
Further On (Up the Road): Exaggeration Forecasts Actual Improvement

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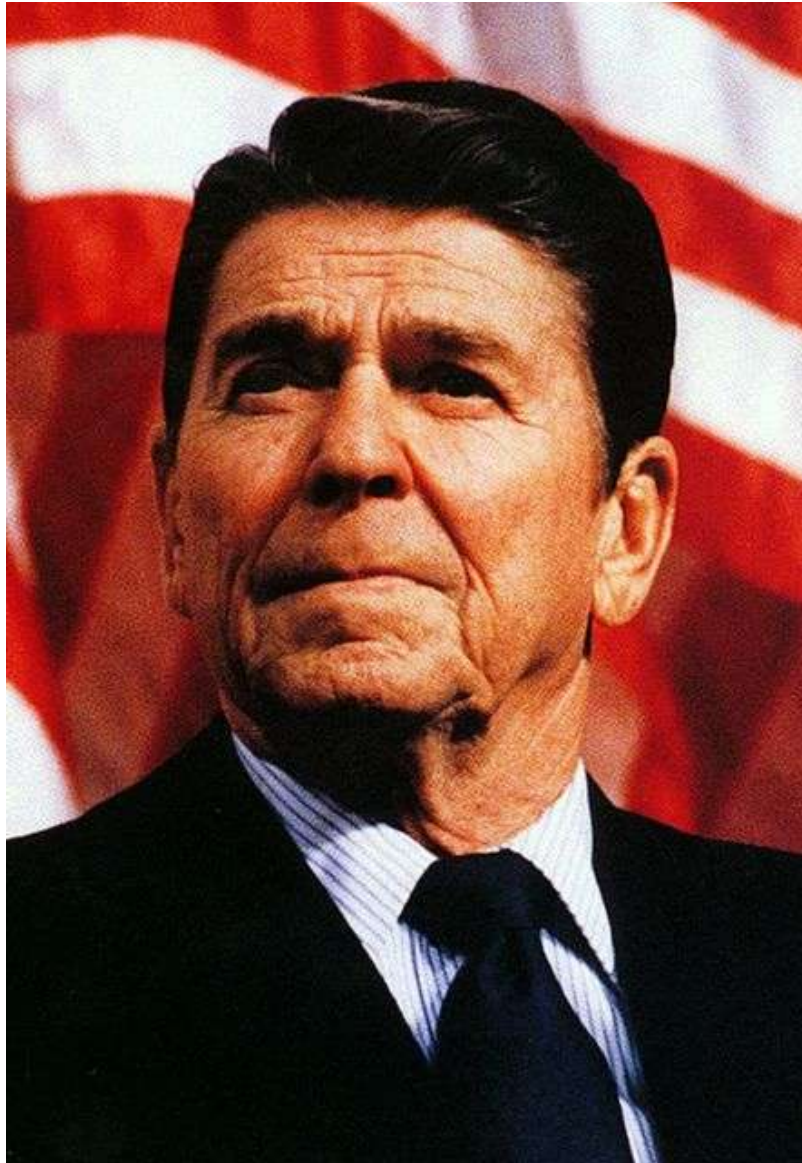
In The News...

- Curriculum Vitae
- Yale student
- Hillary Clinton



I remember landing under sniper fire. There was supposed to be some kind of a greeting ceremony at the airport, but instead we just ran with our heads down to get into the vehicles to get to our base.

-- Hillary Clinton (2008)



“Facts are stupid things.”

-- Ronald Reagan (1980)

Self-Positivity Bias “Controversy”

- People report overly positive self-evaluations
- Relative to:
 - their evaluations of others (better-than-average effect)
 - third-party ratings
 - objective criteria
- Are these self-positivity biases adaptive?
 - Yes, No, Mixed blessing
- What accounts for these disparate conclusions?
 - methods
 - motives

Varieties of Self-Positivity Bias

Misperception

- Ignorance; Information Neglect

Lying

- Manipulation; Public social desirability

Delusion

- Psychopathology

Exaggeration

- Private self-evaluative motives
 - Enhancement and improvement

The Academic Domain



- Concrete, Objective, and Verifiable Criteria
(grades, test scores)
- Reflect Ongoing Real-Life Goal Pursuits
- With affective and self-evaluative implications
- Practical implications

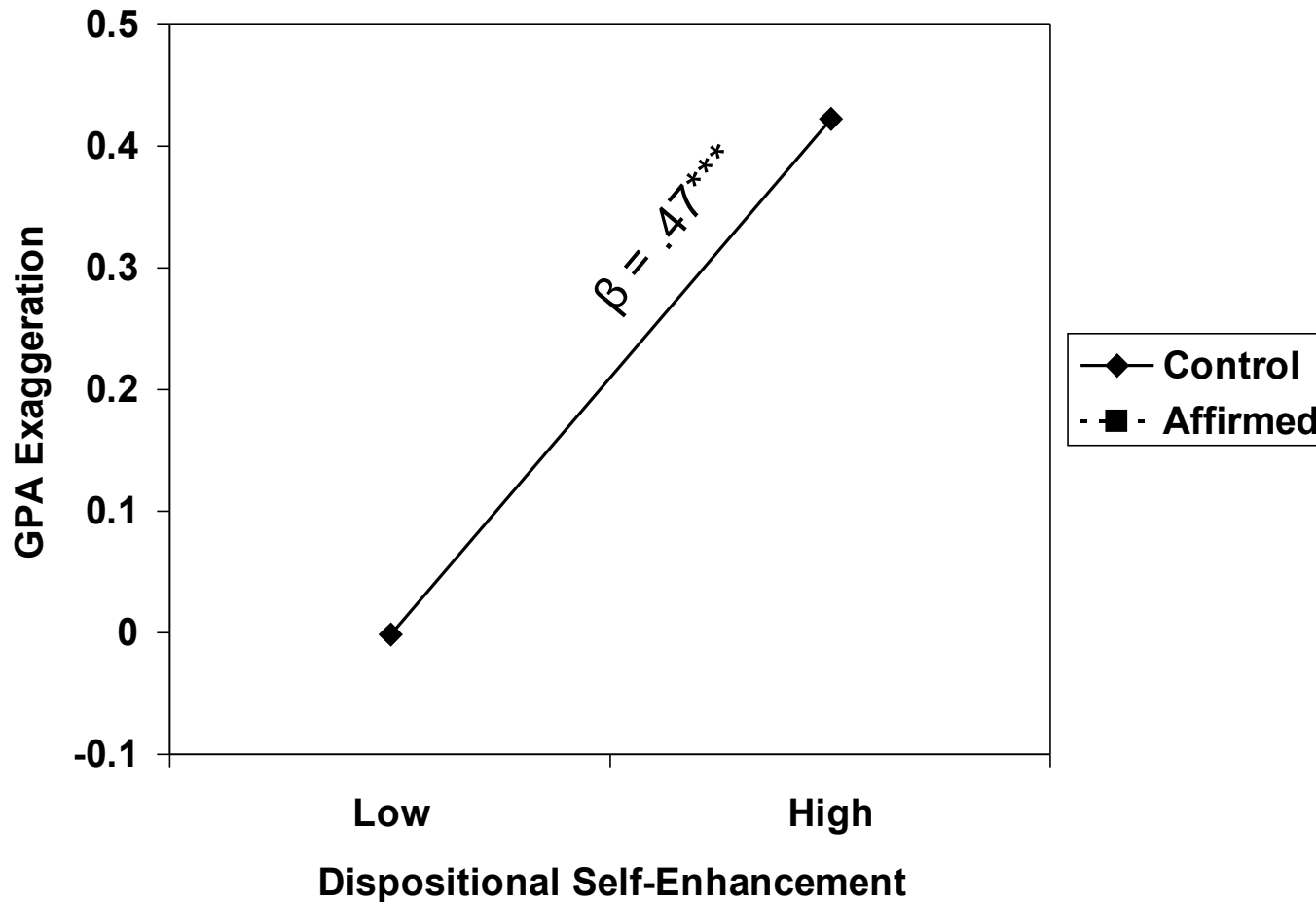
Will Students Exaggerate their Academic Performance?

University students exaggerate their grade point averages (GPAs)
- as well as grades in specific courses

Academic Exaggeration is predicted by:

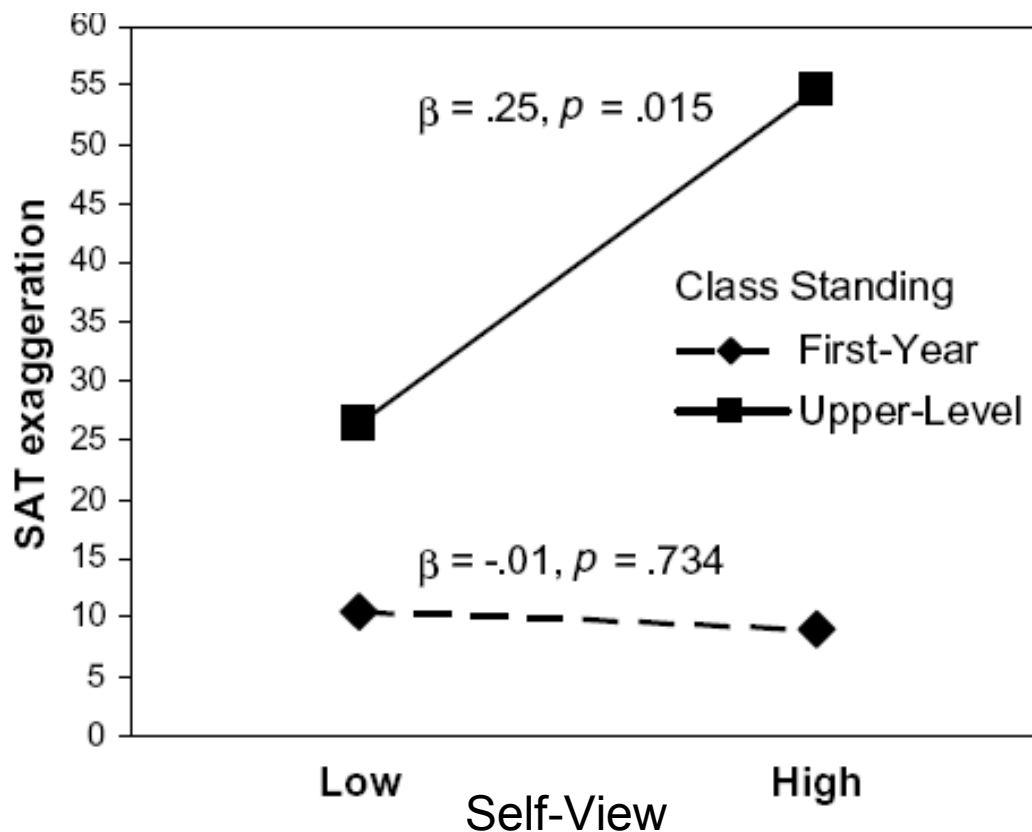
- Need for Achievement
Gramzow et al., 2003
- Dispositional Self-Enhancement
Gramzow & Willard, 2006

Academic Exaggeration is “Motivated” Self-Enhancement



Study 1: Patterns of SAT score self-reports as a function of class standing

| Class | SAT exaggeration index | | | Percentages | | |
|------------|------------------------|----------------------|-----------|-----------------|--------------|-------------------|
| | <i>n</i> | <i>M_D</i> | <i>SD</i> | Exaggerated (%) | Accurate (%) | Underreported (%) |
| First-year | 540 | 9.94 | 51.06 | 30 | 56 | 14 |



Not all exaggerations are similarly motivated

Starting Point for Subsequent Research

Initial Conclusion:

- Academic exaggeration is systematic and predictable
- Linked to motivated self-enhancement

Unanswered Question:

- Is academic exaggeration “positive” and “functional?”
- Need for Achievement and dispositional self-enhancement are not necessarily positive or functional motivations

Research Overview

- Self-Reported Motives and Affect
- Behavioural Correlates
 - longitudinal performance
 - composure during academic interview
- Psychophysiological Correlates
 - cardiovascular reactivity during interview
- Manipulate Reporting Context
 - Nonconscious achievement goal prime
 - Public self-focus
 - Reality salience

Self-Reported Affect and Subsequent Performance Study

Thinking about a current goal pursuit is an emotionally charged experience (Markus & Nurius, 1986; Wayment & Taylor, 1995)

Do people who exaggerate...

- Feel positively toward academics?
- Feel negatively toward academics?

Do people who exaggerate...

- Actually change their standing over time?

Self-Reported Affect and Subsequent Performance Study

- Self-reported current GPA
- Self-reported affect toward academics

“When thinking about your current academic performance, how does it make you feel?”
- Consent to access academic records
 - GPA during same term to index exaggeration
 - GPA 1 year later to index changes in performance

Self-Reported Affect and Subsequent Performance

| | Correlation with GPA exaggeration (<i>r</i>) |
|-------------------------------|---|
| Positive Affect | .27** |
| Negative Affect | -.08 |
| 1-year GPA Improvement | .21* |

* $p < .05$ ** $p < .01$

Motivational Orientation Study

Approach vs. Avoidance orientation

- Approach – focus on achieving gains and success
 - Linked to better performance, psychological adjustment
- Avoidance – focus on averting loss or failure
 - linked to poor performance, anxiety, negative affect

Challenge vs. Threat orientation

- Challenge – resources meet or exceed demands
 - Positive, beneficial, likely to produce gains
 - Excitement, eagerness
- Threat – demands exceed resources
 - Negative, holds potential for harm or loss
 - Anxiety, fear

GPA
Exaggeration

Approach Orientation

.41***

Avoidance Orientation

-.07

* $p < .05$ ** $p < .01$ *** $p < .001$

Willard & Gramzow, 2009

Behavioural Composure Study

An initial survey (with self-reported current GPA)

Series of interviews:

Academic Interview: Structured interview about current academic performance in college

Social Relationships Interview: Structured interview about current social relationships in college

Trier Social Stress Test: Public speaking task (a standard stress-induction paradigm: Dickerson & Kemeny, 2004)

Observer ratings of behavioural composure
(e.g., relaxed vs. nervous)

Behavioural Composure Study

| | Correlation with GPA exaggeration (<i>r</i>) | Inter- rater α |
|--|---|--------------------------|
| Academic Interview | .44** | .90 |
| Social Relationships Interview | .20 | .78 |
| Trier Social Stress Test (TSST) | .39* | .89 |
| TSST Speech Performance | .36* | .64 |

* $p < .05$ ** $p < .01$

Psychophysiology Study

Assess physiological reaction during an academic interview

Exaggeration could be associated with:

- A positive physiological profile
- A negative physiological profile
- No systematic pattern of physiological response

Psychophysiology Study

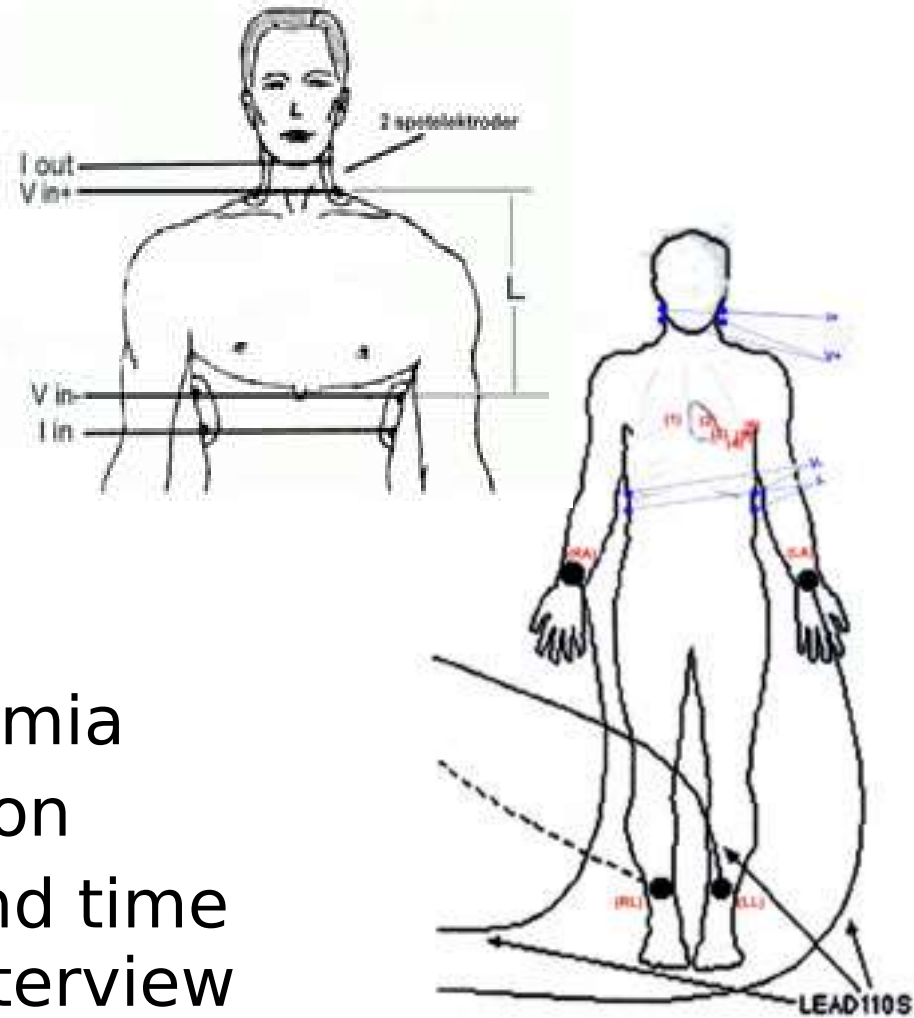
- Computer Survey
- Demographics, self-evaluation, academic motivation, personality
- Baseline Physio Measures
- Interview about academic past, present, and future
- Recovery

Psychophysiology Study

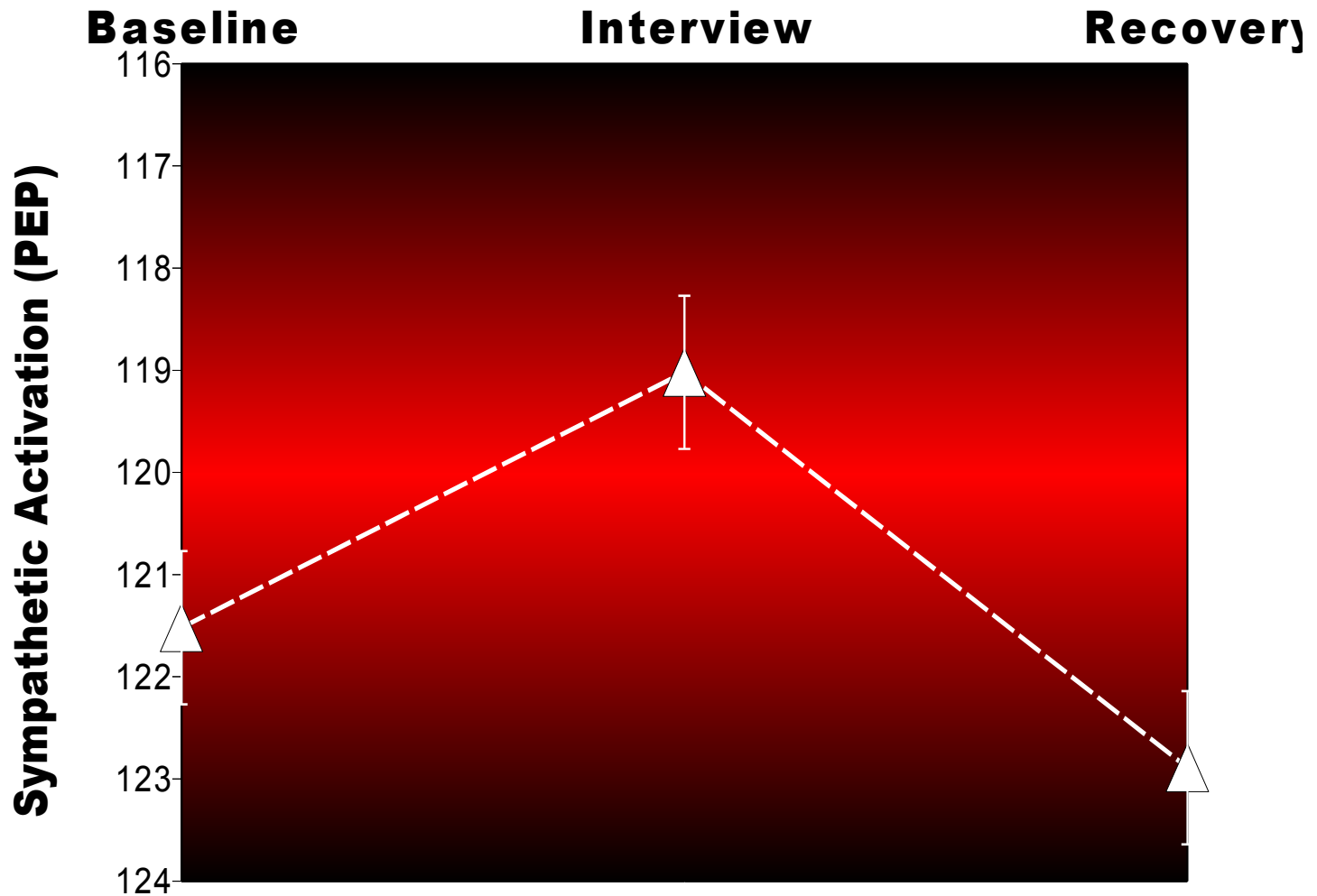
- Computer data replicated past findings
- Significant GPA exaggeration
- GPA exaggeration correlated with approach measures and positive affect
- GPA exaggeration predicted academic improvement one year later

Cardiovascular Measures

- Electro Cardiograph (ECG)
 - Blood Pressure
 - Bio-Impedance
- Primary Measures
 - Pre-ejection period
 - Sympathetic activation
 - Respiratory sinus arrhythmia
 - Parasympathetic activation
 - Respiration rate/depth and time spent speaking during interview



Study 3: Sympathetic Activation



Interpretation of SNS Activation

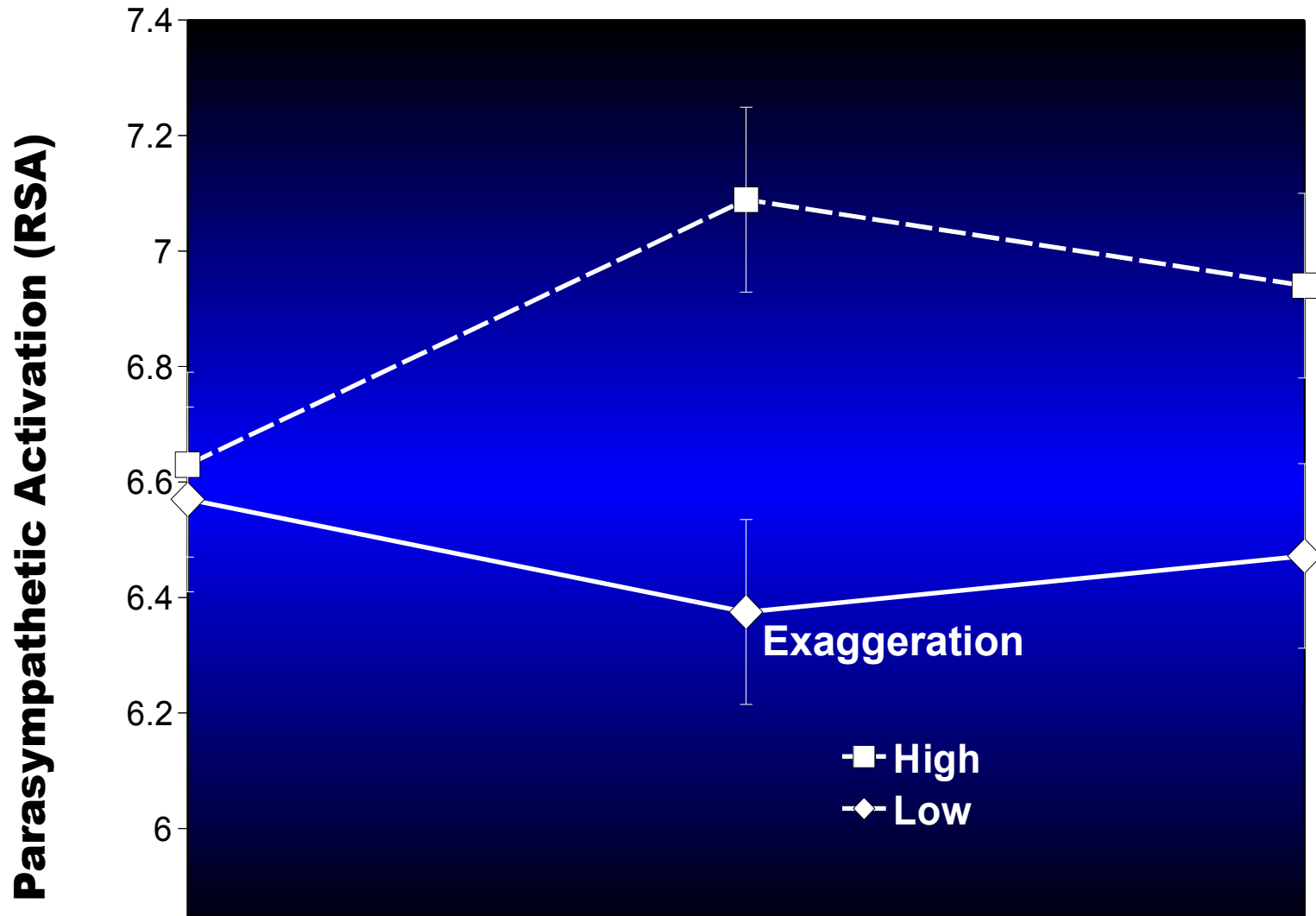
Sympathetic activation

(Mendes et al., 2002; Obrist, 1981; Wright & Kirby, 2001)

Given a goal-relevant task:

- Increased SNS activation indicates engagement
- Decreased SNS activation indicates withdrawal, disengagement

Study 3: Parasympathetic Activation



Gramzow, Willard, & Mendes, 2008

Interpretation of PNS Activation

Parasympathetic activation

(Beauchaine, 2001; Porges, 1995; 2003)

- Low PNS linked to negative emotion, psychological disorders, health problems
- High PNS linked to positive emotion, capacity for emotion regulation, composure under stress

Summary of Physiology Study

- All participants showed increased ANS activation, suggesting task engagement
- **Low exaggerators—Unrivaled SNS activation** (relatively benign at low levels, can be pathophysiological at higher levels)
- **High exaggerators—SNS/PNS coactivation** (usually reflects positive or pleasant psychological states, linked to better mental and physical health)

Interim Conclusions

Academic exaggerators:

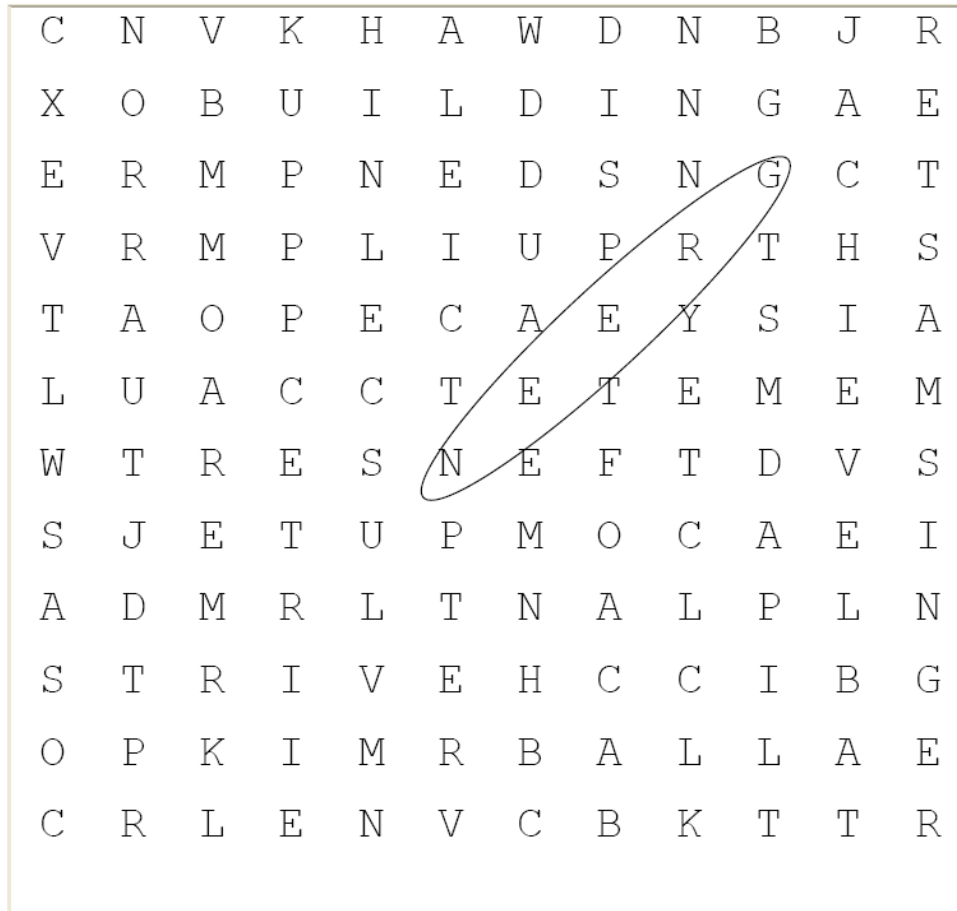
- Are approach oriented
- Improve over time
- Appear poised during interview
- Experience an apparently adaptive cardiovascular response

Goal Priming Study

- Relying on pre-existing individual differences has drawbacks
- Will manipulating achievement motivation increase exaggeration?

Seek and Find

Words may be up, down, backwards, or diagonal



~~GREEN~~

ACHIEVE

STAPLE

WIN

SINGER

ATTAIN

LAMP

STRIVE

SCORE

COMPUTE

BUILDING

MASTER

SUCCEED

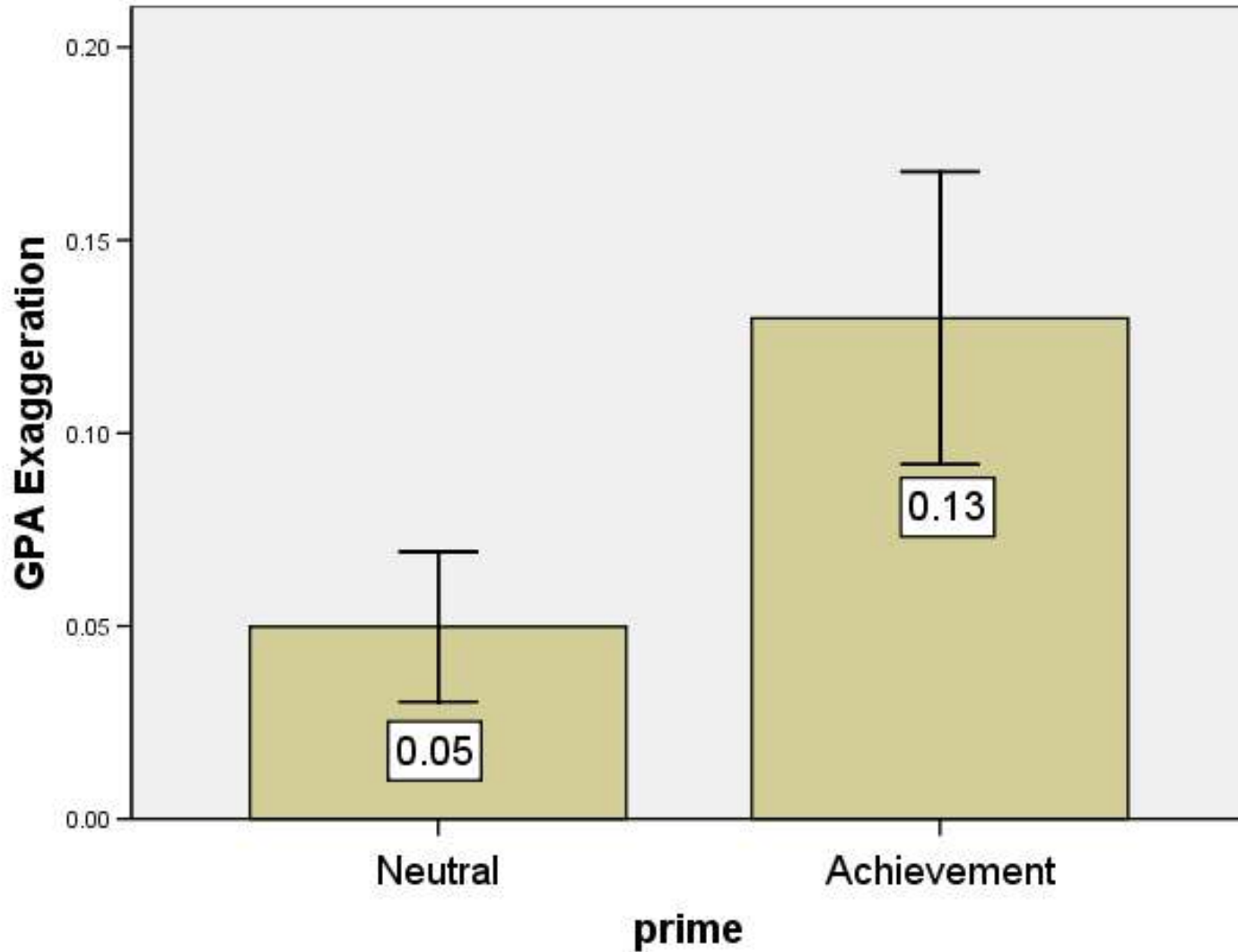
BALL

COMPETE

PLANT

TURTLE

TABLE

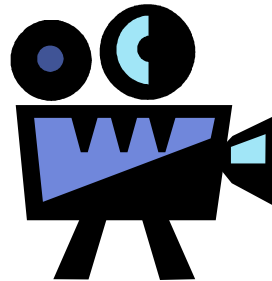


Interim Conclusion

- GPA exaggeration is related to a positive and functional motivational orientation (approach)
- Possible Problem: These relationships may be due to public concerns about socially desirable responding

Public Self-Focus Study

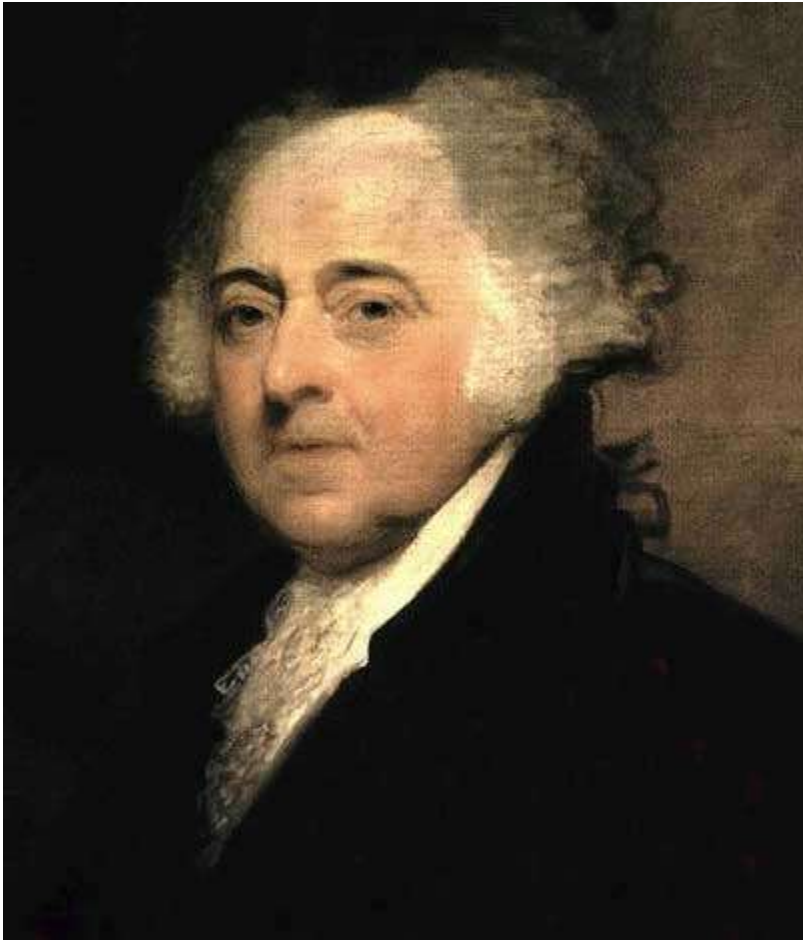
- Concerns about public impression conveyed to others
- These concerns have a stronger influence on behavior in certain situations
 - viz., when people feel they're being watched



Public Self-Focus Study

| | Correlations with GPA Exaggeration | | Difference (z) |
|-----------------------------|------------------------------------|------------------|-------------------|
| | Control Condition | Camera Condition | |
| Social Desirability | -.01 | .40* | -2.88** |
| Approach | .63** | -.04 | 5.24*** |
| Avoidance | -.05 | .05 | -0.47 |
| Positive Affect | .47** | .05 | 3.09** |
| Negative Affect | -.32 [†] | -.05 | 1.89 [†] |
| 1-yr GPA Improvement | .35* | .06 | 2.05* |

[†] $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$



Facts are stubborn things;

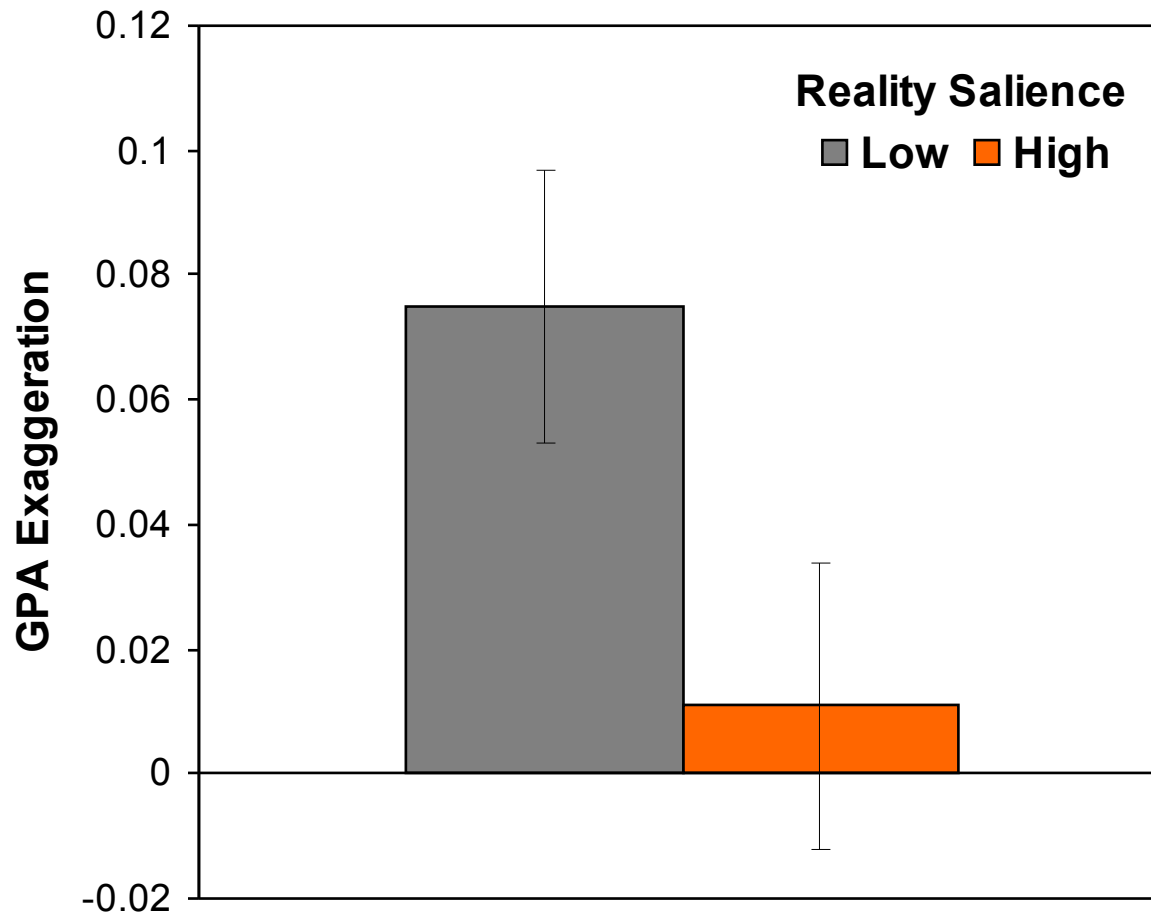
and whatever may be our wishes,
our inclinations, or the dictates of our
passion, they cannot alter the state
of facts and evidence

-- John Adams (1770)

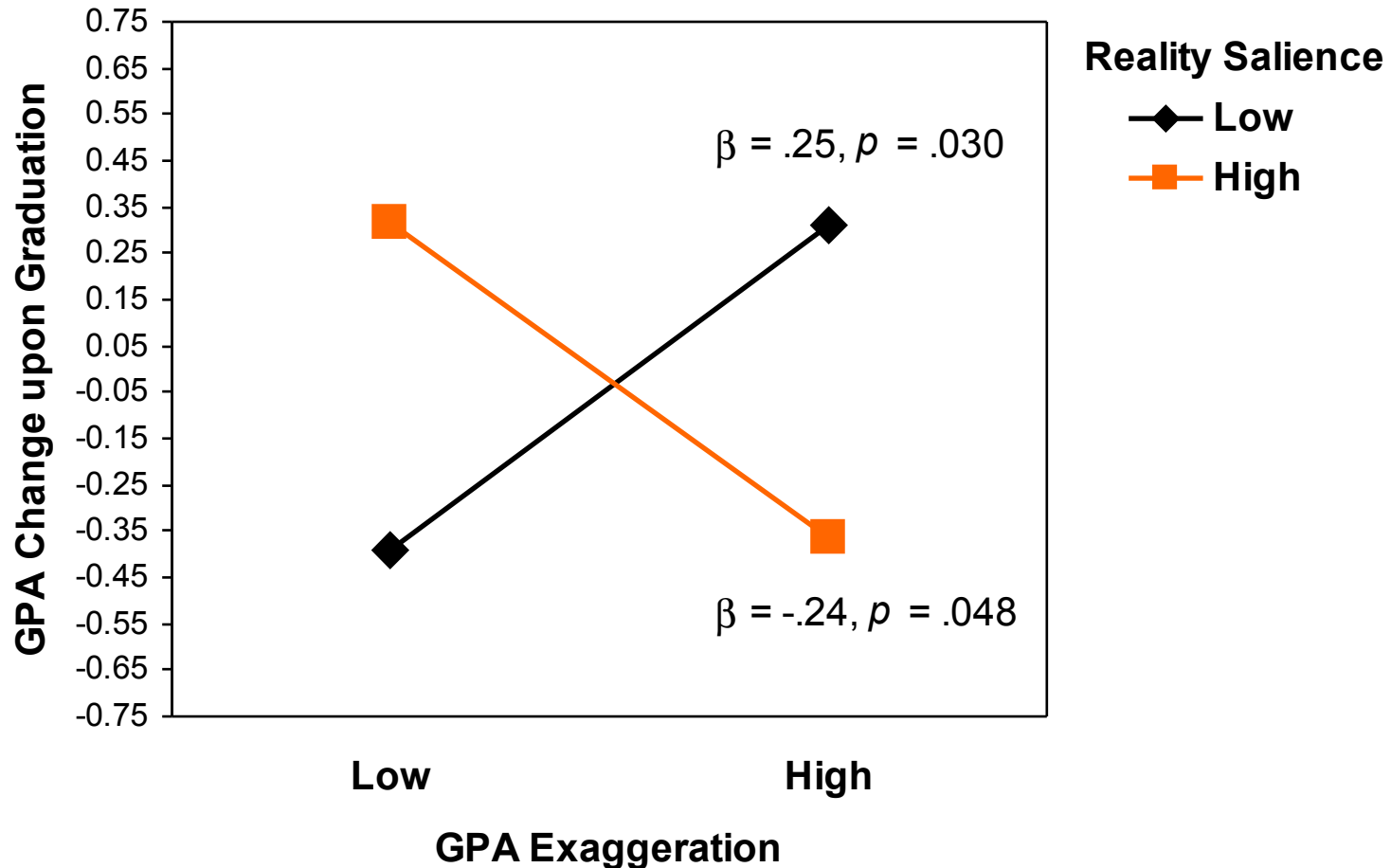
Reality Salience Study

- To what extent are students aware of the reality of their actual current performance when they exaggerate?
- Consent to access academic records:
 - at the end of the study (as in previous studies)
 - immediately before self-reported GPA

Reality Saliience Study



Reality Salience Study



Implications for Self-Enhancement “Controversy”



Self-positivity bias can reflect:

- Private or public motives
- Approach or avoidance motives
- Chronic/dispositional or situationally induced motives

Whether an overly positive self-view is “adaptive” likely depends on the underlying motive

- And whether the motive can be restrained when the situation warrants accuracy

Collaborators



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