

What People Know about the Role of Construal Level in Self-Control

Kentaro Fujita

Department of Psychology

The Ohio State University

What is Self-Control?

- Historically defined **behaviorally**
- **Self-control** = preference for larger-delayed over smaller-immediate rewards

(Ainslie, 1975; Hoch & Loewenstein, 1991; Kirby & Herrnstein, 1995; Mischel, 1974; Mischel, Shoda, & Rodriguez, 1989; Rachlin & Green, 1972; Rachlin, 1995; Schelling, 1978; Strotz, 1955; Thaler & Shefrin, 1981)

- **Motivationally**, self-control entails resolving *dual-motive conflict* (Fujita, 2011; Fujita & Carnevale, 2012)
 - **Narrow-local** vs. **broader-global** concerns
 - **Self-control** → process of prioritizing global over local motivational concern

Dual-Motive Example



- **Local motive:**
 - Eat *these* chocolate chip cookies *now*
- **Global motive:**
 - Lose weight

Self-Regulation \neq Self-Control

- Self-control is example of self-regulation, but not all self-regulation requires self-control
- **Self-regulation** = set of processes tasked with adopting, managing, and monitoring goals & standards in thought, feeling, and behavior
- Self-control addresses specific self-regulation challenge, but there are others

Fujita (2011) – *PSPR*

Fujita & Carnevale (2012) –

Current Directions in Psych Science

Self-Regulation \neq Self-Control

- Putting golf ball requires skillful regulation of thoughts, feelings, & behavior (e.g., Baumeister, 1984; Beilock & Carr, 2004)
- *Not* dual-motive conflict
- Golfer does not *want* to miss (single-motive)
- Self-regulation, but not self-control



Fujita (2011) – *PSPR*
Fujita & Carnevale (2012) –
Current Directions in Psych Science

Beyond Manipulations

- Most social psychological studies manipulate variable, then observe effect on self-control
- Less is known about what people know – implicitly or explicitly – about self-control
 - That is, do they know what research suggests is good vs. bad for self-control?
- Lack of knowledge may predict those vulnerable to self-control failure (Mischel & Mischel, 1983; Rodriguez, Mischel, & Shoda, 1989)

Construal Level Approach

- Self-control is a *construal-dependent* decision
- How one subjectively understands self-control decision at-hand determines whether one succeeds vs. fails

Temporal Dynamics of Self-Control

- Self-control decision-making is remarkably sensitive to time
- Prefer outcomes consistent with global vs. local motives when decision is to be implemented in distant future
- Preference reverses when decision is to be implemented in immediate here-and-now

An Example

- Dieting is a *great* decision when it is to be implemented some time in the future
- Much less good decision when it must be made in presence of immediately available goodies



Construal Level Theory (CLT)

- CLT proposes an association between **psychological distance** and **mental construal**
(Liberman & Trope, 2008; Liberman et al., 2007; Trope & Liberman, 2003; 2010)
- Distance = Removing an event from one's direct experience along any dimension (time, space, social distance, hypotheticality)

Distance & Abstraction

- Detailed and specific info about distant events typically unreliable or unavailable
- Distant events - *high-level construal*
 - Focus on abstract, essential, & goal-relevant features *invariant and common* across all manifestations of event
 - Functionally use info at hand
- Proximal events - *low-level construal*
 - Highlights specific, incidental, & goal-irrelevant details that render particular event *unique and idiosyncratic*
 - Functionally tailor representation to fit specific event

Attending a Talk



- “Learning about someone’s research”
(High-level construal)
- “Sitting in *this* chair in *this* room for the next 40 minutes”
(Low-level construal)

Construal Levels & Preference

- Evaluative connotations of high- and low-level construal are independent
- Possible to evaluate an event positively at one level negatively at the other
- Preferences, decisions, and action can shift depending on level of construal

Attending a Talk



- “Learning about someone’s research”
(High-level construal)
- “Sitting in *this* chair in *this* room for the next 40 minutes”
(Low-level construal)

Construal Levels & Self-Control

- People's preferences in self-control dilemmas shift as function of time due to changes in construal
- Self-control **success** =
 High > Low-level construal
- Self-control **failure** =
 High < **Low-level** construal

Dieter's Dilemma



Low-level: These Cookies $>$ This Apple

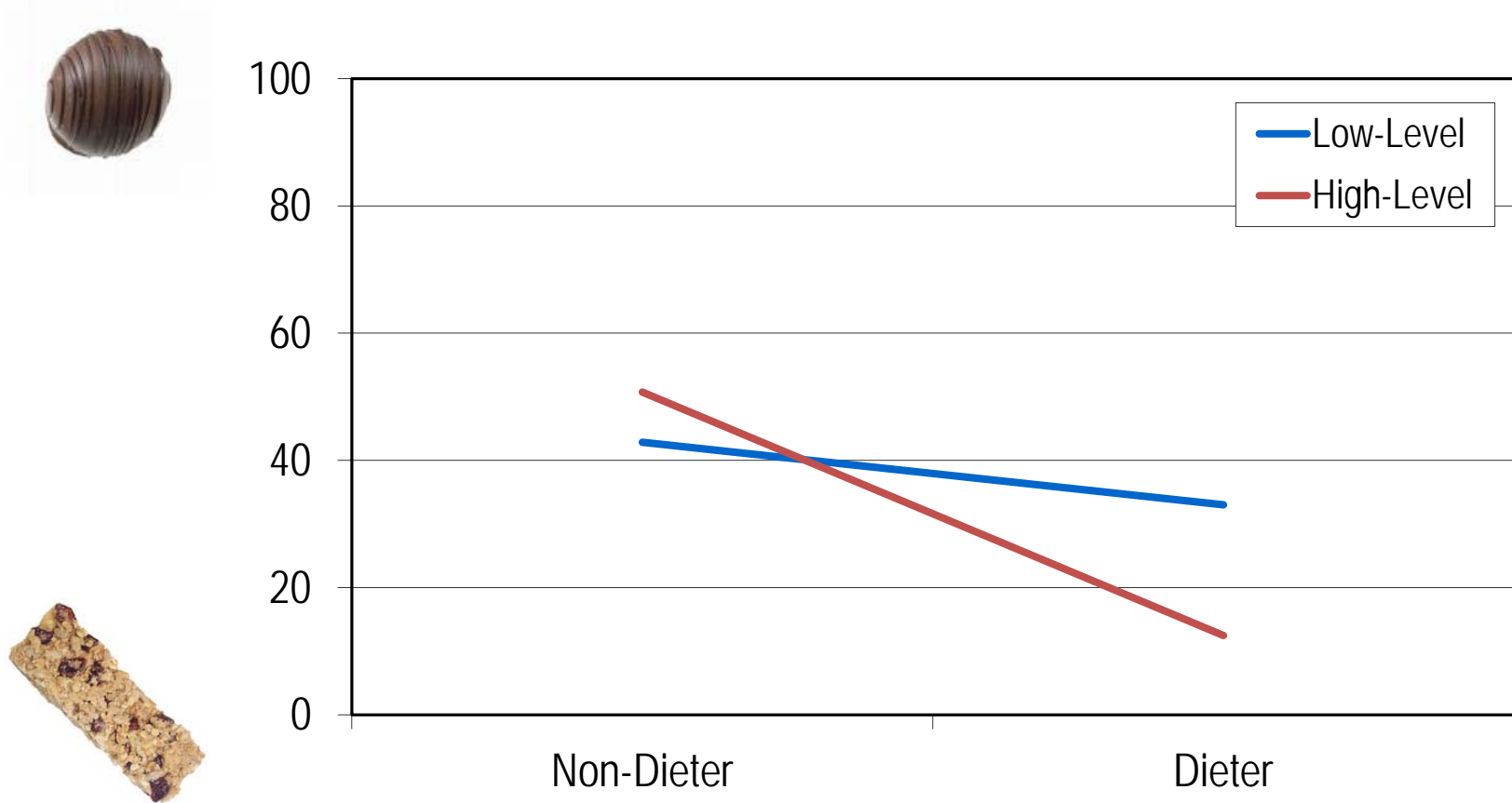
High-level: Hedonism $<$ Weight Loss

Construal Levels & Snack Choice

- Dieters & non-dieters
- Generate superordinate category labels vs. subordinate exemplars (Fujita et al., 2006)
- CAR
 - High-level: VEHICLE
 - Low-level: BMW
- Choice: chocolate truffle vs. granola bar

Construal Levels & Snack Choice

P Truffle over Granola



$b = -.06, SE = .03, p = .05$
MacGregor & Fujita (unpublished)

Additional Empirical Support

- **Temporal discounting** (Aggrawal & Zhao, 2014; Fujita et al., 2006; Maglio et al., 2013; Malkoc et al., 2009; Slepian et al., 2015)
- **Physical endurance** (Fujita et al., 2006; Magen & Gross, 2007)
- **Physical exercise** (Sweeney & Freitas, 2014)
- **Smoking behavior** (Chiou, Wu, & Chang, 2013)
- **Ego-depletion** (Agrawal & Wan, 2009; Schmeichel & Vohs, 2009; see also Bruyneel & Dewitte, 2012)

Knowledge

- Do people know that high-level (relative to low-level) construal promotes self-control?
- If so, do individual differences in this knowledge predict meaningful self-control outcomes?

Study I: Linguistic Categories

- Imagine cookie taste test scenario
- # of cookies up to them
- Imagine concern:
 - Restraint vs. Enjoyment
- Report what kind of thinking would best promote respective goal



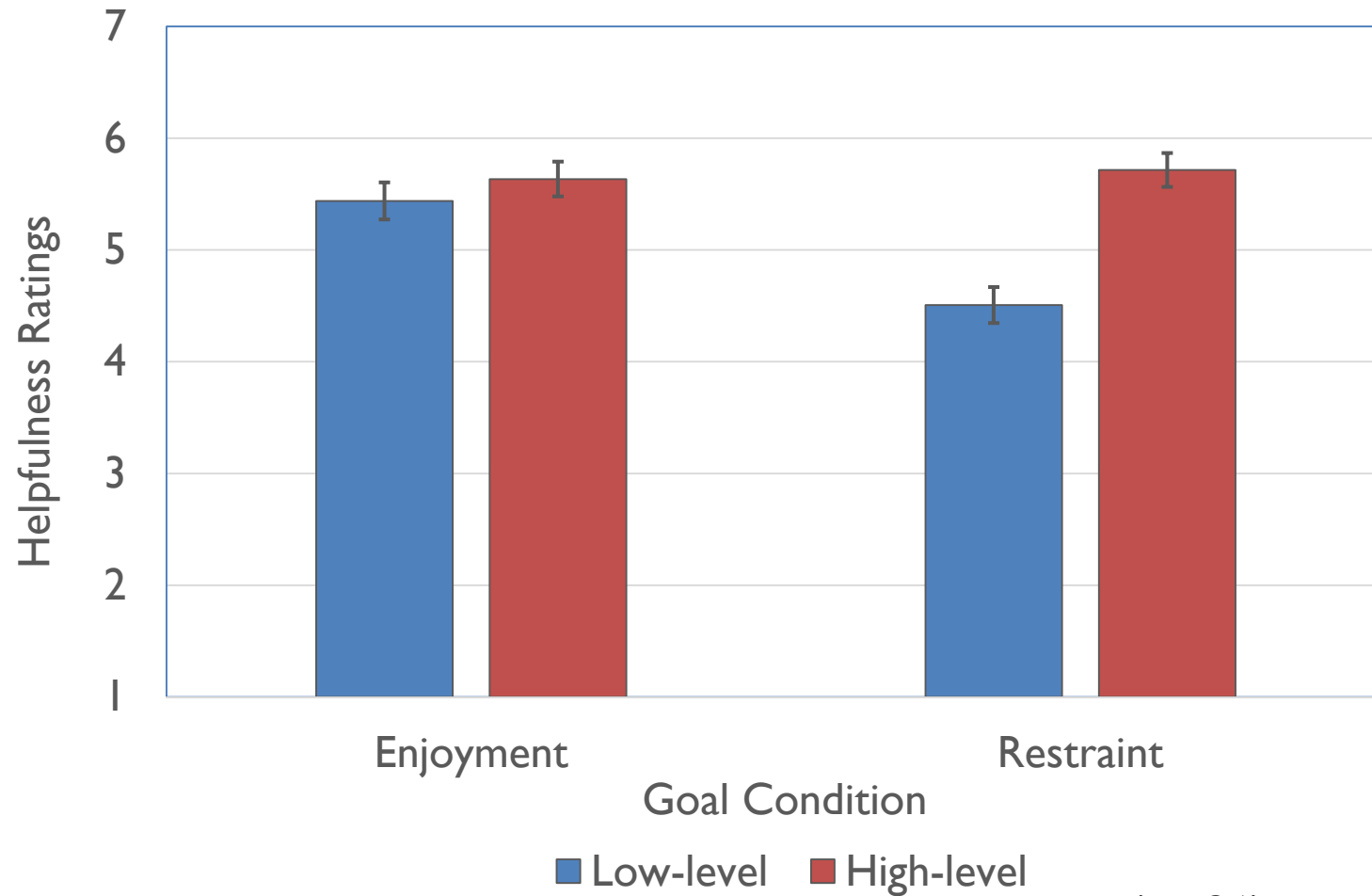
Study I: Linguistic Categories

- Presented statements that varied in linguistic abstraction as proposed by the Linguistic Categorization Model (Semin & Fiedler, 1988)
- Predicate usage reveals cognitive abstraction
- Four categories
 - Descriptive action verbs (hit)
 - Interpretive action verbs (harass)
 - State verbs (hate)
 - Adjectives (hostile)

Linguistic Categories

- Low-Level (Descriptive Action Verbs):
 - I will be rating cookies on a scale.
- High-Level (State Verbs & Adjectives):
 - I need to evaluate the cookies conscientiously.
- Agreement rated on 1-7 scale

Study I: Linguistic Categories



$F(1, 136) = 15.50, p < .001$

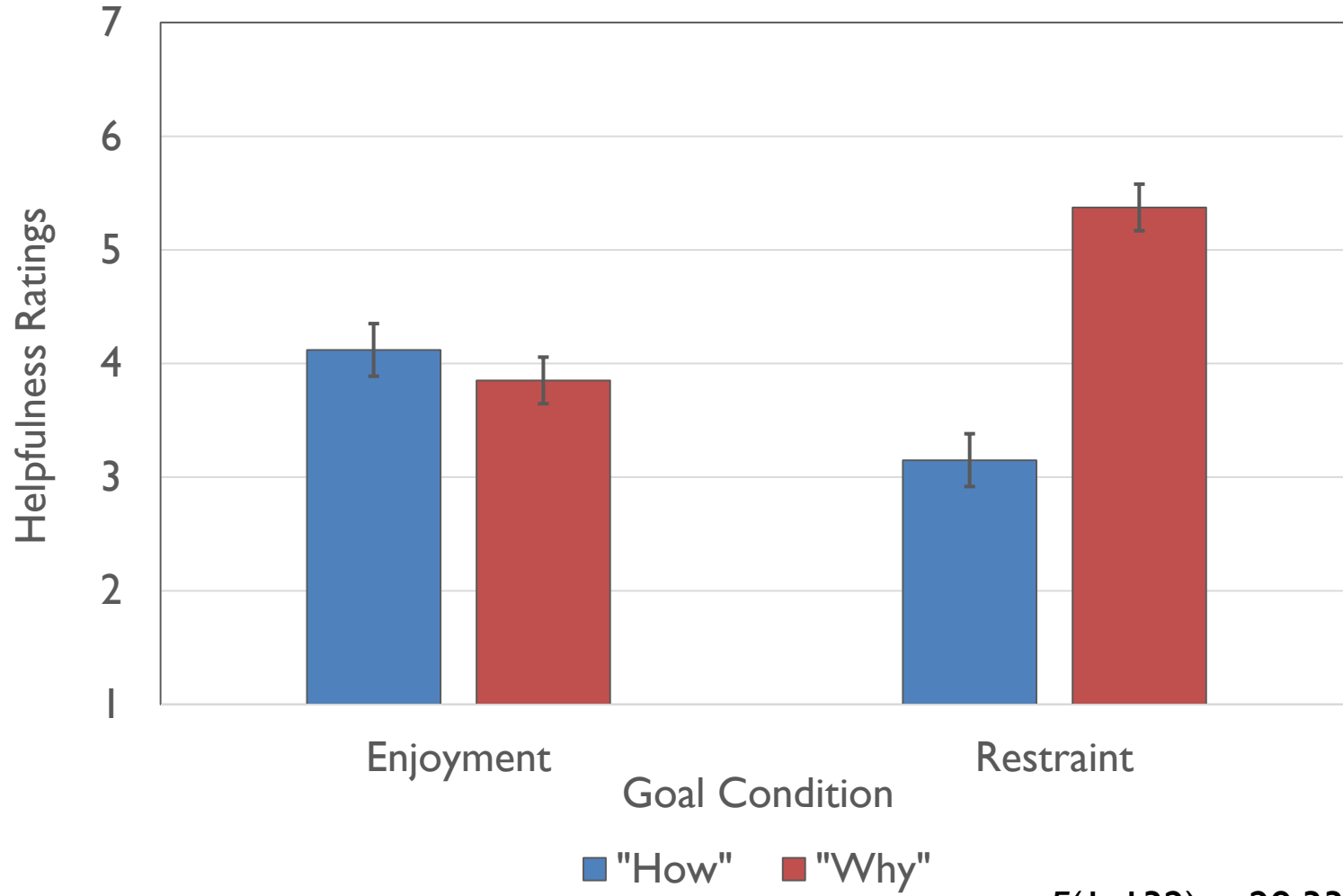
Study 2: Why vs. How

- Content-free assessment of construal level knowledge to address potential confounds
- Same cookie taste test scenario as Study 1 (restraint vs. enjoyment)
- **Why vs. How** (Freitas et al., 2004; Liberman & Trope, 1998; Vallacher & Wegner, 1987; 1989)
 - Why is associated with high-level construal (abstract ends)
 - How is associated with low-level construal (concrete means)

Why vs. How

- How much would each help you advance your goal?
 - Why you (or why you do not) eat the cookies
 - How you (or how you do not) eat the cookies
- Helpfulness rated on 1-7 scale

Study 2: Why vs. How



$F(1, 132) = 29.33, p < .001$

Study 3: Predicting Outcomes

- People appear to know that high-level (relative to low-level) construal promotes self-control
- Do individual differences in this knowledge predict meaningful self-control outcomes?

Study 3: Predicting Outcomes

- Intro Social Psych students before final exam
- List specific temptation that interferes with studying
- Write about thought processes or ways of thinking they should use to overcome temptation
 - Coded for abstraction via LCM
- Assess class achievement motivation
- Obtained final grade in course

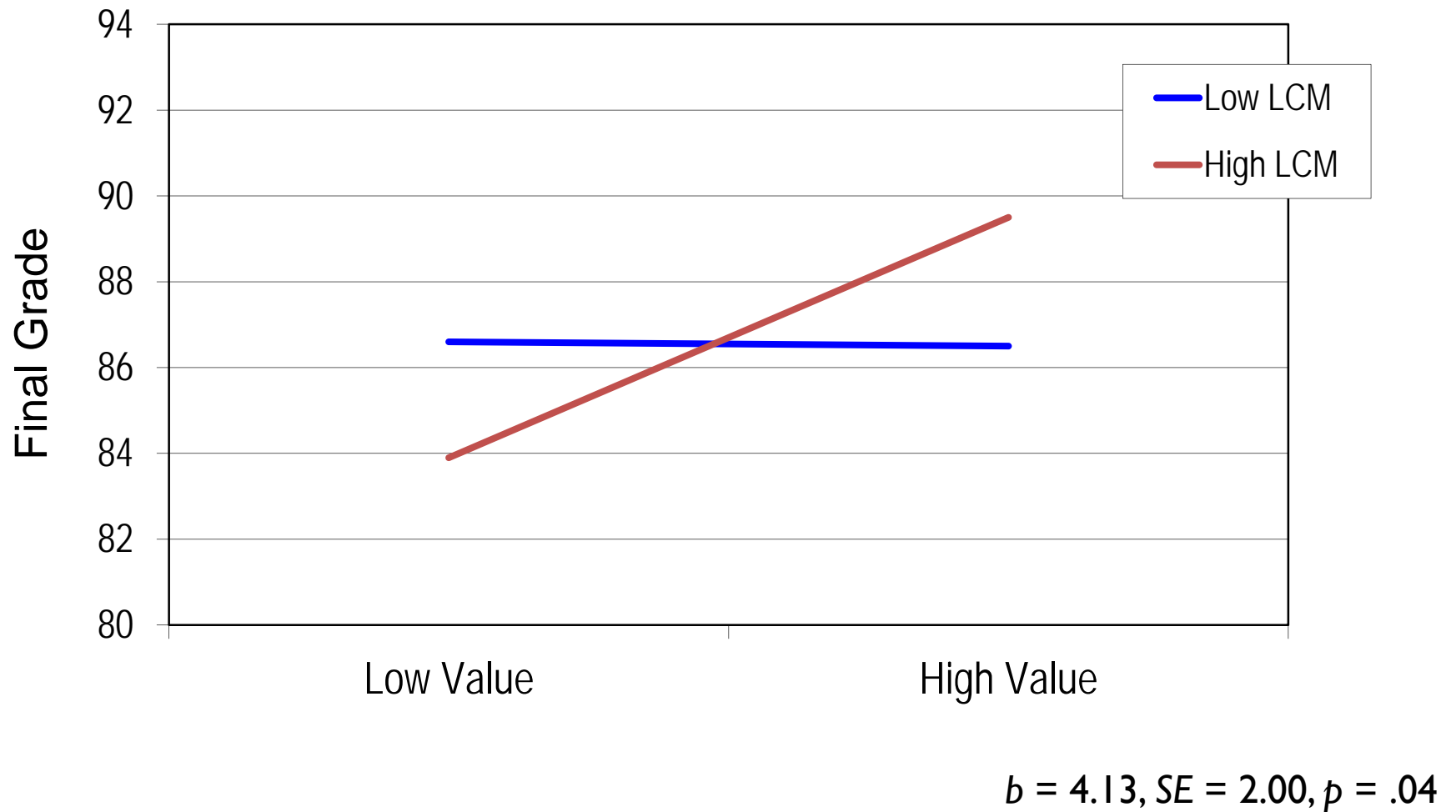


Study 5: Coding Example

I **believe** that in order to **focus** my attention on **studying** for my exam instead of **going out** with friends, I **need** to **look** at the **bigger** picture. Of course at the time I will be **upset** that I **missed** out on an evening of **fun**, but in the **long** run, I will be much more **disappointed** in myself if I **receive** a **poor** grade on this exam. With psychology being my major, I **believe** it is **important** for me to **invest** as much time as possible in **memorizing** and **learning** the material and therefore **acing** the test.

$$\frac{\# \text{ DAVs (1)} + \# \text{ IAVs (2)} + \# \text{ SVs (3)} + \# \text{ ADJs (4)}}{\text{total \# of predicates}}$$

Study 3: Predicting Outcomes



Summary

- People appear to understand that high-level (vs. low-level) construal promotes self-control
- Individual differences in knowledge predict meaningful outcomes
- Effect holds across very different assessments of knowledge and across domains

Implications

- Construal-moderated self-control is not artificial lab phenomenon
- Although only recently documented effect, it appears people already know
 - Suggests people may use high-level construal to functionally advance self-control efforts

Implications

- Knowledge, or lack thereof, may explain why some succeed and others fail at self-control
- Use knowledge measures as diagnostic tool to identify those who may be most vulnerable to failure, and tailor intervention with construal level as specific intervention target

Future Directions

- How is knowledge learned?
 - Trial and error? Implicit statistical learning?
 - Explicit modeling and instruction?
- When is knowledge learned?
 - Children might need to develop ability to engage in abstraction before learning when to use it
- What about self-regulatory benefits of low-level construal – do people know?
 - Successful self-regulation entail matching “right” process/mindset to “right” problem

Acknowledgements

National Science Foundation

The John Templeton Foundation



John
Templeton
Foundation

Jessica Carnevale, SUNY Purchase College

Nicole Dusthimer, The Ohio State University

Karen MacGregor, Hanover Research