementation intentions</p>		
<p><b>Vague</b> = solely vague implementation intentions</p>		



## STUDY 1: Objective, design, and sample

**Objective:** Test of hypotheses using an assigned goal in the context of savings goals

**Design:** 3 (External system: Controlling God vs. Creating God vs. Neutral) x 2 (Plan formats: Vague vs. Very specific)  
between-subjects design

**Sample:** 204 online participants recruited from a company's database

American residents, Female: 74%, Median age: 33

Removal of participants identified as Atheist

## STUDY 1: Procedure

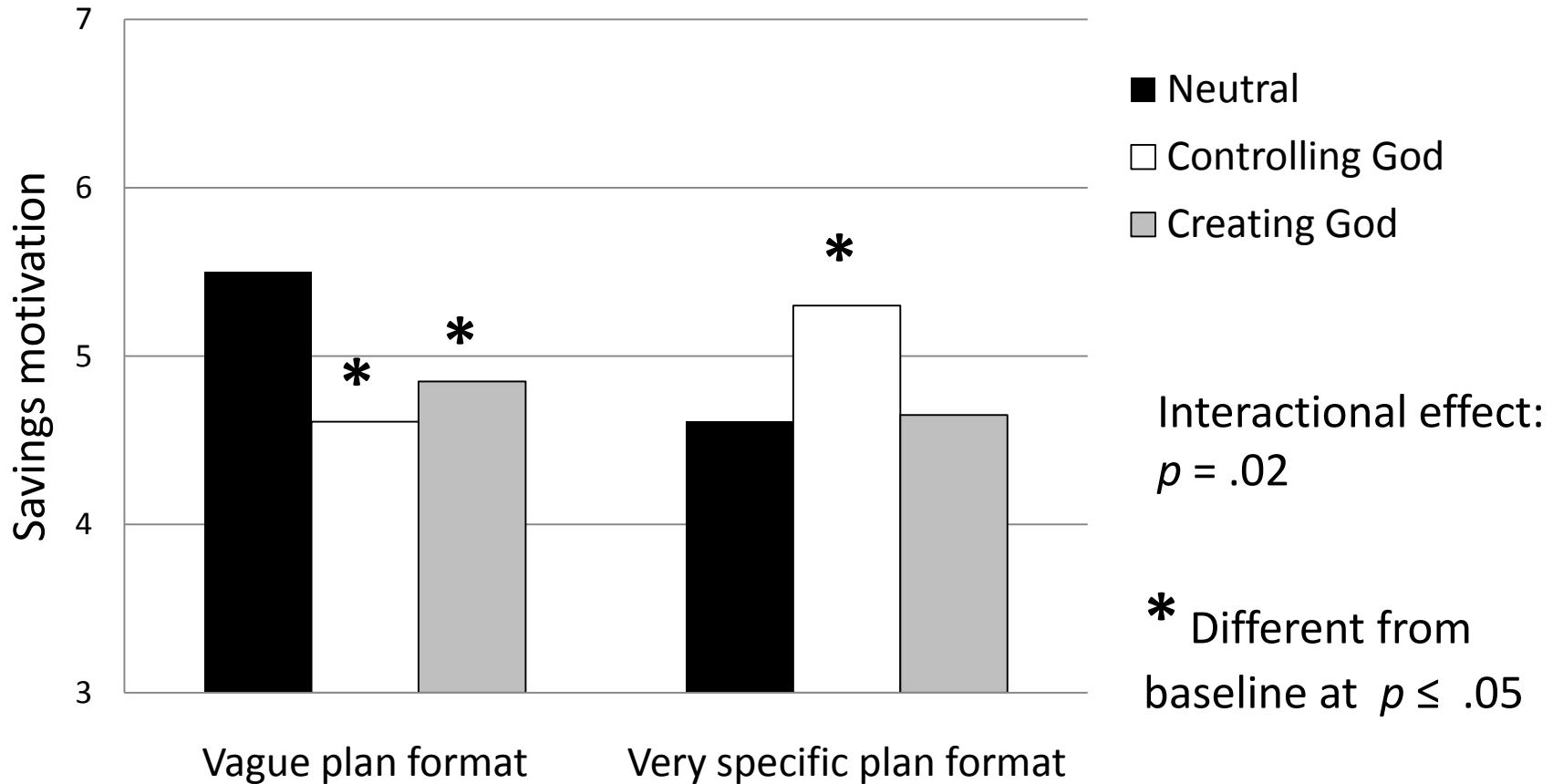
### **Independent variables:**

- ⊙ Manipulation of salience of beliefs in external systems by reading a text adapted from Kay et al. (2010)  
Pretense of a reading test  
Removal of participants with 0, 1, or 2 good answers out of 4; Why?  $P(X < 3) = 94.9\%$  with  $\sum X_i \rightarrow B(4, .25)$
- ⊙ Manipulation of plan formats by scenario adapted from Soman and Zhao (2011)  
Pretested on perceived level of specificity and positive/negative mood

### **Dependent variable:**

- ⊙ Three-item measure of motivation in goal pursuit ( $\alpha = .99$ )

# STUDY 1: Results



## STUDY 2: Objective, design, and sample

**Objective:** Testing the robustness of study 1's results with a chosen savings goal

**Design:** 2 (External system: Controlling God vs. Baseline) x 2 (Plan formats: Moderately specific vs. Very specific) between-subjects design

**Sample:** 161 online participants recruited from a company's database

American residents, Female: 71.4%, Median age: 33

Removal of :

- Participants identified as Atheist
- Participants without a savings goal

## STUDY 2: Procedure

### **Independent variables:**

- ⊙ Manipulation of salience of beliefs in external systems by reading a text (same as study 1)
- ⊙ Manipulation of plan formats by asking to list a savings goal non started or at its early stages
  - Moderately specific: selecting the amount among ranges (e.g., less than \$500, \$500 to \$999)
  - Very specific: entering the amount and planning how much can be saved monthly for the next six months

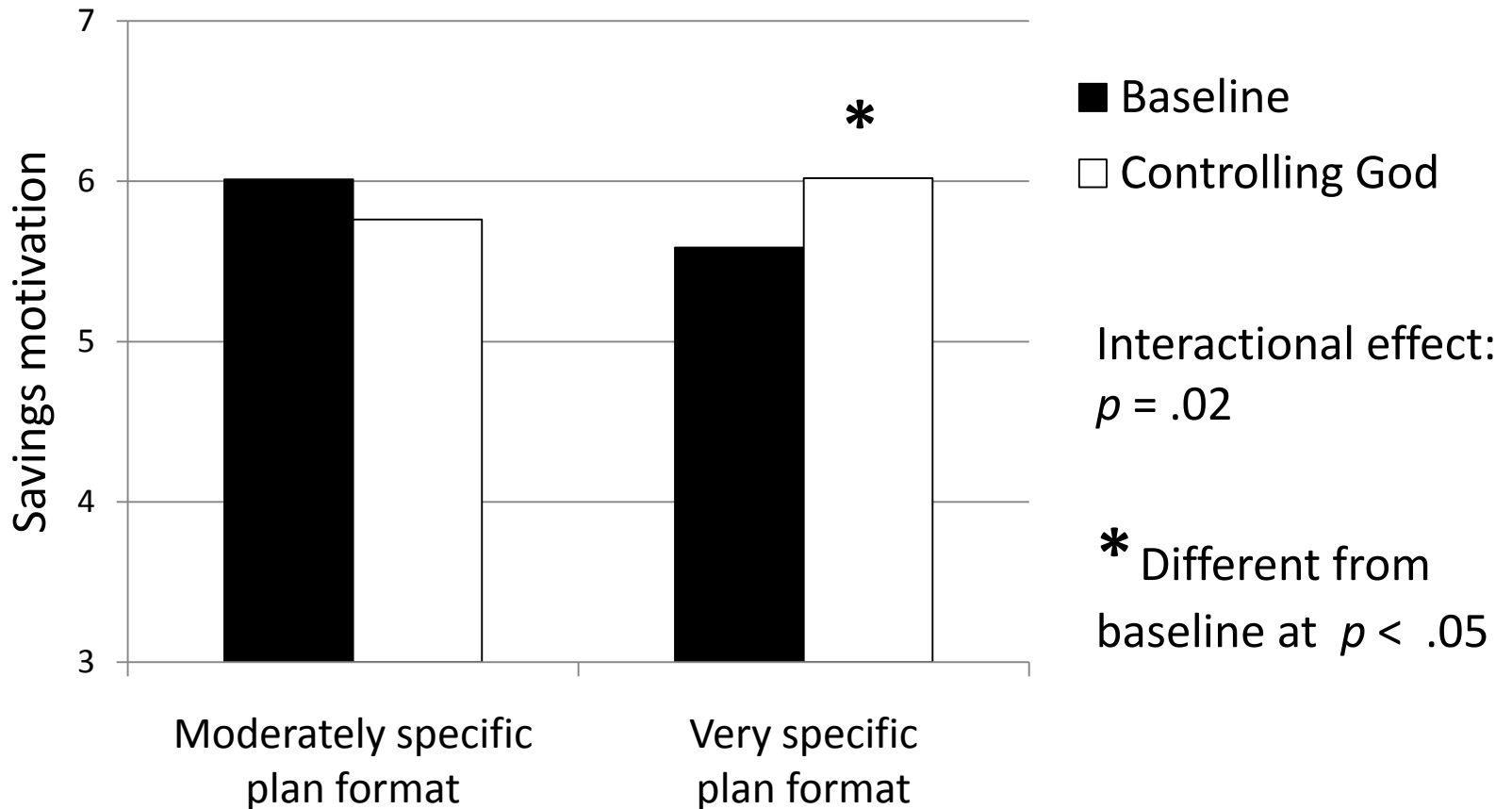
Pretested on perceived level of specificity and positive/negative mood

### **Dependent variable:**

- ⊙ Two-item measure of motivation in goal pursuit ( $\alpha = .78$ )

## STUDY 2: Results

**Covariates: Age, income, and goal importance**



## STUDY 3: Objective, design, and sample

### **Objective:**

- ⊙ Explaining the mechanism by perceived self-efficacy
- ⊙ Context of a fitness goal

**Design:** 2 (External system: Controlling God vs. Baseline) x 2 (Plan formats: Moderately specific vs. Very specific) x One continuous (Goal progress) between-subjects design

**Sample:** 147 Smartphone users recruited from a company's database

American residents, Female: 75.5%, Median age: 36

Removal of :

- Participants identified as Atheist
- Participants without a fitness goal

## STUDY 3: Procedure

**Pretense:** Marketing of an app designed to help users manage their fitness goals

### **Independent variables:**

- ⊙ Manipulation of salience of beliefs in external systems by reading a text (same as study 1)
  
- ⊙ Manipulation of plan formats by
  - Asking details about the targeted objective
  - Exposure to an informative ad from an alleged non-profit organization on the theme “What can you do for your health?”

Pretested on perceived level of specificity and positive/negative mood



# STUDY 3: Procedure

## Vague implementations



## Specific implementations



## STUDY 3: Procedure

### **Dependent variables:**

- ⊙ Mediator variable: perceived self-efficacy  
How confident are you that you can perform the different activities recommended by *Be Healthy, Be Happy*, to attain your fitness goal?
- ⊙ Outcome variable: Willingness to buy (one item)  
7-point scale after a brief description of the app

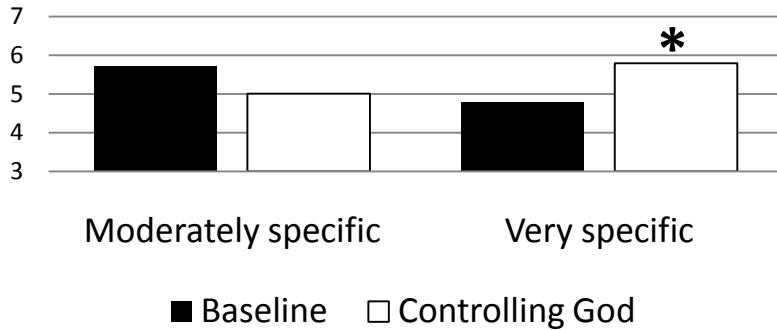
**“Moderated moderator”**: Goal progress (one item)

How soon are you to completing your fitness goal? On a 7-point scale (1 = very far, 7 = very close)

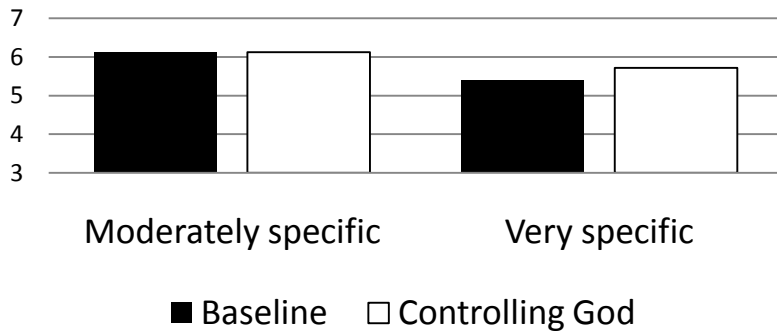
# STUDY 3: Results

## Perceived self-efficacy

Low progress (-1SD)

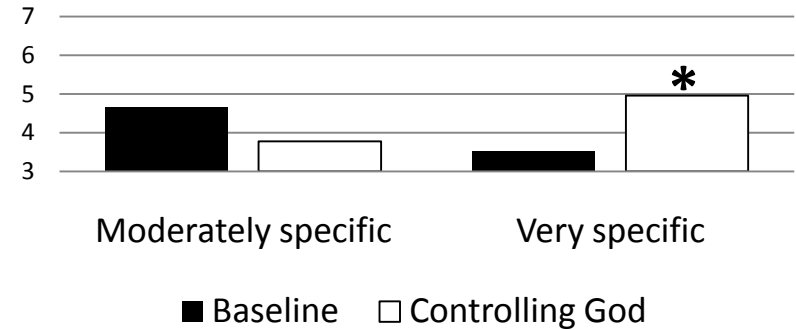


High progress (+ 1SD)

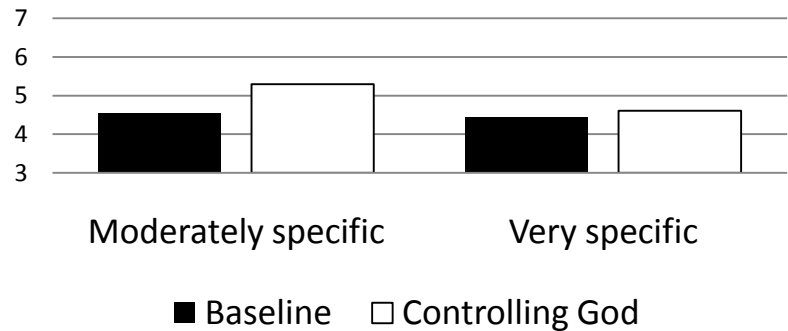


## Willingness to buy

Low progress (-1SD)



High progress (+1SD)

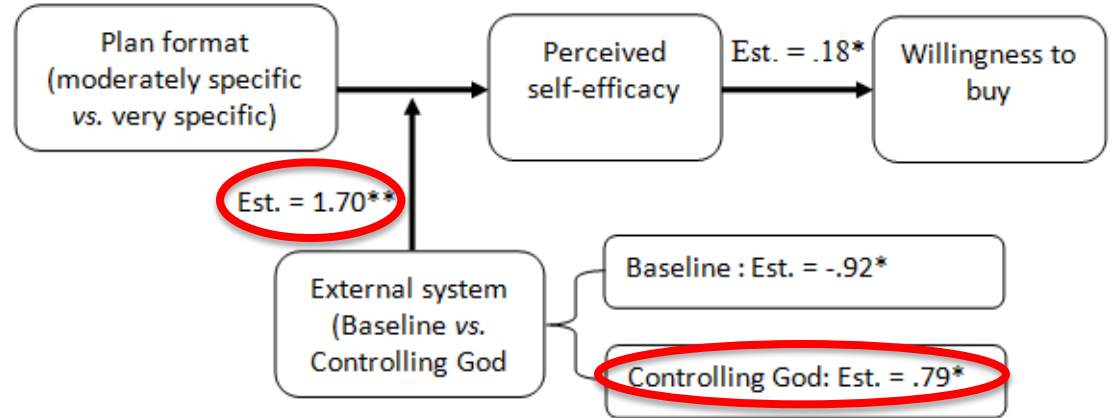


Covariates: Gender, Age, and Goal importance

\* Different from Baseline at  $p < .01$

# STUDY 3: Results

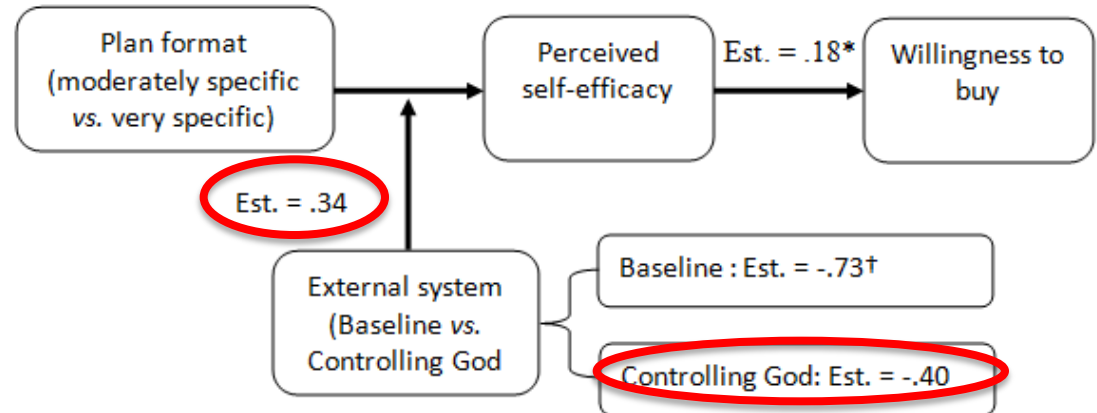
## Low progress (-1SD)



Conditional indirect effects based on 5000 bootstrapped samples:

- when external system = baseline: effect = -.24 (95% CI = -0.726 to -0.009)
- when external system = controlling God: effect = .21 (95% CI = -0.024 to 0.872)

## High progress (+1SD)



Conditional indirect effects based on 5000 bootstrapped samples:

- when external system = baseline: effect = -.20 (95% CI = -0.601 to -0.010)
- when external system = controlling God: effect = -.11 (95% CI = -0.498 to 0.044)

## STUDY 4A AND 4B

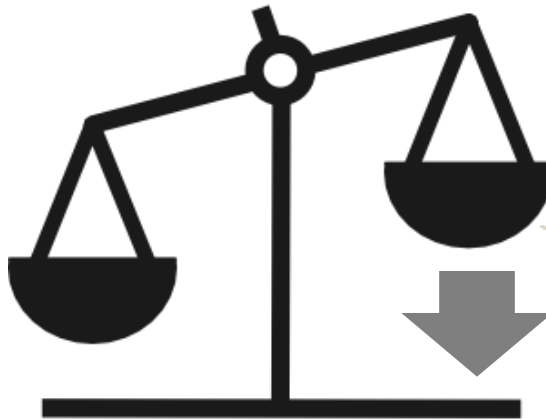
### Compensatory Control Theory (Kay et al. 2008; 2009)

Perception of  
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Personal control

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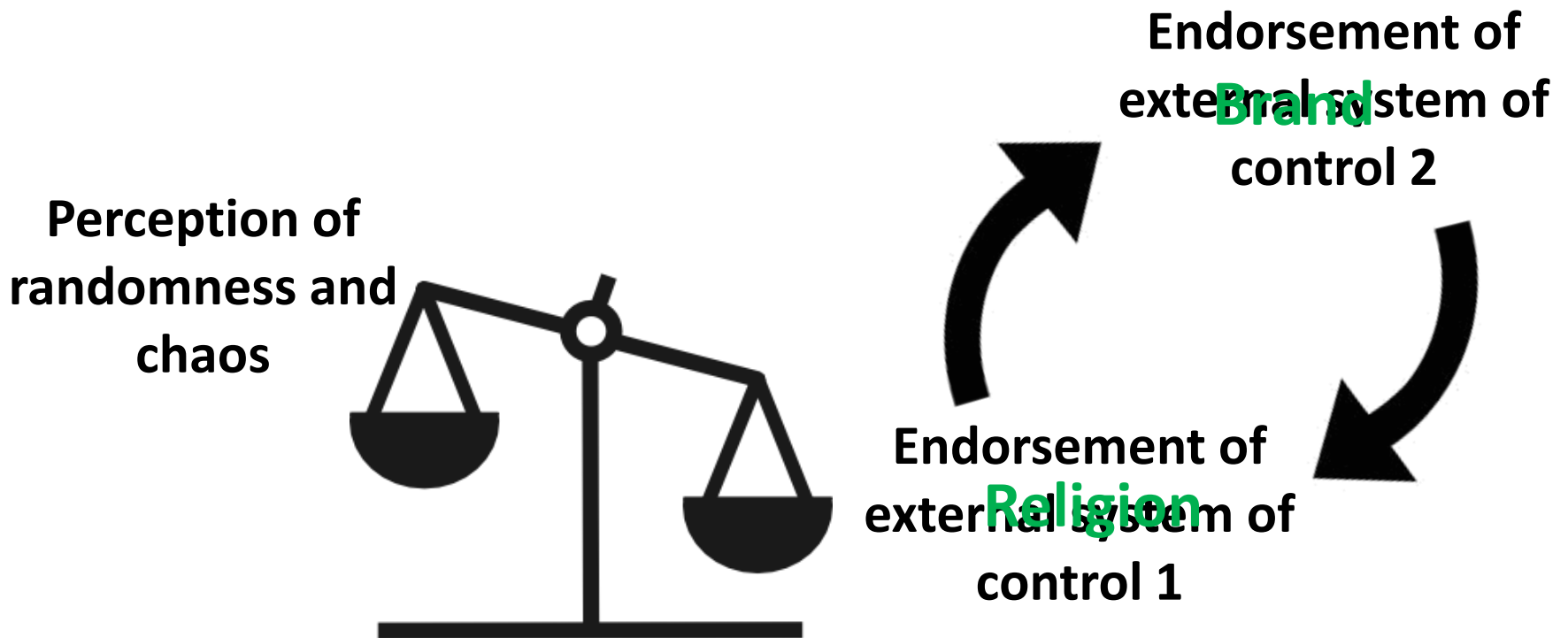


Endorsement of  
external systems of  
control

Lack of personal  
control

## STUDY 4A AND 4B

### Compensatory Control Theory (Kay et al. 2008; 2009)



## STUDY 4B: Objective, design, and sample

### **Objective:**

- ⦿ Testing the hypothesis of moderation with the brand rather than religion as external source of control
- ⦿ Showing that the expected effects are due to one's willingness to rely on the brand (i.e., brand reliability), and do not imply trusting the brand (i.e., brand trust)

**Design:** 3 (External system: brand reliability vs. brand trust vs. baseline) x 2 (Plan formats: Vague vs. Very specific) between-subjects design

**Sample:** 273 participants recruited from a company's database  
American residents, Female: 73.3%, Median age: 35  
Removal of participants without a savings goal

## STUDY 4B: Procedure

**Pretense: marketing study in behalf of an anonymous banking institution**

### **Independent variables:**

- ⊙ Manipulation of salience of beliefs in external systems:
    - Baseline: direct access to the manipulation of plan formats
    - Brand reliability
    - Brand trust
- Assessment of three slogans, used for measure of psychological reactance:
- Friendly/hostile,
  - Libertarian/authoritarian,
  - Obtrusive/unobtrusive (reversed)
  - Controlling/non-controlling (reversed)



## STUDY 4B: Procedure

**Manipulation check for psychological reactance** ( $\alpha = .84$ )  
 $t(179) = 5.24, p < .001, M_{\text{brand reliability}} = 5.48, M_{\text{brand trust}} = 4.41$

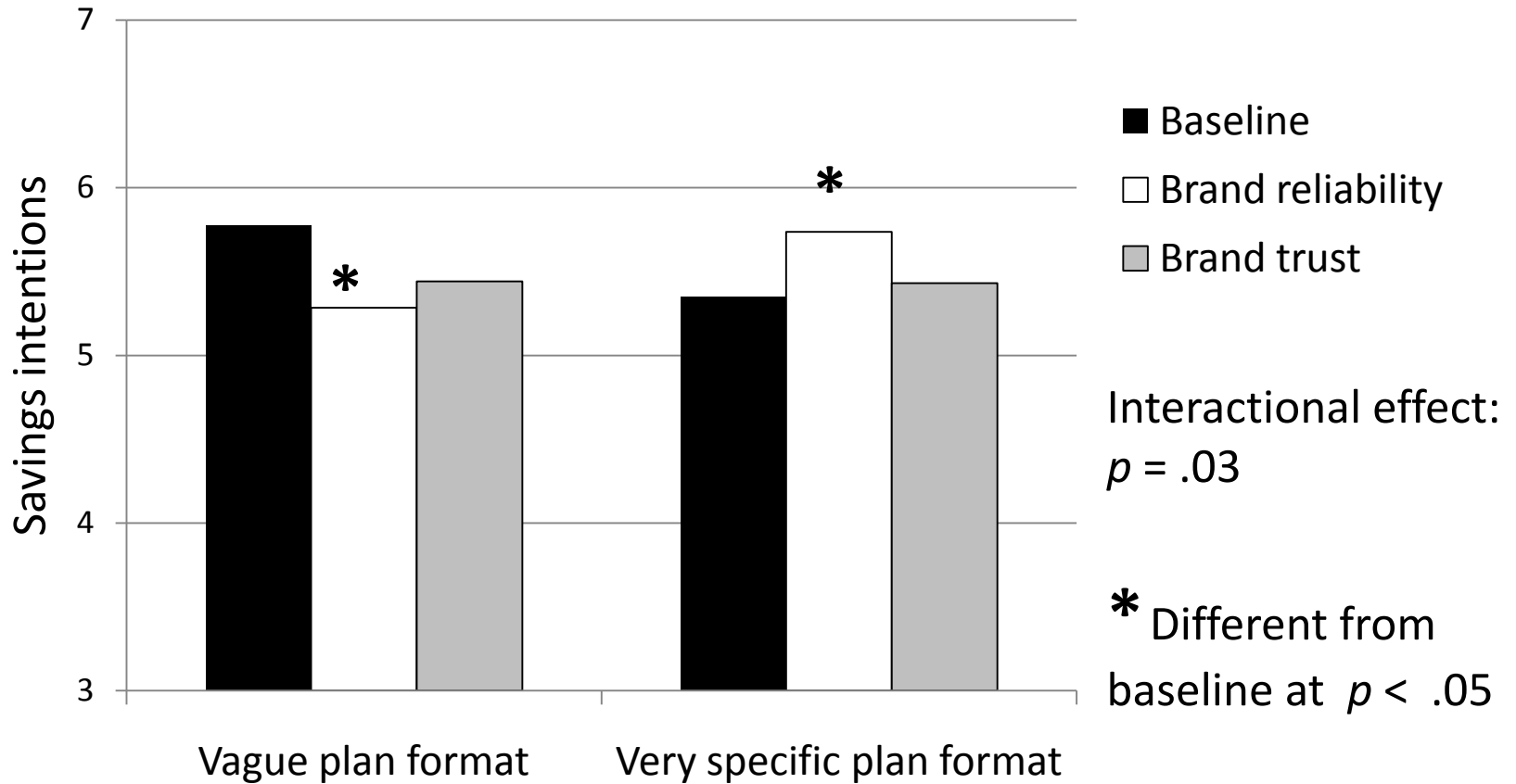
- ⊙ Manipulation of plan formats by asking to list three savings goal non started or at their early stages + informative ad
  - Vague plan format: Ad giving advice on savings with vague implementations
  - Very specific plan format: Entering the targeted amount + ad giving advice on savings with specific implementations

Pretested on perceived level of specificity and positive/negative mood

**Dependent variable:** Savings intentions (six items,  $\alpha = .85$ )

# STUDY 4B: Results

## Covariates: Age, income, and goal importance



# CONCLUSION

**Demonstration of divergent effects of reminding consumers that their long-term goals occur within external systems of control, depending on the specificity of plan formats**

## **A twofold contribution**

- ⊙ Negative effects of planning
- ⊙ Motivational consequences of compensatory control

**Practical interest:** Beneficial effect of control stimuli in persuasion tactics when planning long-term goals provokes control threats

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# APPENDIXES

## STUDY 1: Scenario for manipulation of plan formats

*Suppose you have a job with reasonable payment that gives you a monthly discretionary income of about \$800 after necessary expenses (namely rent, supermarket food bills, and utilities). You have very little by way of savings, but you are now starting to look ahead.*

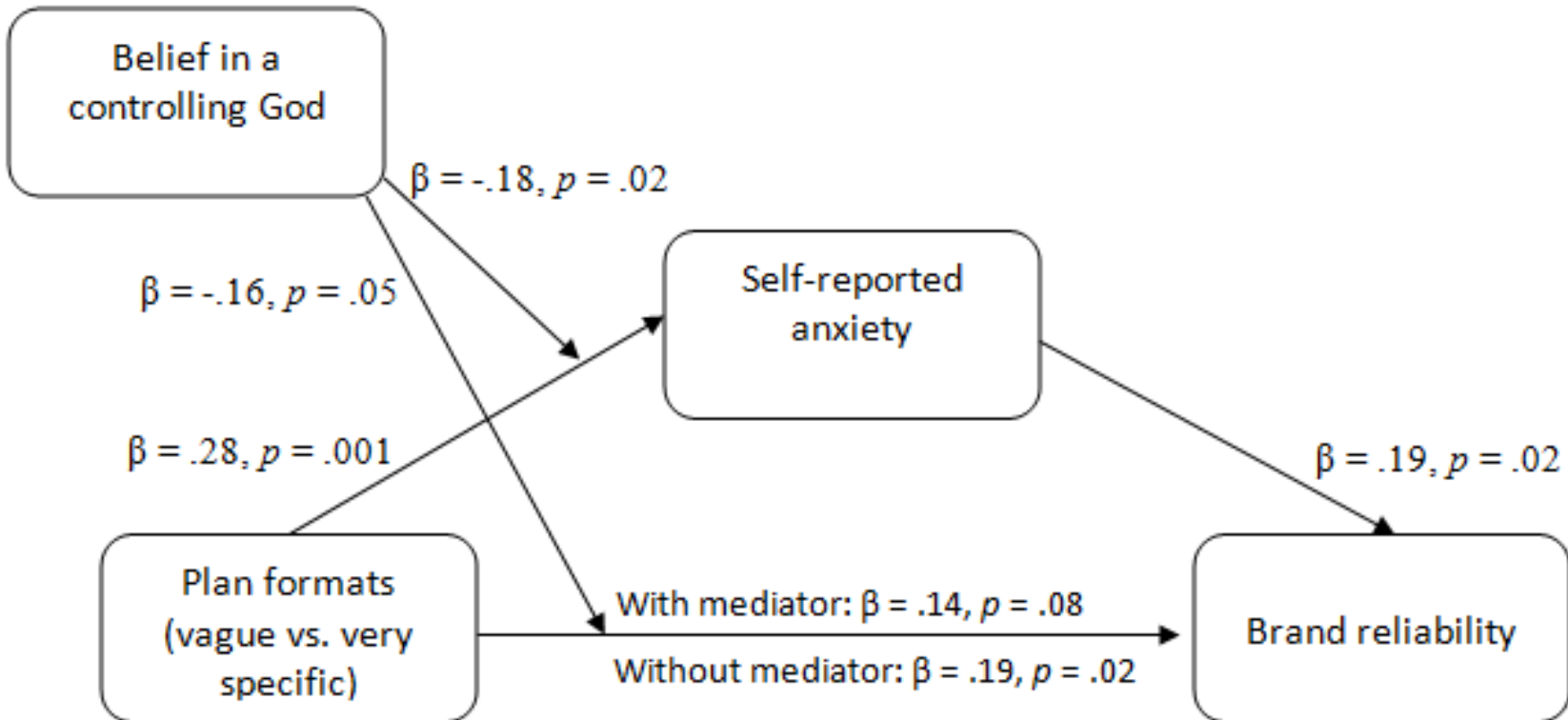
**Vague plan format** *Your financial adviser has just introduced a new savings program to you. The program requires you to commit in advance to allocating a portion of your future salary for a time period to be invested in bonds and certificates of deposits with a guaranteed rate of return of four percent.*

**Very specific plan format** *Your financial adviser has just introduced a new savings program to you. The program requires you to deposit a monthly fixed amount (minimum \$300) for ten years to be invested in bonds and certificates of deposits with a guaranteed rate of return of four percent.*

*Your adviser leaves the decision to you as to whether or not you would sign up. However, he does remind you that you are now getting to a point at which you should think about your future financial well-being, including providing for your children's education, retirement savings, housing expenses, and other funds for emergencies...*

## STUDY 4A: Results

**Covariates: Age, income, and goal importance**



Conditional indirect effects based on 5000 bootstrapped samples:

when belief in a controlling God is low: effect = .26 (95% CI = 0.006 to 0.591)

when belief in a controlling God is high: effect = .05 (95% CI = -0.082 to 0.229)

## STUDY 4B: Manipulation of salience of beliefs in external systems

### **Brand reliability**

“Our motto is “Rely on a bank that makes you reach your goals” because...

- ⊙ ... we believe that a bank acts on its clients’ behalf to bring order into their financial life.
- ⊙ ... we believe that a bank should intervene in its clients’ financial life and makes things happen for them.
- ⊙ ... we believe that a bank should have a constant presence by its clients’ side.”

### **Brand trust**

“Our motto is “Trust a bank that makes you reach your goals” because...

- ⊙ ... we believe that a bank is a partner that does not hide anything from its clients.
- ⊙ ... we believe that a bank should be transparent and honest with its clients.
- ⊙ ... we believe that a bank should be trustworthy of its clients’ business.”



## STUDY 4B: Informative ad for manipulation of plan formats

**Vague  
implementations**

“Successful financial goals result from saving as much as possible, in other words, saving what is not spent.”

Joseph Stiglitz, 2001 Nobel prize in economics



**Specific  
implementations**

“Successful financial goals result from saving a predetermined proportion of the household income after taxes by automatic transfers into a well-chosen savings plan or investment portfolio. The rule of thumb is to allocate about 15% of the net salary to saving.”

Joseph Stiglitz, 2001 Nobel prize in economics

