



Grade Expectations:
The Motivational Consequences
of Performance Feedback
on a High-Stakes Assessment

Alison C. Koenka, Ph.D.

Division 15, APA

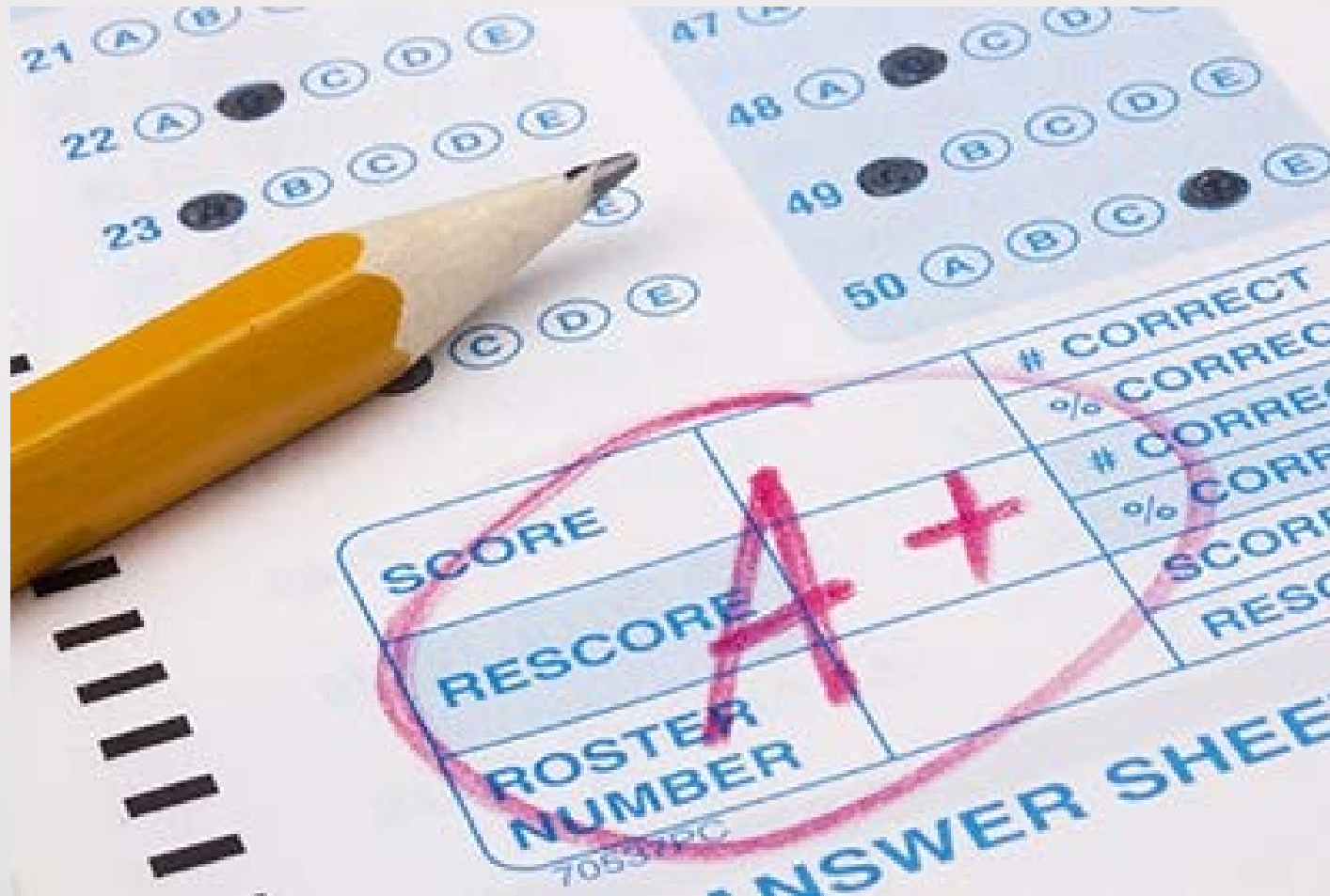
August 11, 2018

significance

- Assessment is prevalent and salient

significance

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significance

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their lives together. ~~The society~~ ^{be} should allow ~~them~~ ^{to} to enter into a marriage which ~~not only~~ includes ^{not only} sharing of income and property, but also inheritance and tax.

Great addition! Stephen Macedo, a theorist at Princeton, just came out this year with a book in which he argues against your position, but that position (yours) is nevertheless hard to refute. Perhaps one could argue (arg)

that if a multiple-person marriage harmed some of the individuals in it (one or more "wives" for

significance

- Assessment is prevalent and salient
- Resulting importance of understanding performance feedback and its influence on academic motivation

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- Resulting importance of understanding **performance feedback** and its influence on academic motivation

performance-specific evaluative information conveyed to students on an assessment in the form of a grade, comment, or combination of the two

significance

- Assessment is prevalent and salient
- Resulting importance of understanding performance feedback and its influence on **academic motivation**

“the process whereby [academic] goal-directed activity is instigated and sustained”

prior work

- Meta-analytic investigation
 - Grades versus no feedback
 - Grades versus comments

prior work

- Meta-analytic investigation
 - Grades versus no feedback
 - Grades versus comments

Comments alone: $d = 1.14$ *

Grades accompanying comments: $d = -.04$ (not significant)

unanswered questions

- Moderating effect of feedback stage

unanswered questions

- Moderating effect of feedback stage

1. Random assignment

2. Feedback **receipt**

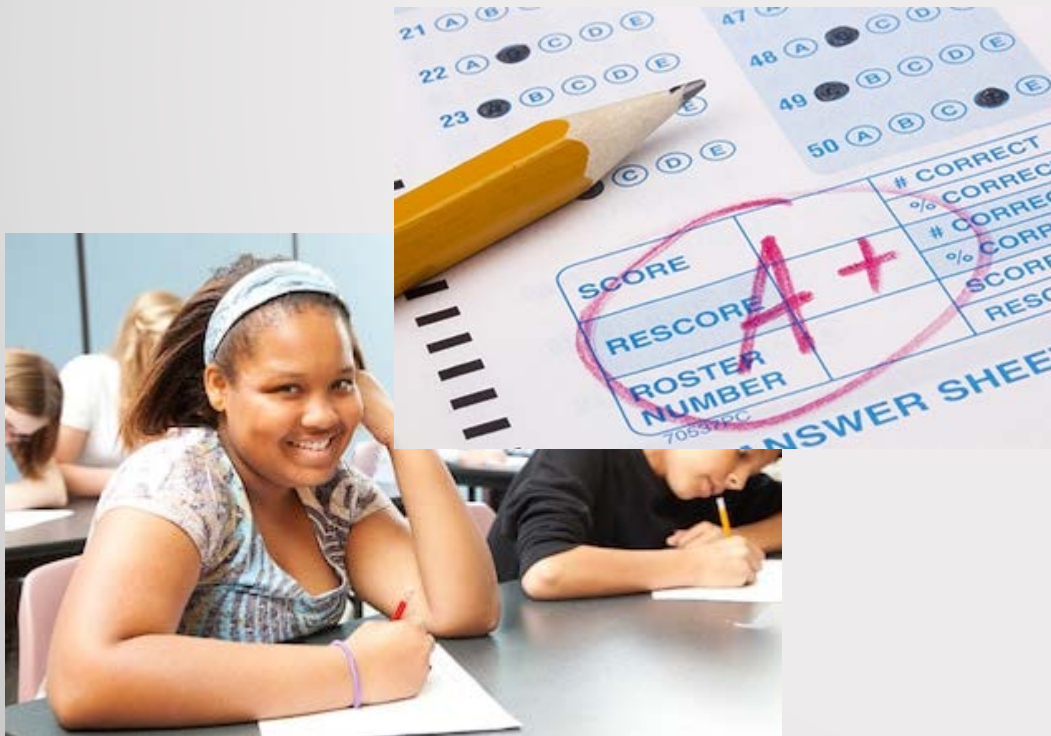
3. Motivation measurement

unanswered questions

- Moderating effect of feedback stage
 - Confounds form with valence

unanswered questions

- Moderating effect of feedback stage
 - Confounds form with valence



unanswered questions

- Moderating effect of feedback stage

1. Random assignment

2. Feedback **receipt**

3. Motivation measurement

1. Random assignment

2. Feedback **anticipation**

3. Motivation measurement

unanswered questions

- Moderating effect of feedback stage
 - Confounds form with valence
 - Capturing fluctuations in motivation during a single assessment

unanswered questions

- Moderating effect of feedback stage
- Impact of performance feedback on high-stakes, summative assessments
- More nuanced investigation of pairing grades and comments
- Impact on self-efficacy

overarching objective

What is the motivational impact of grades, written comments, grades and comments, or no feedback on a high-stakes math or science assessment?

theoretical framework

- Social cognitive theory
self-efficacy
- Achievement goal theory
goal orientations
- Self-determination theory
intrinsic motivation

method

- 161 students at an all-female, private secondary school

method

- 161 students at an all-female, private secondary school
 - 7th, 8th, or 9th grade
 - 13 math or science classes



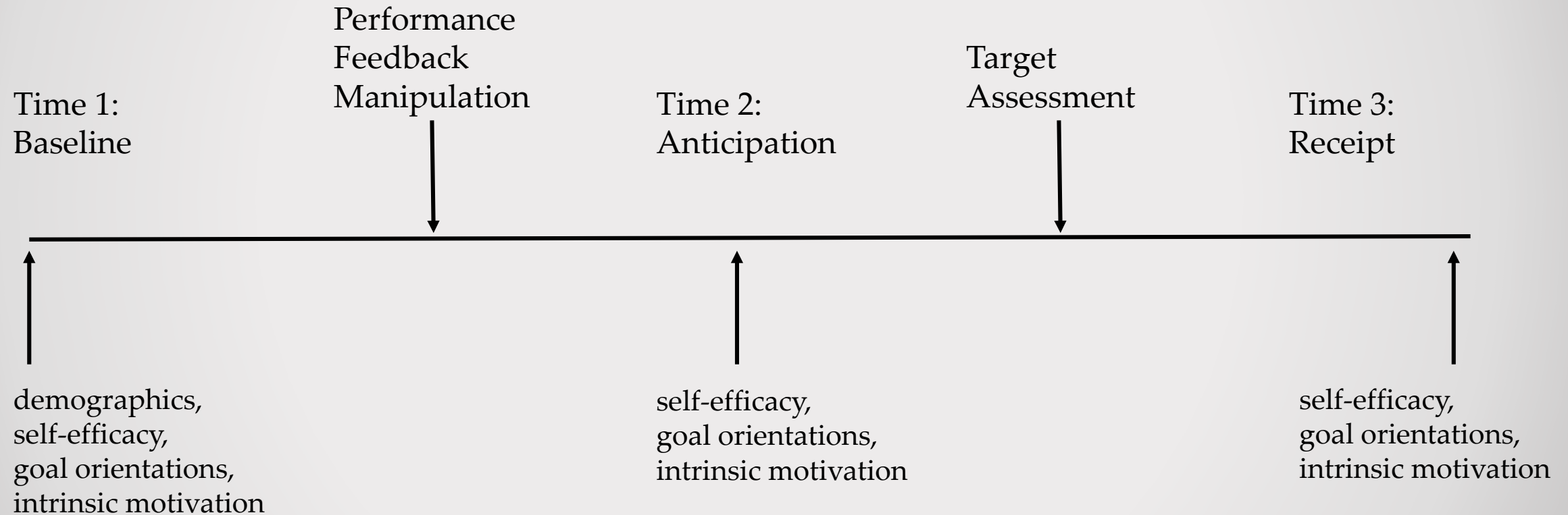
design and conditions

- Cluster-randomized experimental design
- Four experimental conditions
 1. Grades
 2. Comments
 3. Grades and comments
 4. No feedback

design and conditions

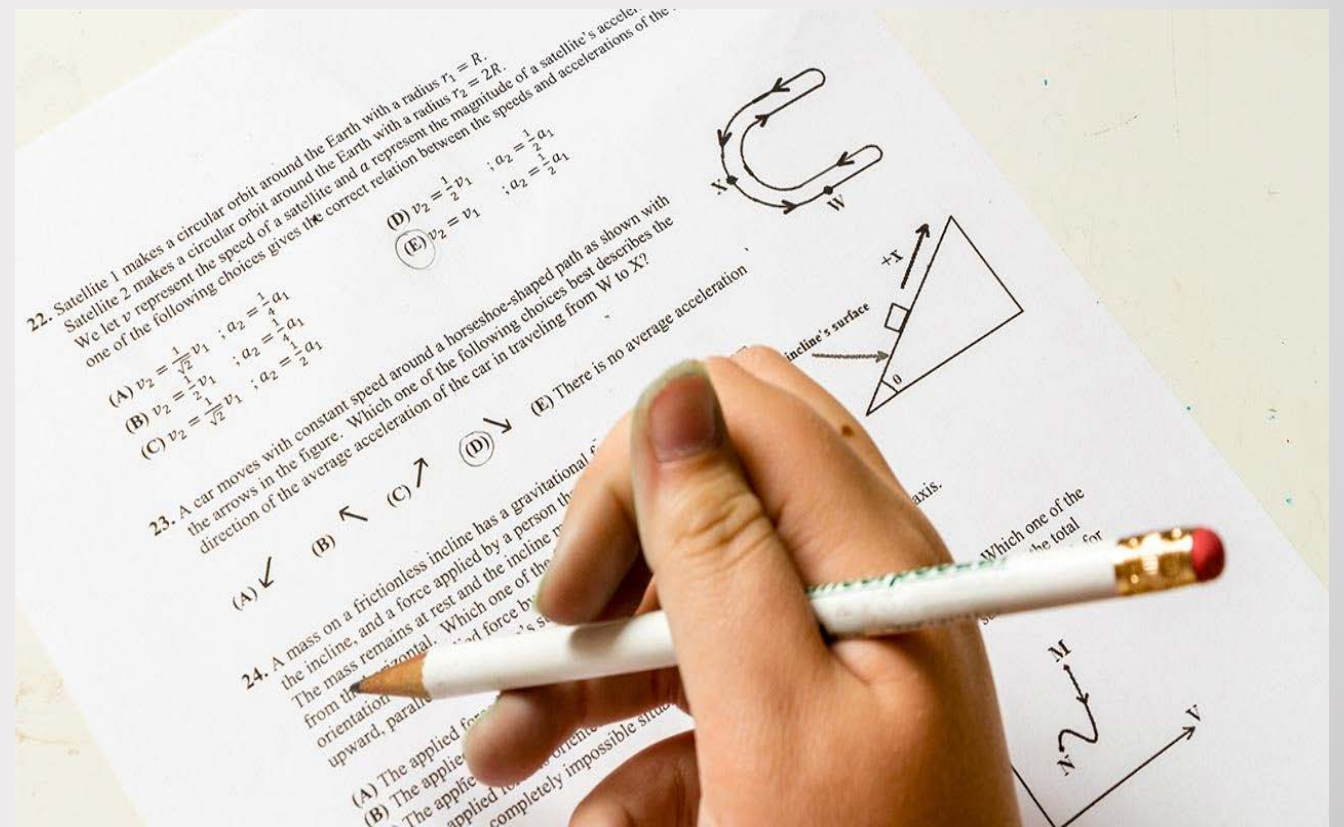
- Cluster-randomized experimental design
- Four experimental conditions
 - Teachers conveyed information
 - Students believed that assessment would count towards grade like a typical classroom assessment would

procedure



target assessment

- Teacher-designed
- High in stakes



nature of grades and comments

- Criterion-referenced grades
- Task-focused comments

Hypothetical example: *“You have clearly demonstrated your understanding of calculating the volume of a cylinder”*

nature of grades and comments

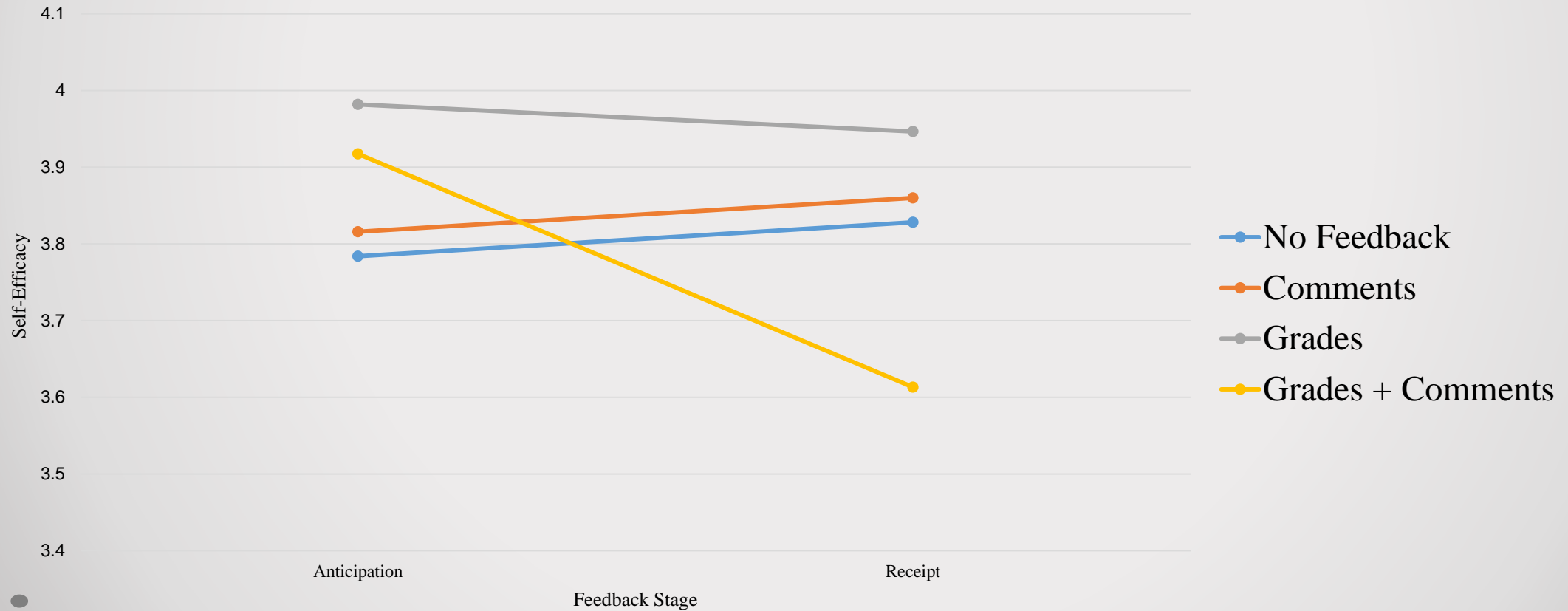
- Criterion-referenced grades
- Task-focused comments
- Fidelity implementation

data analytic approach

- Multilevel modeling
- Calibration and baseline motivation

results

- self-efficacy



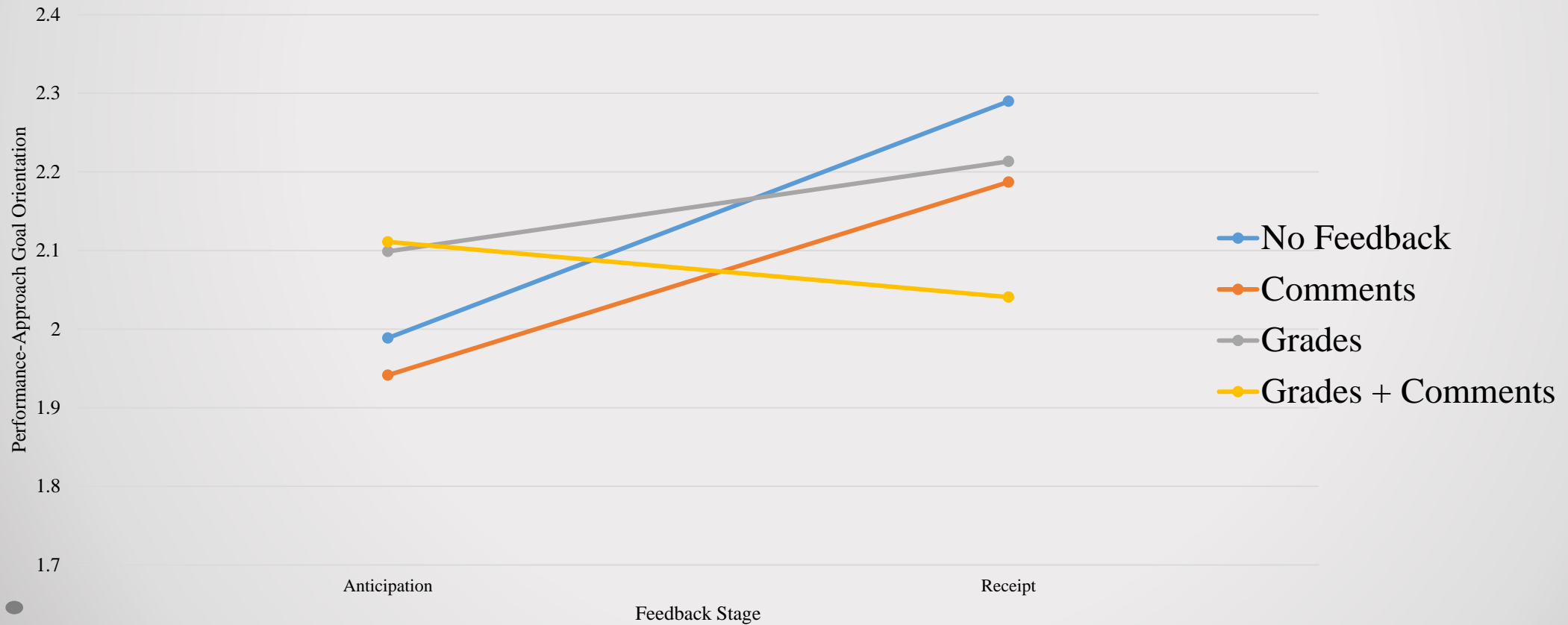
results

- self-efficacy



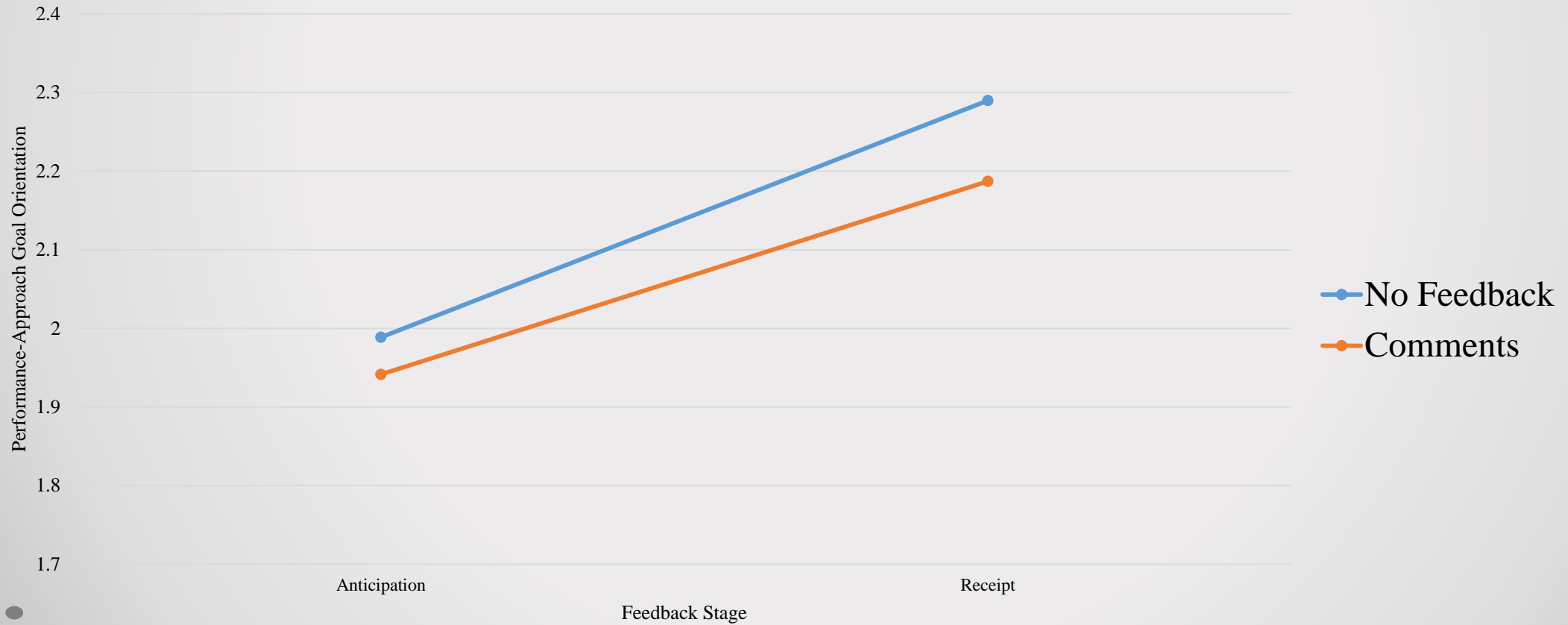
results

- performance-approach



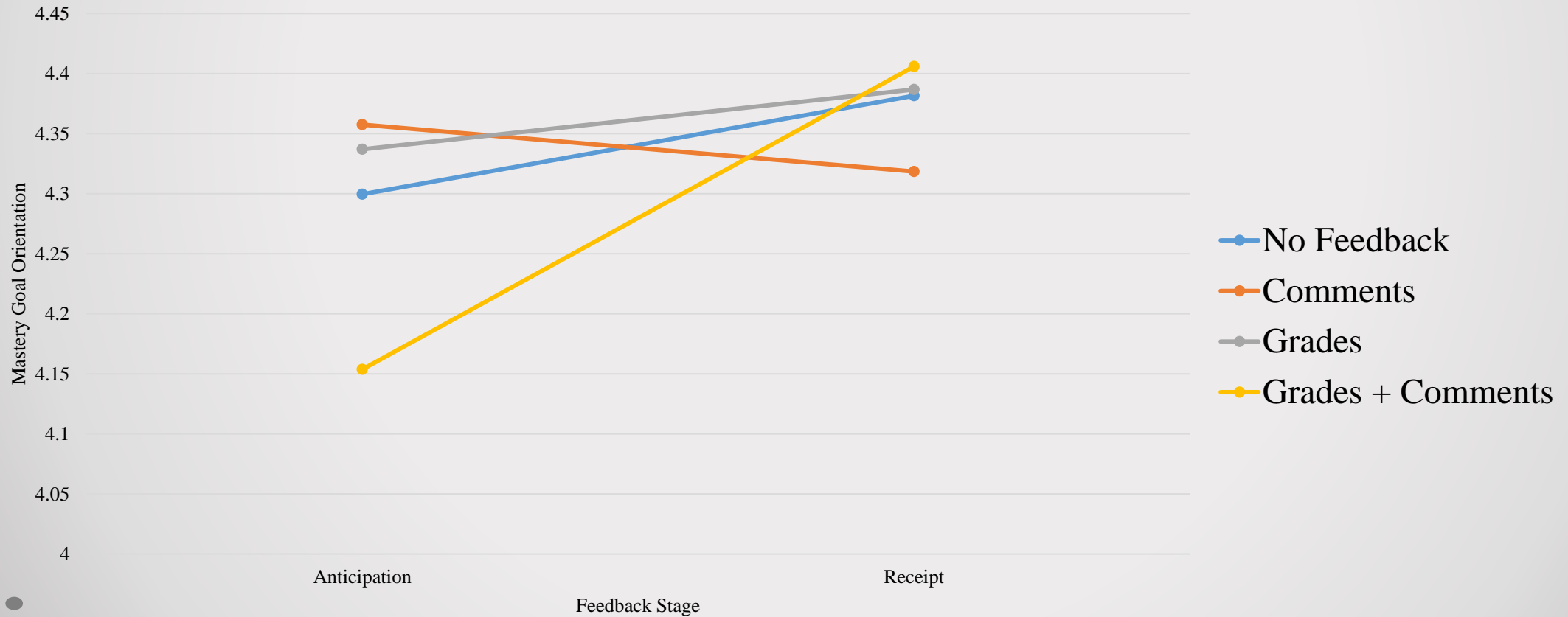
results

- performance-approach



results

- mastery



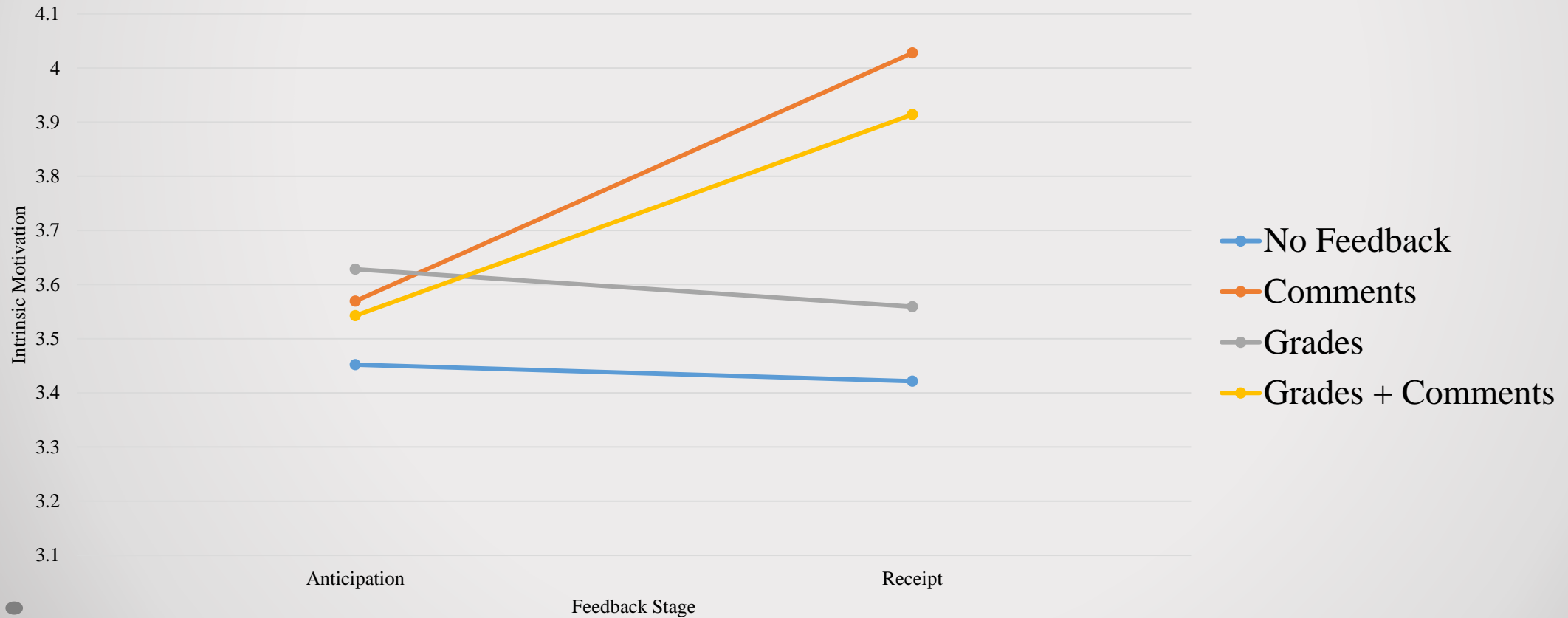
results

- mastery



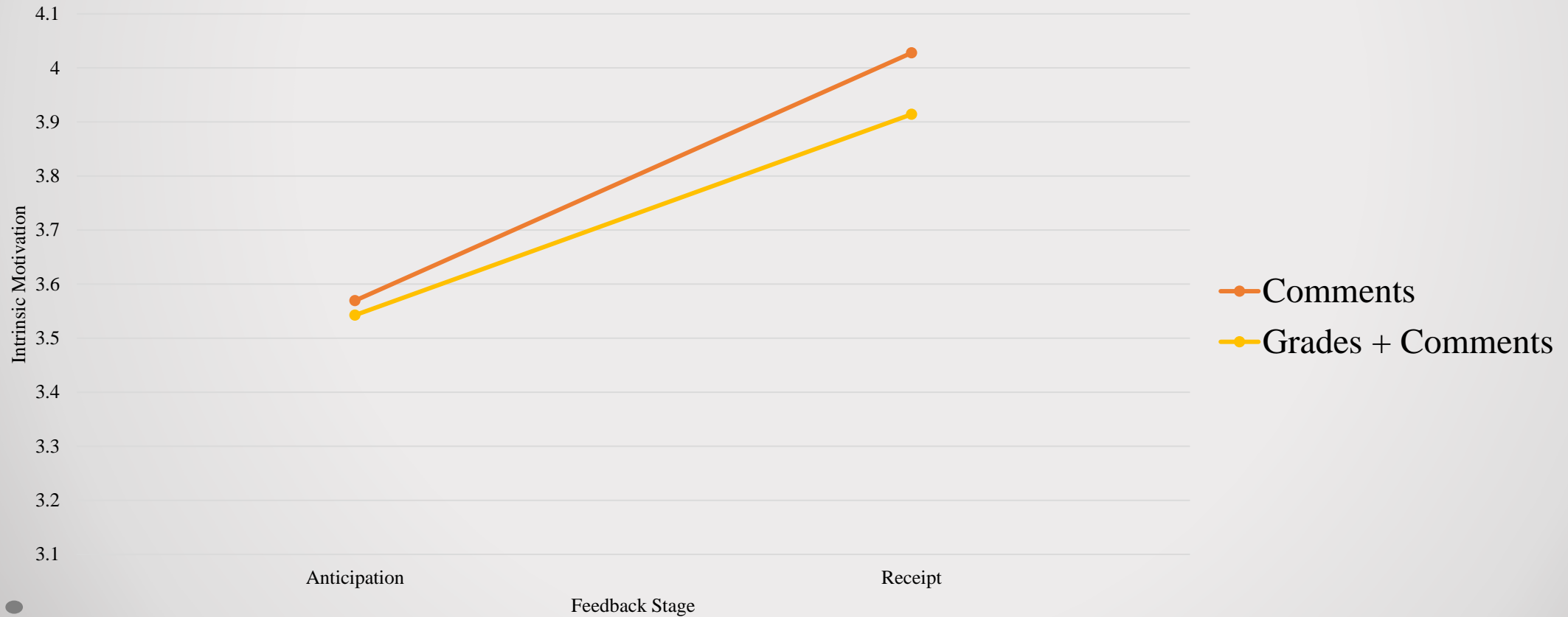
results

- intrinsic motivation



results

- intrinsic motivation



conclusions

- Motivational fluctuation within single assessment

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- Grades and comments led to most favorable motivation outcomes

conclusions

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- Grades and comments led to most favorable motivation outcomes
 - Providing written comments is worth the extra time

conclusions

- Motivational fluctuation within single assessment
- Grades and comments led to most favorable motivation outcomes
 - Providing written comments is worth the extra time
 - Essential to consider the broader assessment context

conclusions

- Motivational fluctuation within single assessment
- Grades and comments led to most favorable motivation outcomes
- Grades and comments also led to a decline in self-efficacy

conclusions

- Motivational fluctuation within single assessment
- Grades and comments led to most favorable motivation outcomes
- Grades and comments also led to a decline in self-efficacy
 - Such a thing as too much feedback?

conclusions

- Motivational fluctuation within single assessment
- Grades and comments led to most favorable motivation outcomes
- Grades and comments also led to a decline in self-efficacy
 - Such a thing as too much feedback?
 - More accurate perceptions of current understanding?

caveats

caveats

- All-female sample

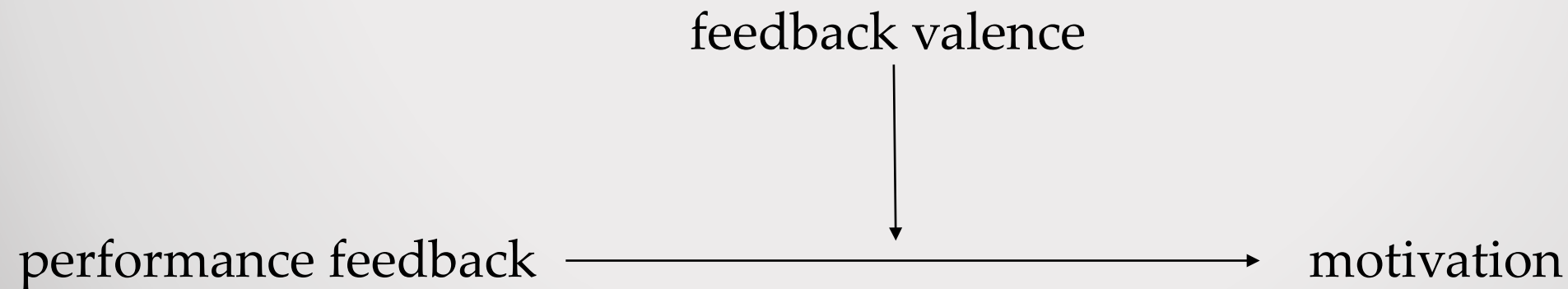


caveats

- All-female sample
- Academically selective school
- Failed to disentangle valence from feedback form

caveats

- All-female sample
- Academically selective school
- Failed to disentangle valence from feedback form



thank you!

Alison C. Koenka, Ph.D.

koenka.1@osu.edu

Special Thanks To:

Dr. Harris Cooper
Dr. Rick H. Hoyle
Dr. Dale H. Schunk
Dr. Elizabeth J. Marsh
Dr. Amy L. Dent