Contractive and Expansive Regulatory Scope

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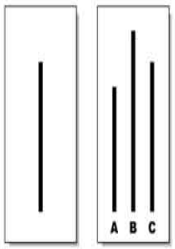
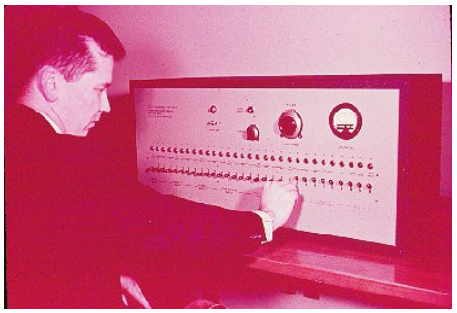
Social psychology has created a science of the human experience in the “here-and-now”

Classic studies (Asch, Milgram, Zimbardo) illustrate the power of the immediate situation and how individuals get entrapped in it





Regulatory Scope

- **Contractive Scope**: Predictions, plans, and actions focused on me-here-and-now

- **Expansive Scope**: Predictions, plans, and actions that extend across temporal, spatial, social, and hypotheticality distances

Functional **Construal Level Theory (*f*CLT)**

Regulatory Scope-Construal Level Co-Evolution

- Human phylogeny, ontogeny, and history have evolved mental and social supports for **expanding** and **contracting** regulatory scope

- **Contractive regulatory scope** is supported by low-level, concrete, individuating mental construals
- They specialize in the individuating details that afford malleable regulation in the *"here-and-now"*

Functional **Construal Level Theory (*f*CLT)**

- **Expansive regulatory scope** is supported by high-level, abstract, big-picture mental construals

- High level construals extract invariant core features that transcend the present

Mental Variants of Construal Level

- Category - Exemplars (Bar-Anan et al., 2007; Fujita et al., 2006)
- Whole - Parts (Henderson et al., 2006; Wakslak et al., 2006)
- End - Means (Gilead et al., 2013; Smith et al., 2008; Todorov et al., 2007)
- Cause - Effects (Rim et al., 2014)
- Words - Pictures (Amit et al., 2008)
- Amodal, Disembodied - Modal, Embodied (Maglio et al., 2014)

Social Variants of Construal Level

- Leader Roles vs. Follower Roles (Smith & Trope, 2006)
- Ethics vs. Pragmatics (Eyal et al., 2009)
- Global Institutions vs. Local Institutions
- Monetary vs. Barter Exchange Systems (Hansen et al., 2013)
- Art and Science vs. Entertainment and Technology

Illustrative Research

- Language for **expansive communication**
- Goal focus for **expansive imitation**
- “Why” focus for **expansive social learning**
- Universal rules for **expansive justice decisions**
- Leadership for **expansive exploration**

Expanding Words, Contracting Pictures

- Pictorial images are icons that physically resemble the referent object
- Words are symbols that carry the essence of the object

- Visual images support contractive communication
- Words support expansive communication

- The private-ness of visualization and shared-ness of verbalization parallel their roles in self regulation

Amit, Wakslak, & Trope (*PSPB*, 2012)

Expansive and Contractive Communication

- Concrete language supports communication within close, small, and homogeneous groups
- Abstract language supports communication across distant, large, and heterogeneous groups (Joshi et al., *SPPS,* 2016)

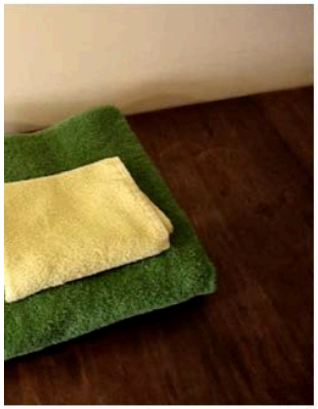
- Informal (concrete) language supports contractive communication
- Polite (abstract) language supports expansive communication (Stephan et al., *JPSP,* 2008)

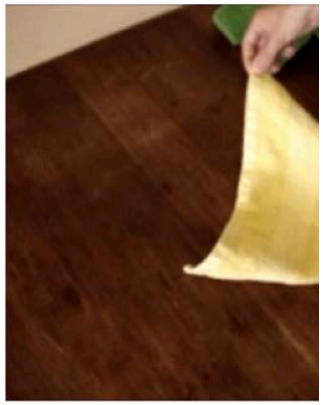
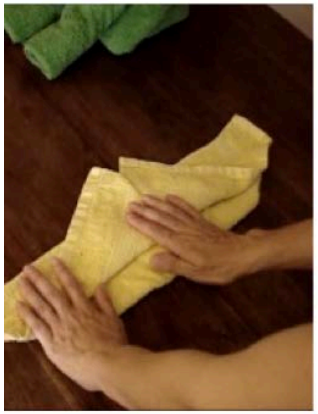
- Low-level for tuning-in; high-level for tuning-out (Zajonc, 1960)

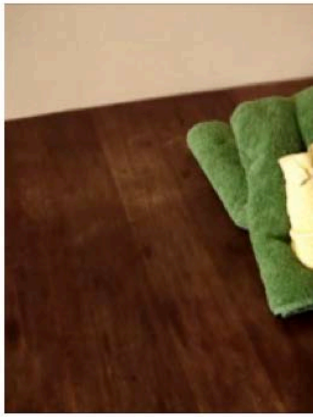
Low-Level vs. High-Level Imitation

- Humans and animals learn by imitation (Bandura, 1977)
- What do we imitate, the low level or high level?
- Is imitation of distal models less literal?
- Towel-Dog experiment: Imitating a model folding a dog out of towels in 1990/2012, in NYC or LA.

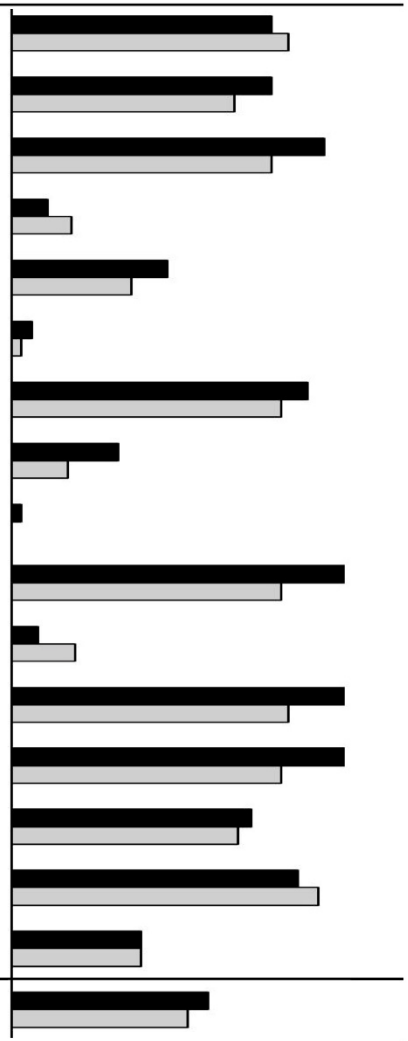
Hansen, Alves, & Trope (*JEP:G*, 2016)



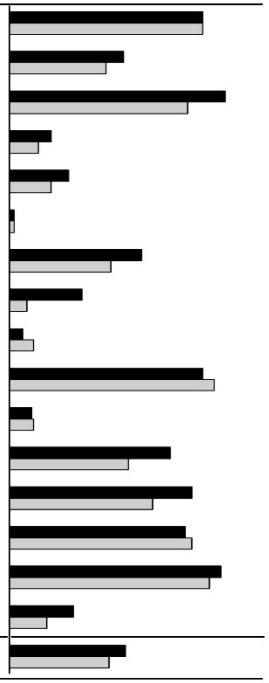





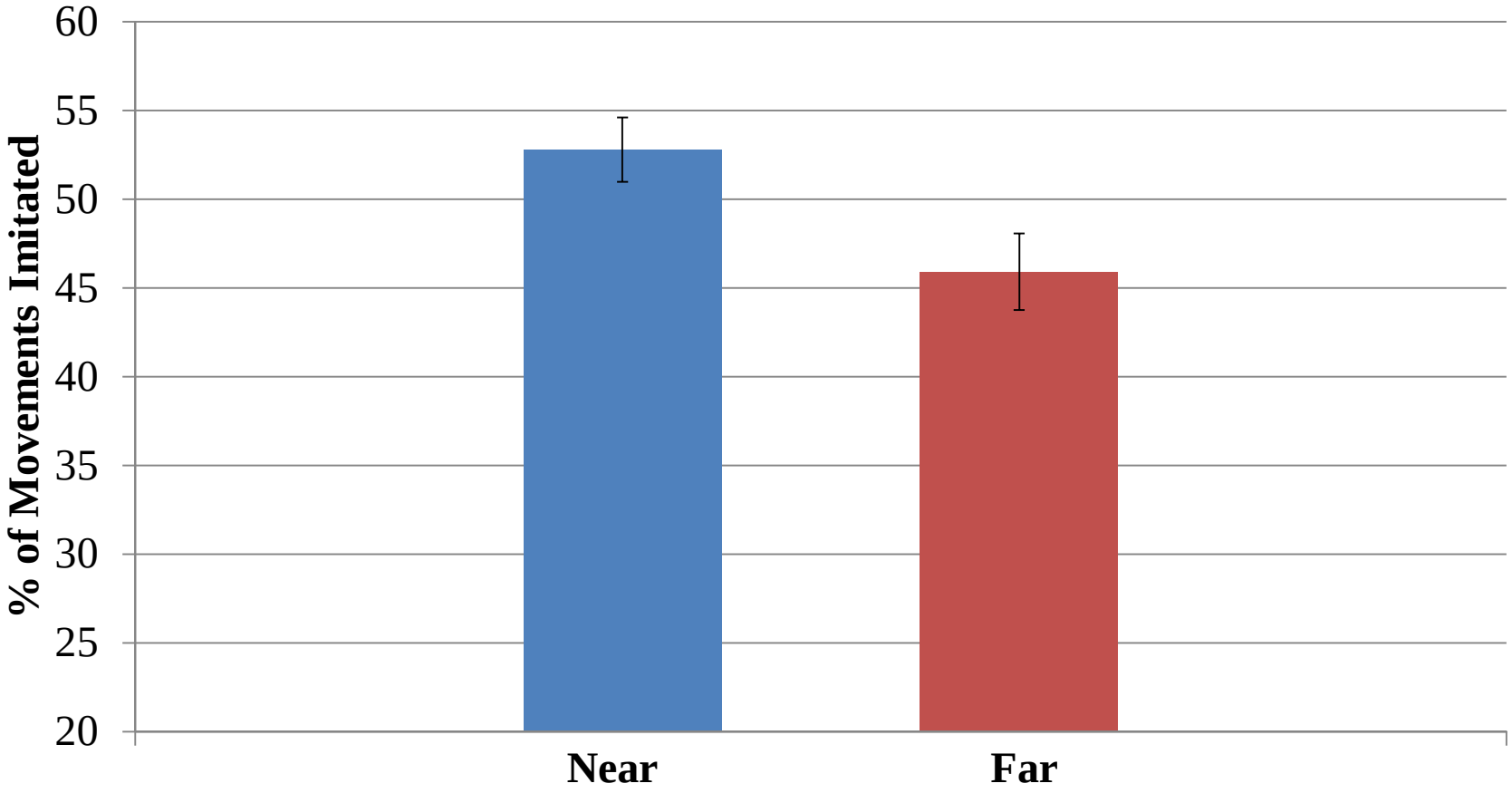
Movements	Near (2012)	Distant (1990)
Starting with the right leg, then the left	78	83
90-degree counter-clockwise turn of the body part	78	67
Placing the front legs on the right-hand side	94	78
180-degree counter-clockwise turn of the body part	11	18
Flattening the towel before starting with the head	47	36
Folding the long side of the towel back and forth	6	3
Flattening the towel after folding the long side	89	81
Crossover grip at the start of the face folding	32	17
Flapping the corner back and forth	3	0
Starting with the right ear, then the left	100	81
Folding the first ear back and forth	8	19
Flattening the towel after ear folding	100	83
Rolling the head from the left side first, then from the right side	100	81
Placing the head in the left hand for finalizing the head	72	68
Flapping both ears forward	86	92
Turning the finished dog 90 degrees counter-clockwise	39	39
Average	58.94	52.88



Movements	Near (NY)	Distant (LA)
Starting with the right leg, then the left	88	88
90-degree counter-clockwise turn of the body part	52	44
Placing the front legs on the right-hand side	98	81
180-degree counter-clockwise turn of the body part	19	13
Flattening the towel before starting with the head	27	19
Folding the long side of the towel back and forth	2	2
Flattening the towel after folding the long side	60	46
Crossover grip at the start of the face folding	33	8
Flapping the corner back and forth	6	11
Starting with the right ear, then the left	88	93
Folding the first ear back and forth	10	11
Flattening the towel after ear folding	73	54
Rolling the head from the left side first, then from the right side	83	65
Placing the head in the left hand for finalizing the head	80	83
Flapping both ears forward	96	91
Turning the finished dog 90 degrees counter-clockwise	29	17
Average	52.75	45.38



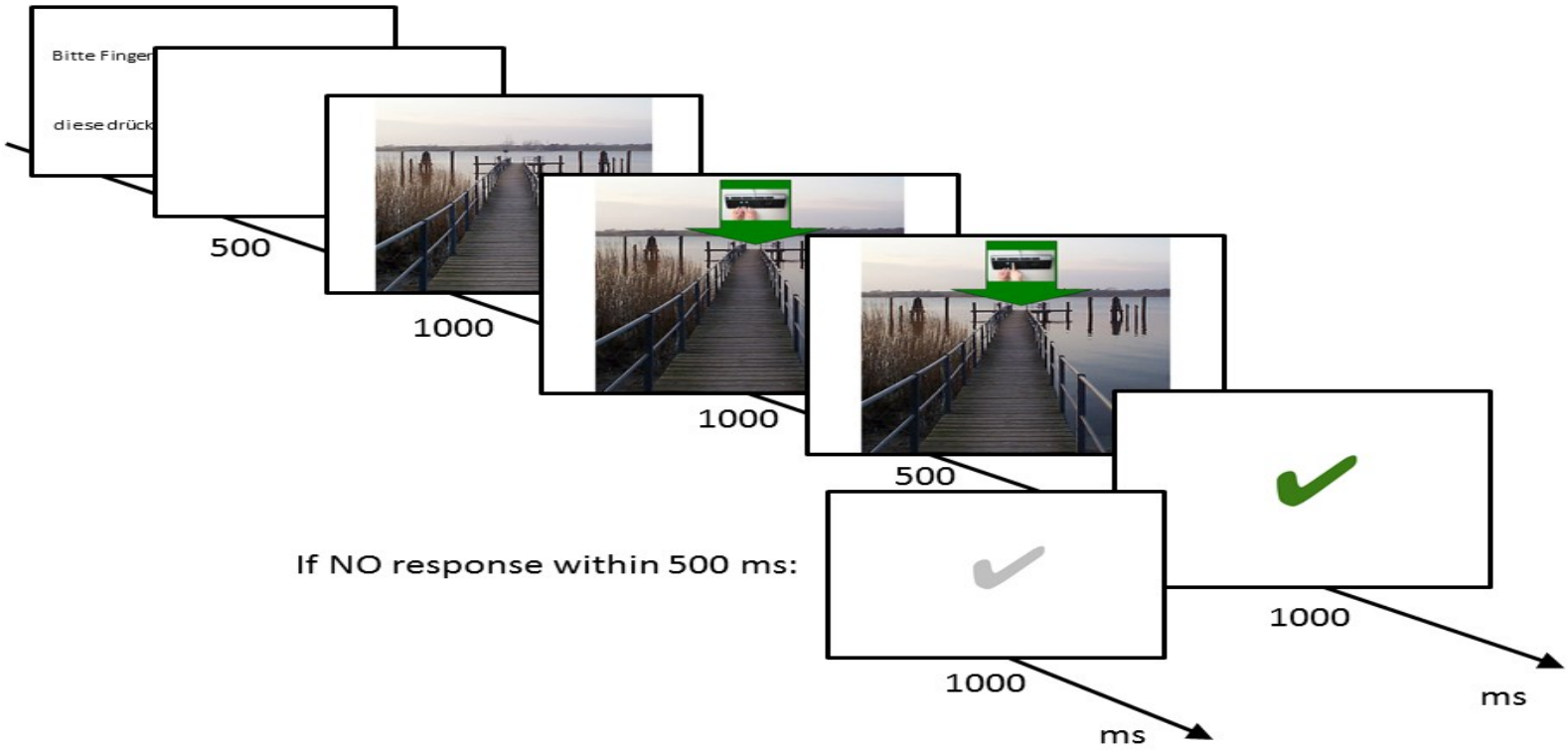
Imitation of Folding a Towel Dog



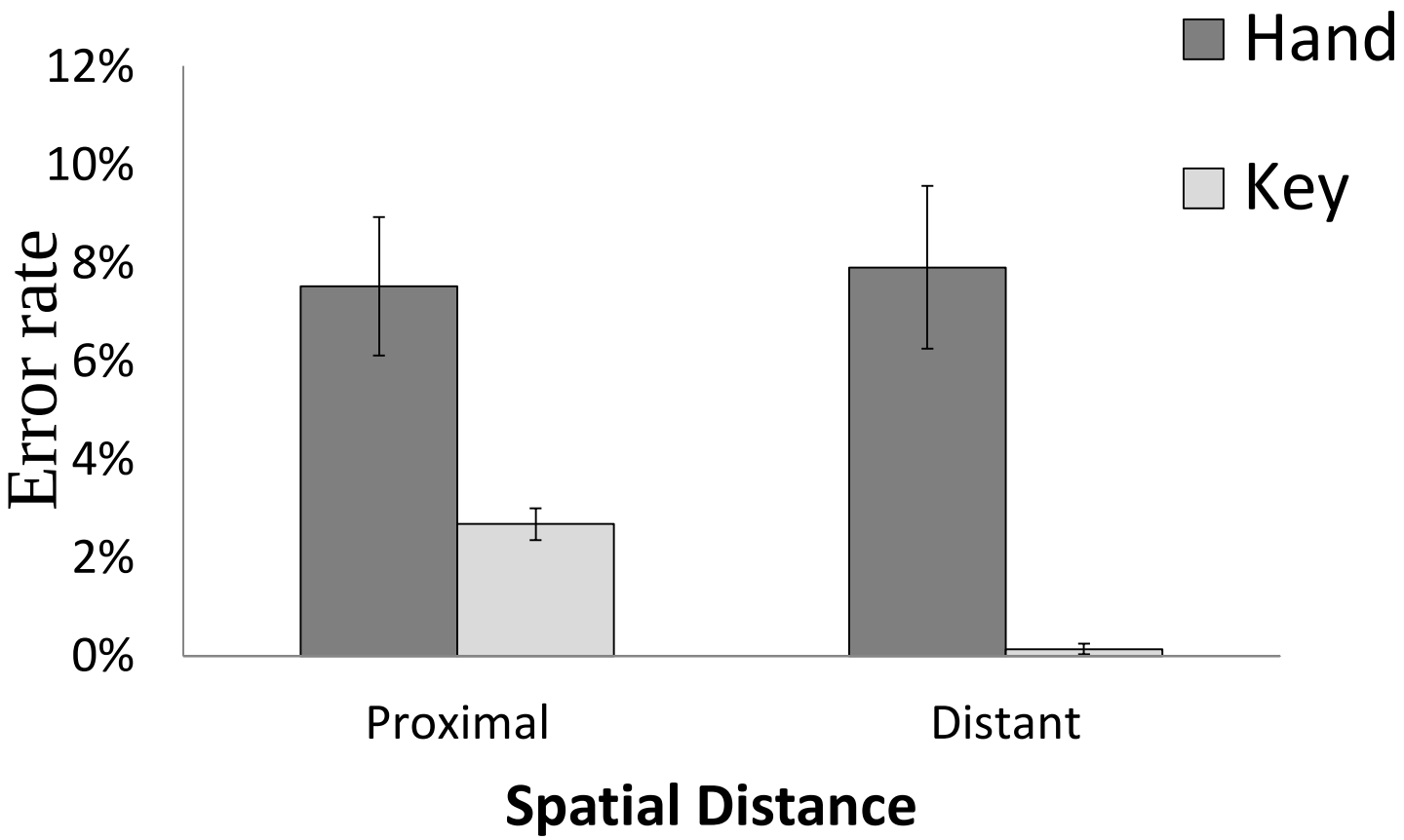
Hansen et al. (2016)

Goal Errors and Movement Errors in Imitation

- Ps asked to imitate a model pressing one of two keys using either the right or the left hand as fast as possible
- Model's action were presented in an arrow pointing to either a spatially near or a spatially distant location in a picture with depth cues
- DV: Imitation errors of hand use and key press


Bitte Finger
diese drück
500
1000
1000
500
If NO response within 500 ms:
1000
1000
ms
ms

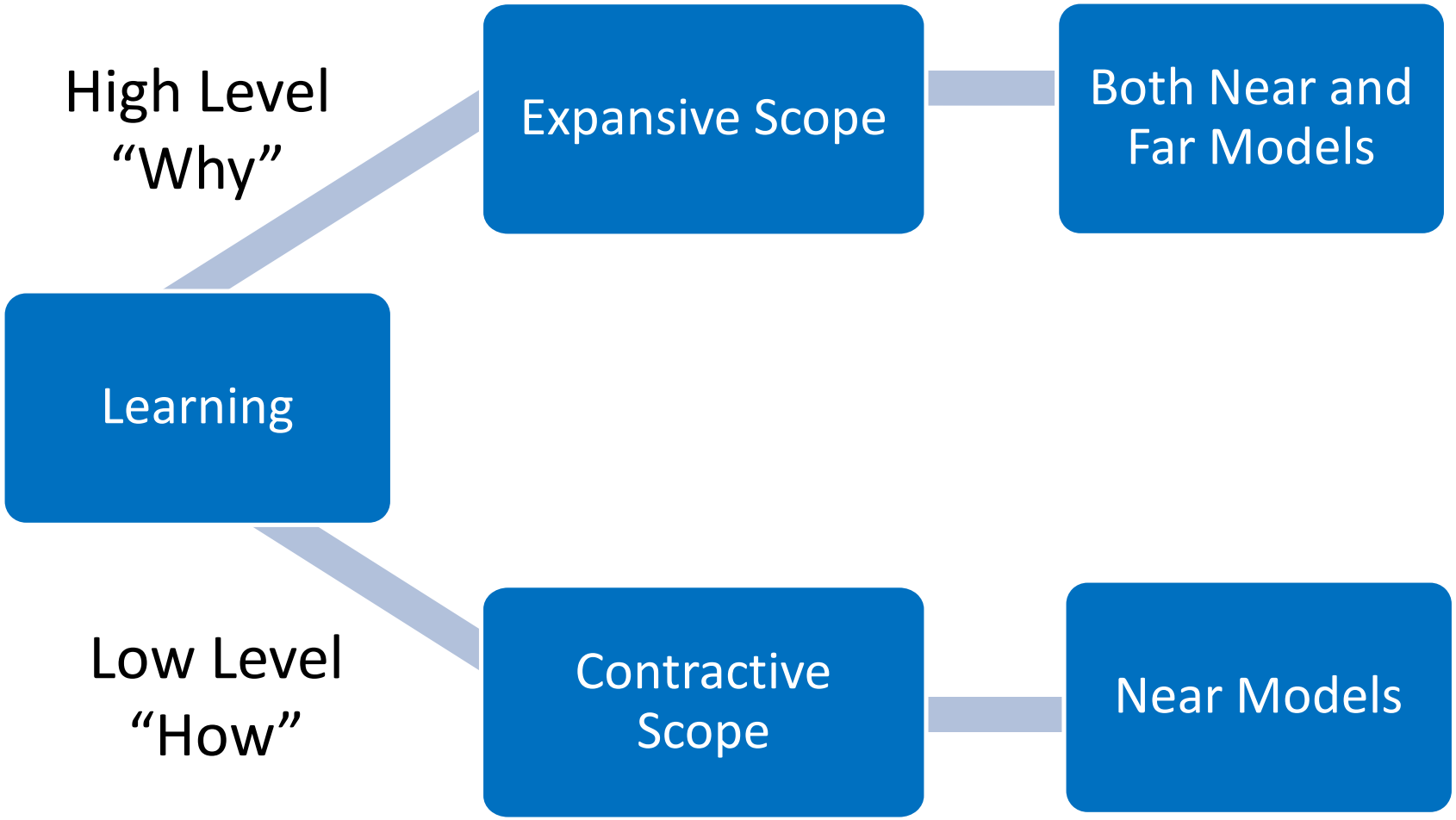
Error Rate in Speeded Imitation



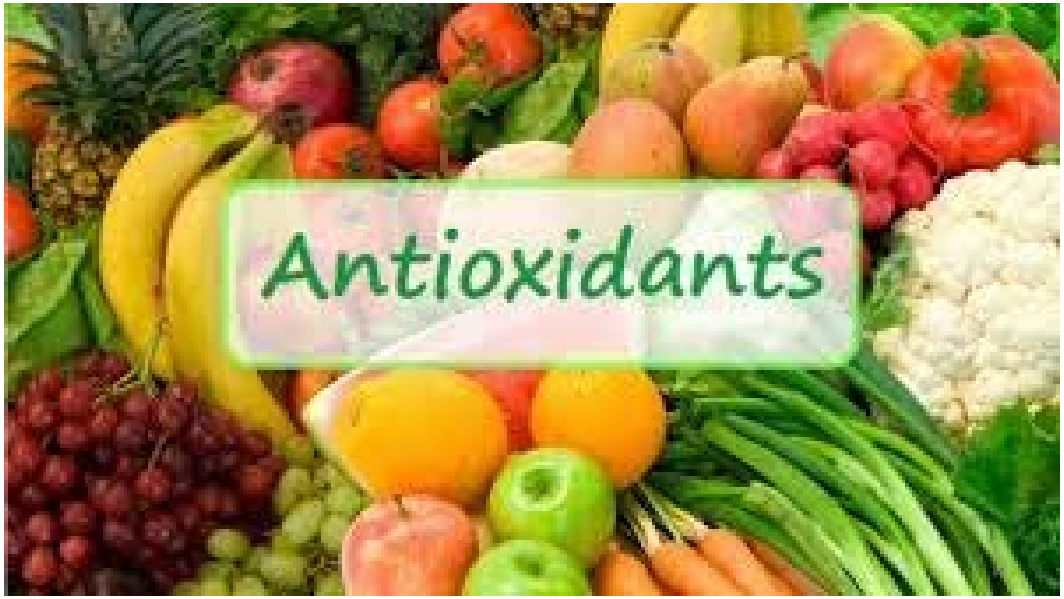
Conclusion
Expansive and Contractive Imitation

- Low-level construals subserve proximal imitation
- High-level construals subserve distal imitation

Social Learning of Goal-Pursuit



Who You Learn From



Who You Learn About Health From

Learning about Antioxidants:

Why antioxidants are important (High Level)

vs.

How to get antioxidants (Low Level)

Who You Learn About Health From

Learning about Antioxidants:

How interested are you in learning about (how/why) from the article published (earlier today/two months ago)?

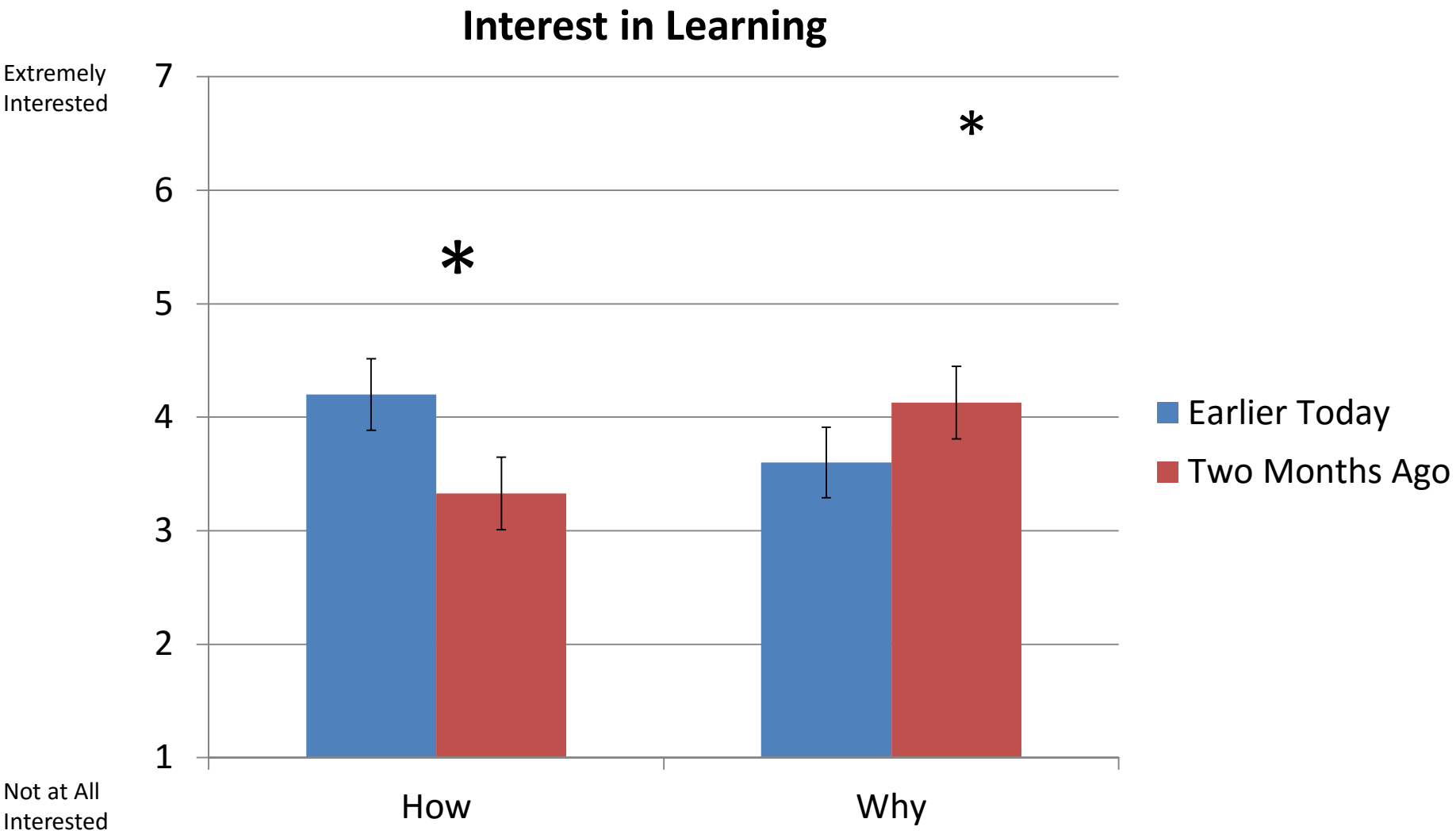
Who You Learn About Health From

Hypothesis:

Learning about How – More interest in learning from near sources

Learning about Why – Broader scope, equal interest in learning from near and far sources

Results



Interaction: $F(1, 159) = 4.90$, $p = .03$

Who Do We Learn Goal Pursuit Strategies From?

Hypothesis:

Learning about dealing with Temptation/Obstacles:

- Selection of more proximal models

Learning about pursuing the Goal:

- Selection of a broader range of models including more distant models

Please think of and **list one goal** that you have (e.g. dieting, do well in school, etc.):

Please think of and list some **temptations or obstacles** that you face when trying to pursue the goal listed above:

In pursuing our goals, we sometimes look to others as guides and learn from how they pursue similar goals or deal with similar temptations and obstacles.

In the space below please **list the initials of someone** that you look to in order to **learn from** them about **pursuing the goal** you listed above:

How close do you feel to this person?

Extremely Close						Extremely Distant
1	2	3	4	5	6	7

Please think of and **list one goal** that you have (e.g. dieting, do well in school, etc.):

Please think of and list some **temptations or obstacles** that you face when trying to pursue the goal listed above:

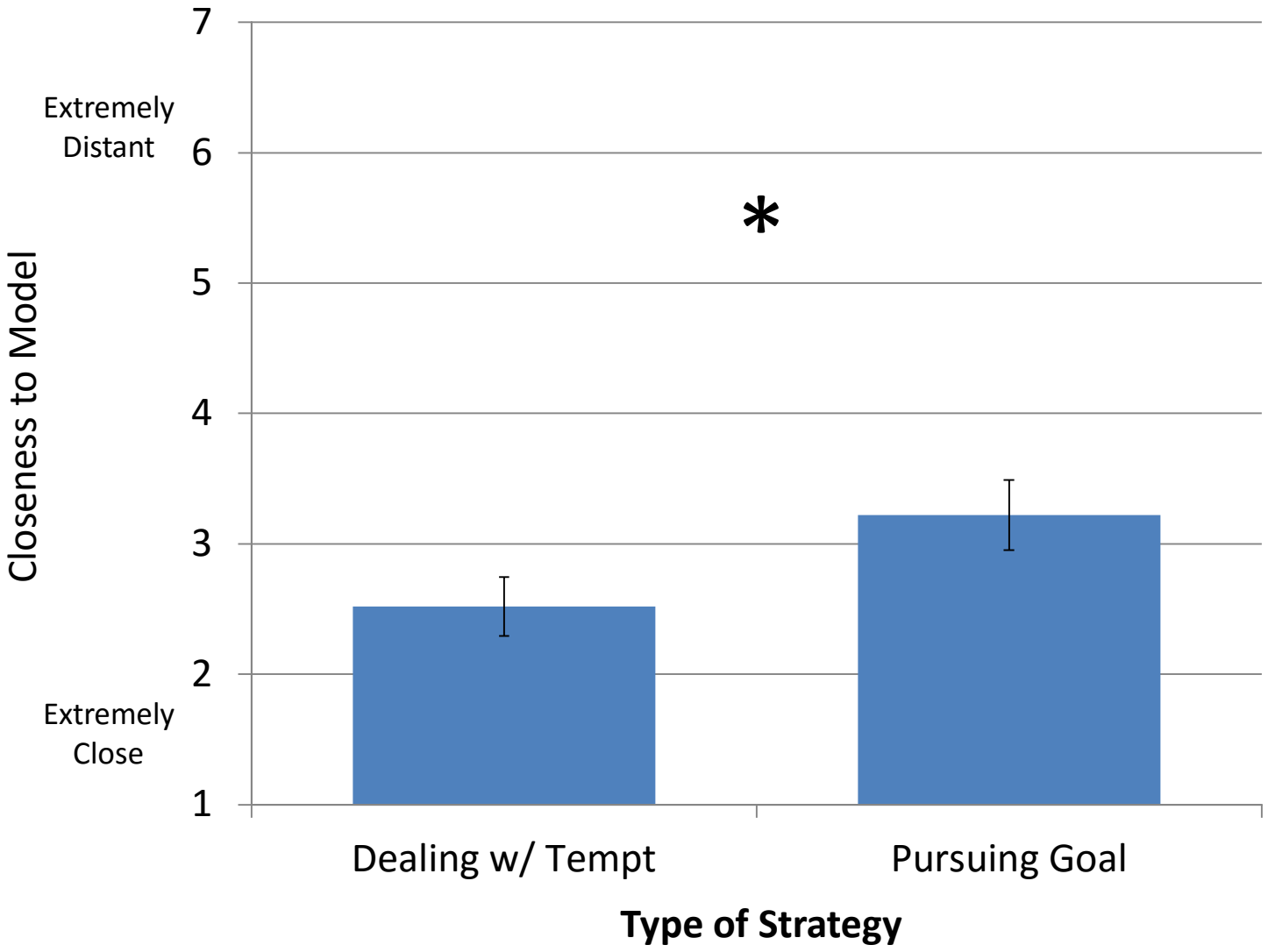
In pursuing our goals, we sometimes look to others as guides and learn from how they pursue similar goals or deal with similar temptations and obstacles.

In the space below please **list the initials of someone** that you look to in order to **learn from** about **dealing with temptations and obstacles** to the goal you listed above:

How close do you feel to this person?

Extremely Close						Extremely Distant
1	2	3	4	5	6	7

Who Do We Learn Different Self-control Strategies From?



Expansive and Contractive Social Learning

- Low-level imitation affords learning from proximal models
- High-level imitation affords learning from distant models (Hansen et al., *JEP:G, 2016)*

- Learning the low level from oneself
- Learning the high level from increasingly distant people, times, and places (Kalkstein et al., *JPSP,* 2016)

The Scope of Justice:
Expansive vs. Contractive Justice

- Contractive Justice is supported by concrete construals, promoting target-sensitive application of justice

- Expansive justice is supported by abstract construals, affording consistent application of justice principles

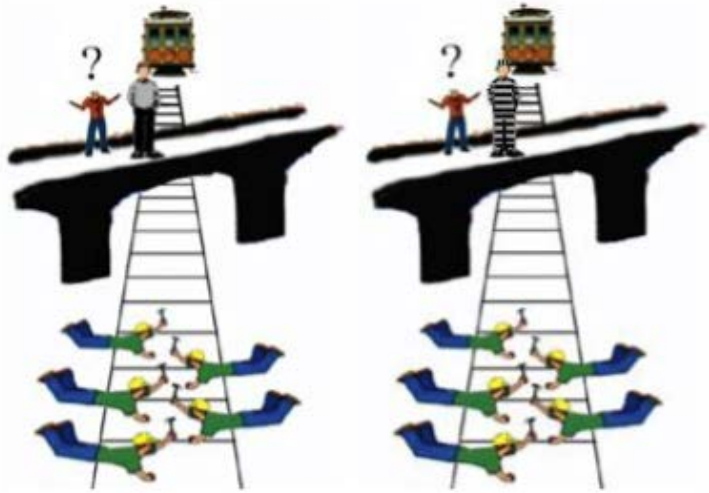
- Mentovich, Yudkin, Tyler, & Trope (*PSPB,* in press)

Trolley Problem

- Man on footbridge; kill to save five
- Described as either “man” or “prisoner”

- Construal mindset manipulation: categories/exemplars

- “Will you push?”



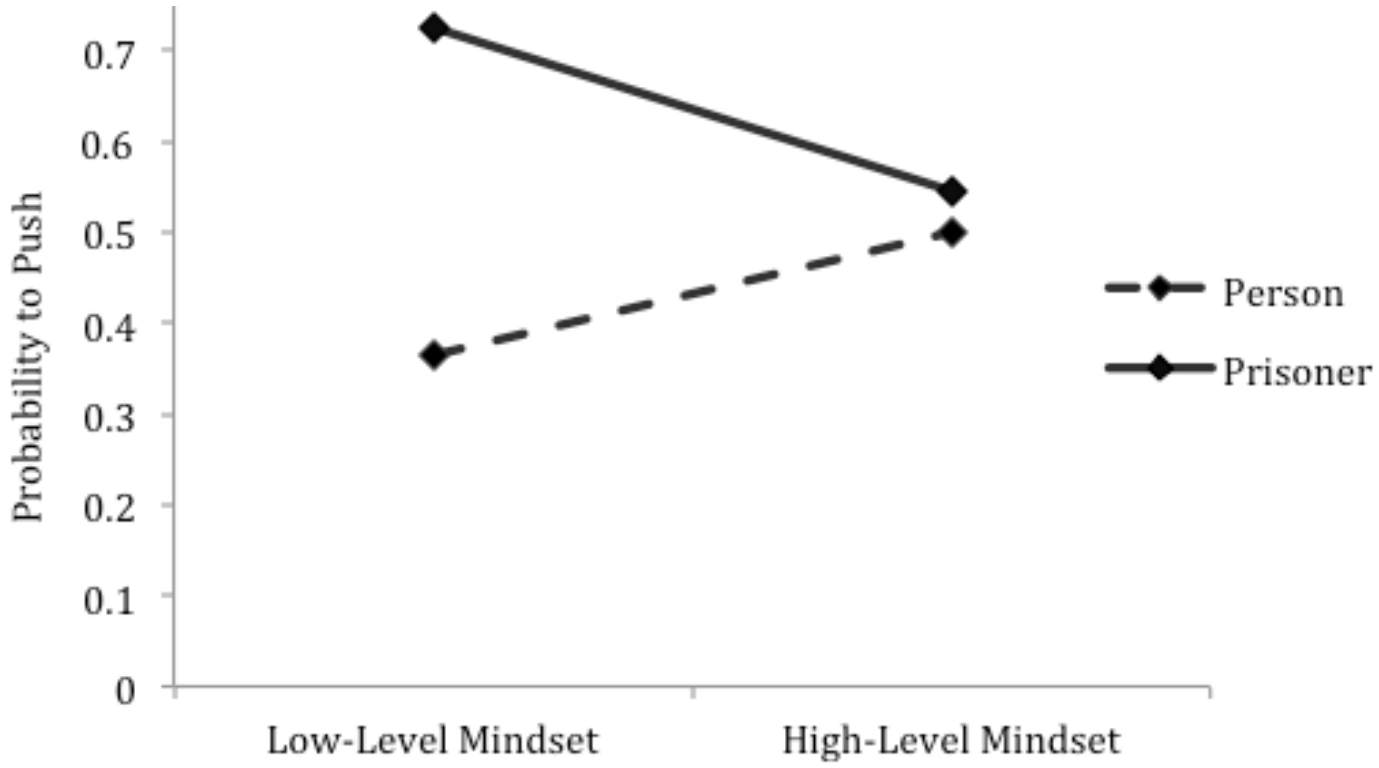
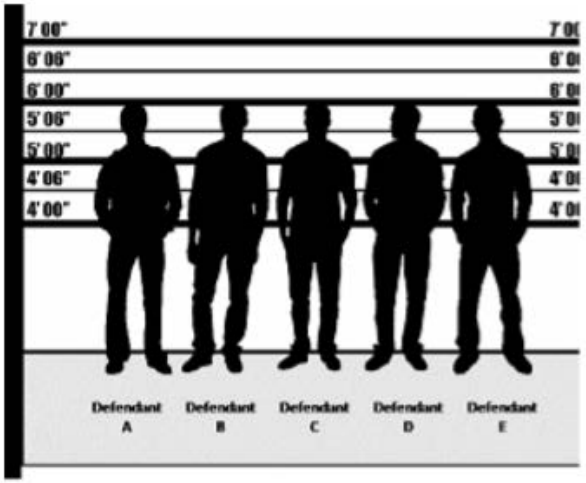


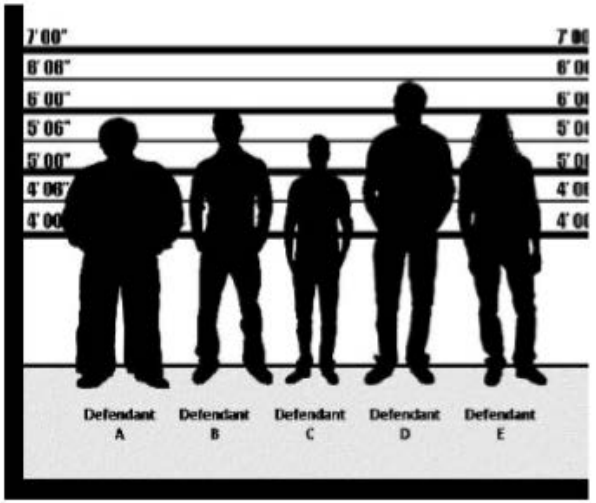
Figure 5: Probability of the decision to 'push' the target from the footbridge in each of

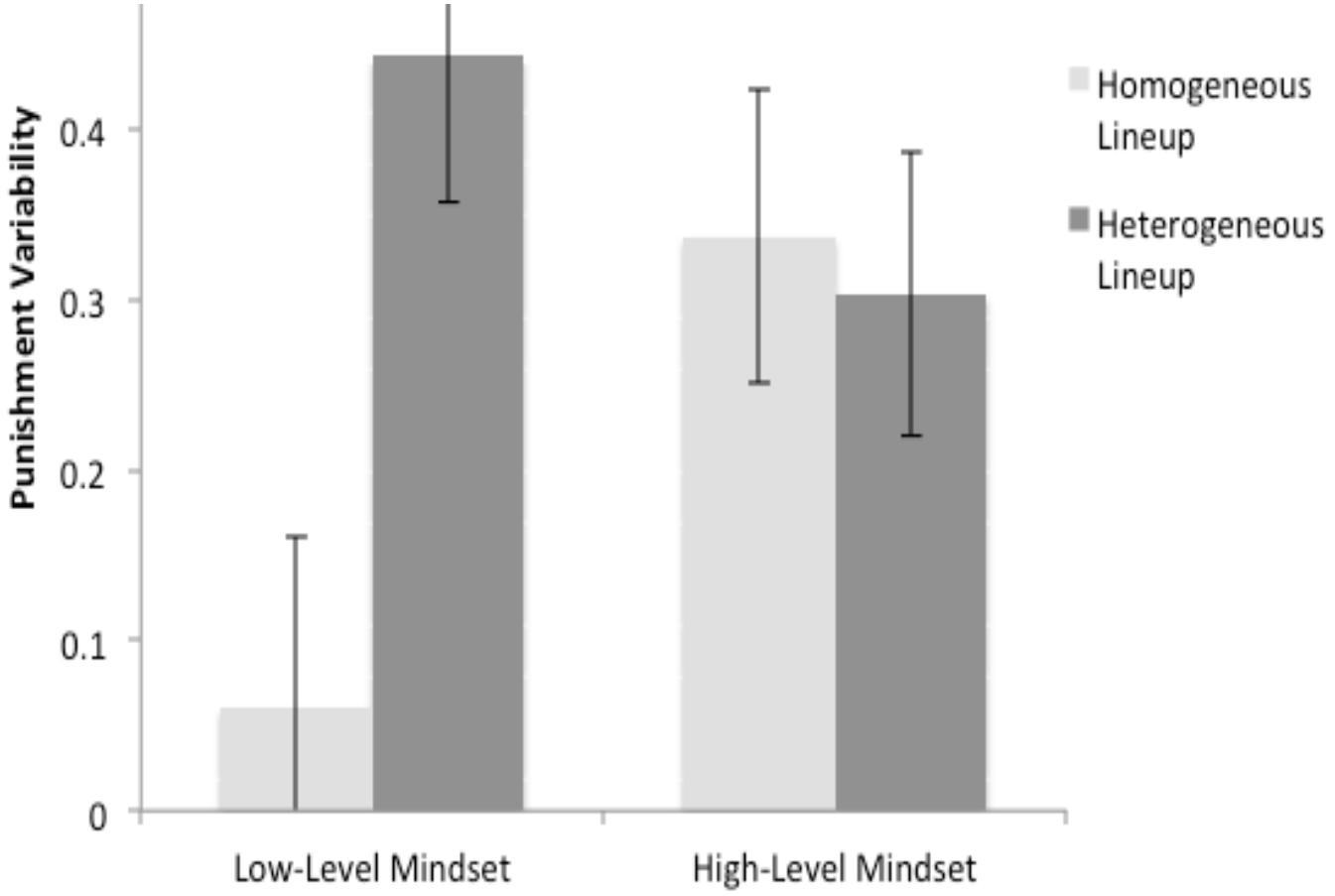
Homogeneity

- Lineup of criminals



- "How much should each person be punished?"




Punishment Variability
0.4
0.3
0.2
0.1
0
Low-Level Mindset
High-Level Mindset
Homogeneous Lineup
Heterogeneous Lineup

Summary: Justice Without Borders

- Low-level construals promotes moral exclusion and selective application of justice

- High-level construal promotes moral inclusion and universal application of justice

Social Supports of Regulatory Scope

- Social hierarchies have evolved as social supports for expanding and contracting mental scope

- Does high (low) hierarchical position expand (contract) mental scope?

Status and Abstraction

- High hierarchical position is associated with the use of abstract language (Magee & Smith, 2013; Reyt & Wiesenfeld, 2014)

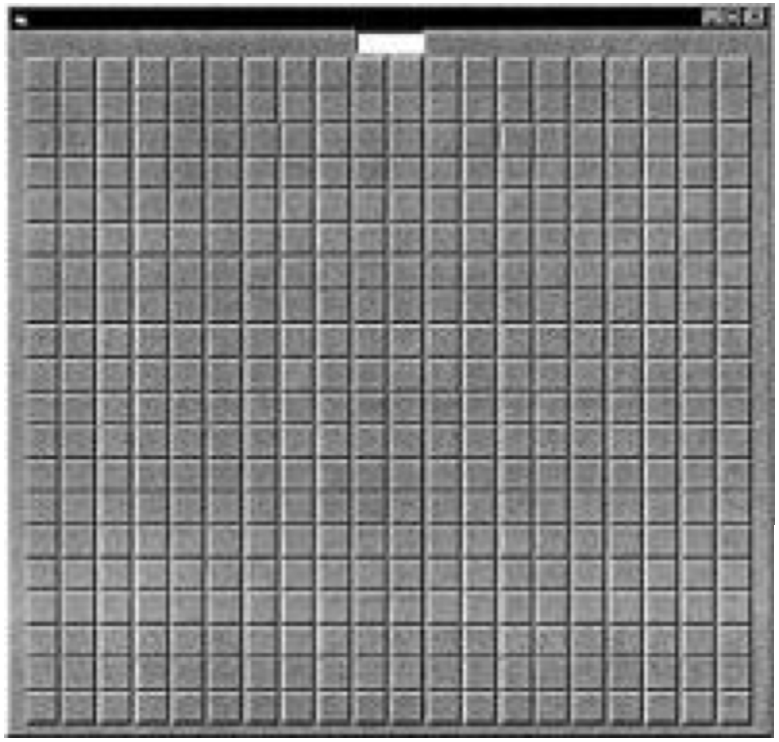
- Abstract language signals power (Wakslak, Smith, & Han, 2016)

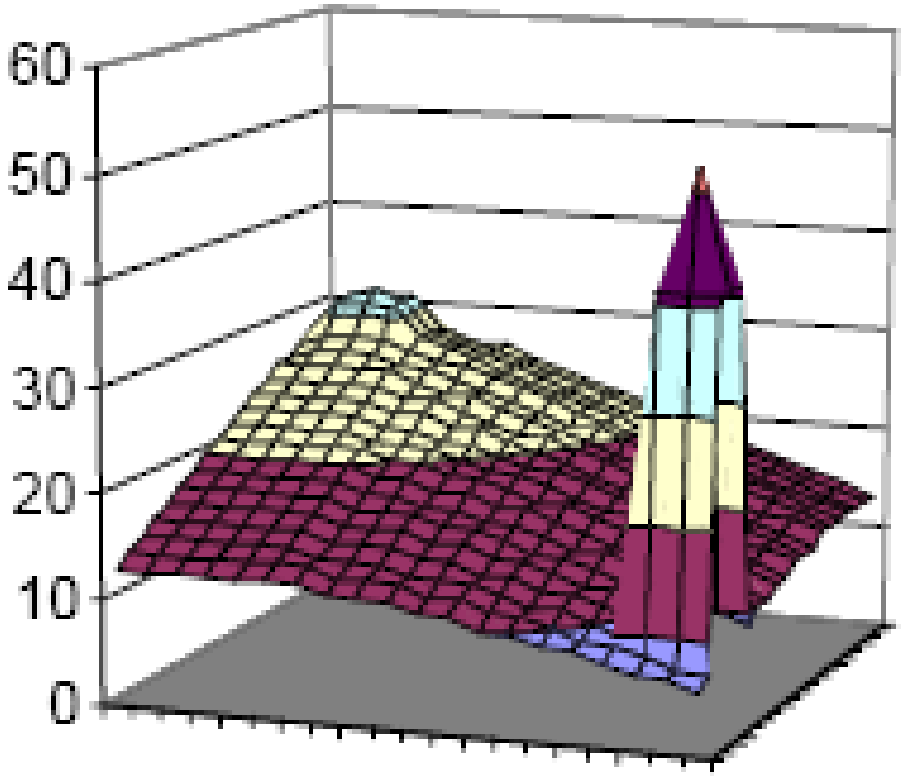
- Abstract language may expand power holders' mental scope

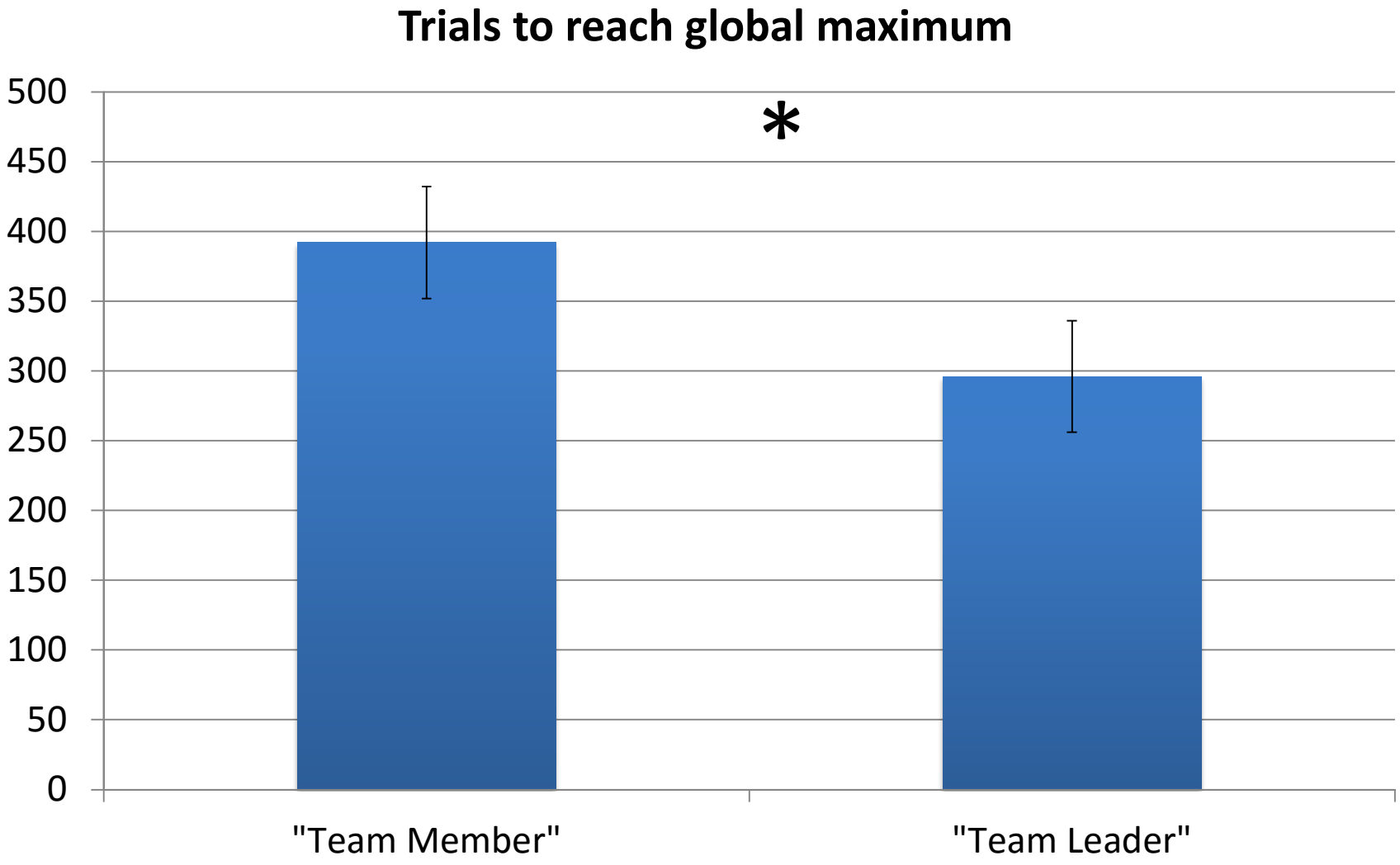
- People may demand high status holders to think abstractly

Power and Local vs. Global Maxima

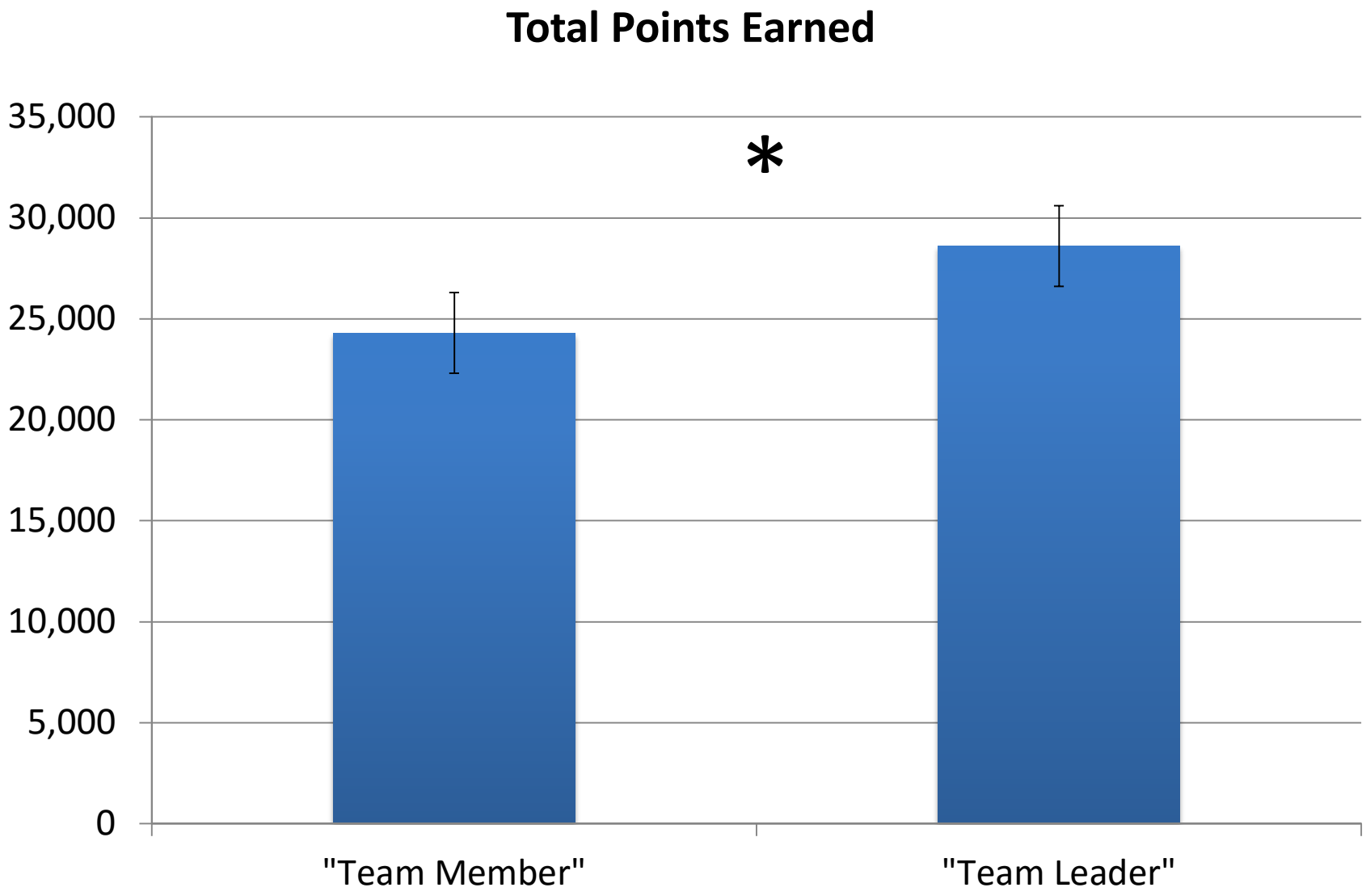
- Does power facilitate leaving a local maximum in search of a remote global maximum?
- Two-dimensional search task presenting one local and one global maximum (“Two-Hill Task).
- Performed as “team leader” or “team member.”




60
50
40
30
20
10
0


Trials to reach global maximum
500
450
400
350
300
250
200
150
100
50
0
*
"Team Member"
"Team Leader"

*$t(59) = 2.02$, $p < .05$


Total Points Earned
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
*
"Team Member"
"Team Leader"

*$t(59) = 2.06$, $p < .05$

Summary

- Social hierarchies have evolved to facilitate contractive and expansive regulation
- Subordinate roles focus on the “here-and-now”
- Superordinate roles prioritize goals that expand people’s mental scope

Conclusion

- Humans have evolved mental and social supports for contractive and expansive regulation

- Low-level (high-level) construals support contractive (expansive) regulation

- Concrete (abstract) construals afford malleable immersion in the present (consistent responding)

Extensions:
Contractive and Expansive Control Readiness

- Cognitive control in a neutral task (e.g., Stroop) proactively facilitates self-control in a self-relevant task (e.g., gun-tool task, overcoming food temptations) (Kleiman, Hassin, & Trope, 2014; Kleiman, Trope, & Amodio, in press)

- High-level construal may expand the scope of control readiness
- Low-level construal may contract the scope of control readiness

Thank you

Collaborators in *f*CLT

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