Why Do You Study?

Complex Answers to a Simple Question
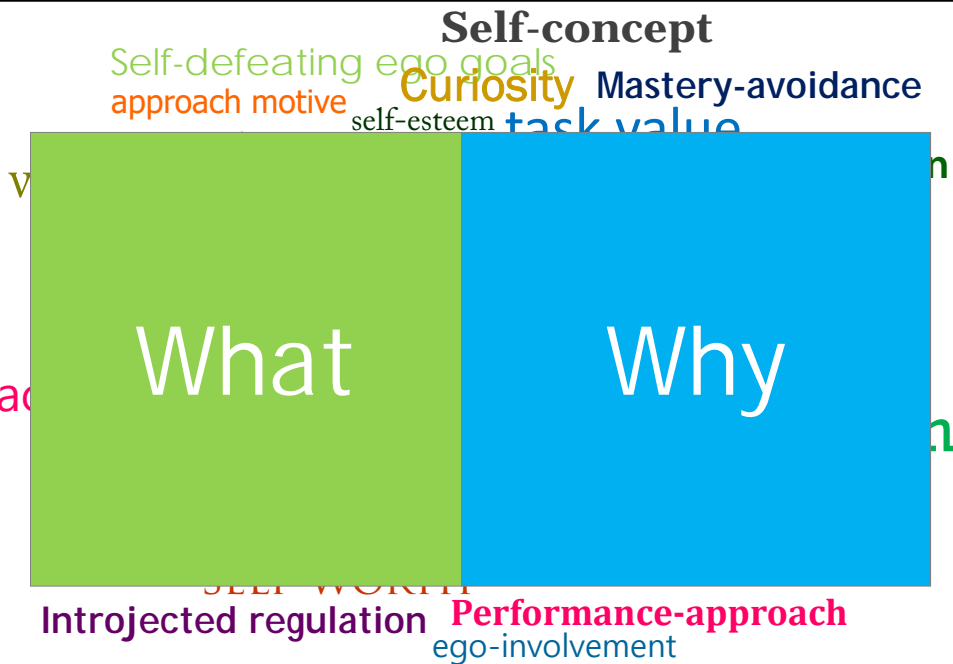
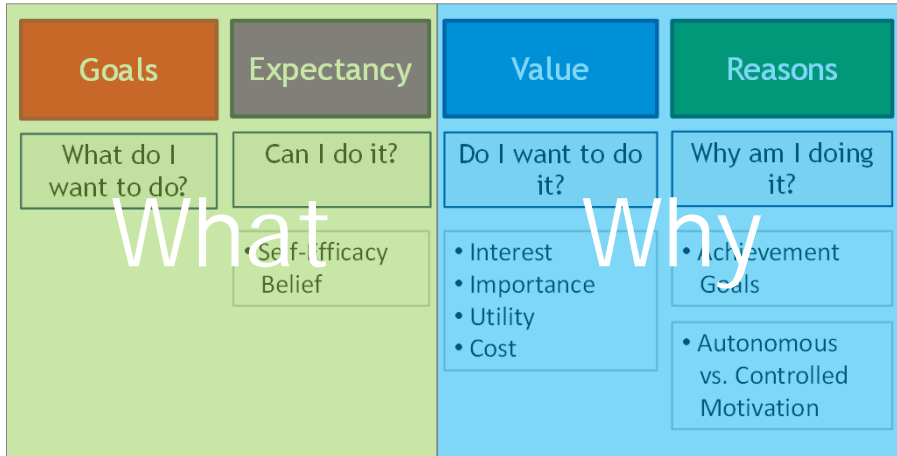**Mimi Bong**

Department of Education
Brain & Motivation Research Institute
Korea University

1

Self-concept
Self-defeating ego goals
approach motive
Curiosity
Mastery-avoidance
self-esteem
task value

| What | Why |

SELF-WORTH
Introjected regulation
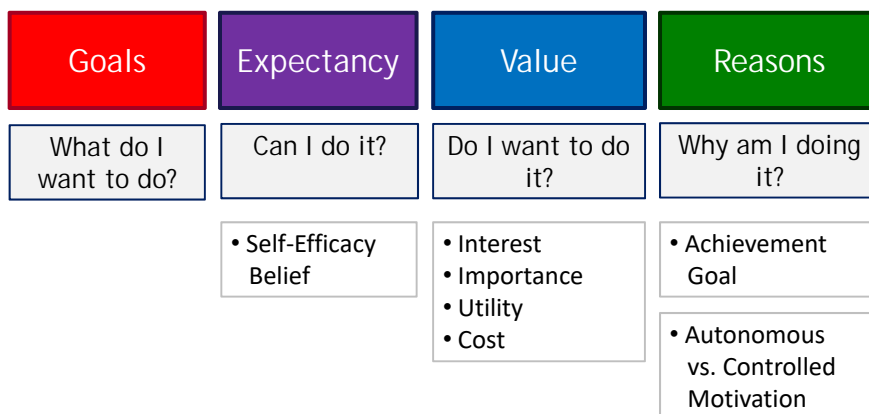Performance-approach
ego-involvement

2

Eccles & Wigfield (2002)

3

4

Why Do Students Strive to Achieve?

Dweck (1986)

- To increase competence
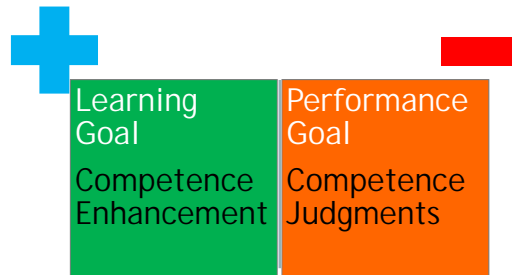   - → **Learning Goal Orientation**

        or

- To gain positive judgments/avoid negative judgments of competence
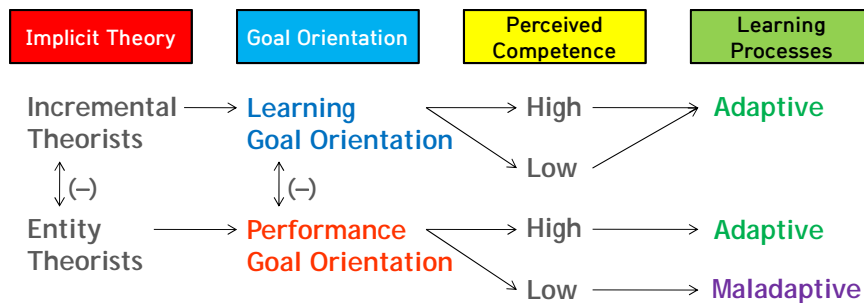   - → **Performance Goal Orientation**

Dweck's Original Definition

: *Reasons* for engaging in achievement behavior

Learning Goal Competence Enhancement	Performance Goal Competence Judgments

---

Dweck's Original Theory

Implicit Theory	Goal Orientation	Perceived Competence	Learning Processes

Incremental Theorists → Learning Goal Orientation → High → Adaptive

Low

(−) (−)

Entity Theorists → Performance Goal Orientation → High → Adaptive
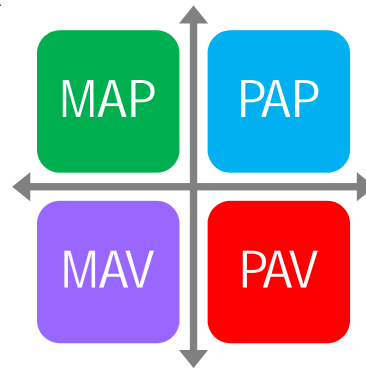
Low → Maladaptive

Dweck (1986); Dweck & Leggett (1988)

Elliot's Revised Definition

: Competence-based *aims* that guide achievement behavior

Elliot & McGregor (2001)

Elliot's 2 × 2 Model

- **Mastery-Approach Goal**
  - To learn as much as possible
- **Mastery-Avoidance Goal**
  - To *avoid* not learning all that one possibly could
- **Performance-Approach Goal**
  - To perform better than others
- **Performance-Avoidance Goal**
  - To *avoid* performing worse than others

Elliot's 3×2 Model

		Goal Definition		
		Absolute	Intrapersonal	Interpersonal
Goal Valence	Positive	To do the task correctly	To do better than before	To do better than others
	Negative	To avoid doing the task incorrectly	To avoid doing worse than before	To avoid doing worse than others

Elliot, Murayama, & Pekrun (2011)

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Elliot's 3×2 Model

		Goal Definition		
		Absolute	Intrapersonal	Interpersonal
Goal Valence	Positive	Attainment of *task-based* competence	Attainment of *self-based* competence	Attainment of *other-based* competence
	Negative	*Avoidance* of *task-based* incompetence	*Avoidance* of *self-based* incompetence	*Avoidance* of *other-based* incompetence

Elliot, Murayama, & Pekrun (2011)

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Elliot's 3 × 2 Model

		Goal Definition		
		Absolute	Intrapersonal	Interpersonal
Goal Valence	Positive	Task-Approach	Self-Approach	Other-Approach
	Negative	Task-Avoidance	Self-Avoidance	Other-Avoidance

Elliot, Murayama, & Pekrun (2011)

What Do Students Say Are the Reasons that They Strive to Achieve at School?

What Are Students' Reasons for Striving to Achieve?

- ◆ **Open-Ended Achievement Goal Question**
  - ▪ "What are the reasons that you study? Please write down the five (three) most important reasons that you study in descending order of importance."
  - ▪ Study 1: 239 Korean 8th graders
  - ▪ Study 2: 335 Korean 7th, 8th, & 9th graders
  - ▪ Study 3: 410 Korean 9th graders

Lee & Bong (2016) *Journal of Educational Psychology*

To avoid doing worse than other students

To avoid lagging behind

For my own satisfaction   To get a good score

in society   To demonstrate ability

For myself

To get a good job **To protect my pride**   To avoid a bad score

To ...

To av...   level

To r...   ...ol

For ...   ...udent

TO MA...   ...down

To get a better job   To improve ability   ...py

TO FIT INTO SOCIETY WELL   Because it is interesting

To avoid demonstrating a lack of ability

To do better than other students

TO GAIN KNOWLEDGE

Summarized into 30~32 Specific Goal Categories

... Then Classified into the Achievement Goal Frameworks of

➡ **Midgley et al. (2000)**

: MAP, PAP & PAV (Ability Validation + Normative)

➡ **Elliot & McGregor (2001)**

: MAP, MAV, PAP & PAV (Normative)

➡ **Grant & Dweck (2003)**

: Learning, Outcome, Ability, Normative

Lee & Bong (2016) *Journal of Educational Psychology*
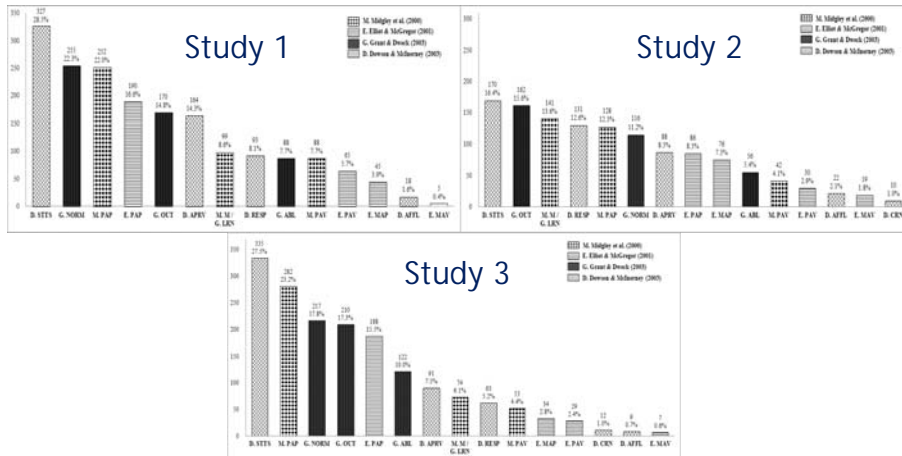
bMRI

... as well as the Social Goal Framework of

➡ **Dowson & McInerney (2003)**

: Social Affiliation Goal (to become closer to others)

: Social Approval Goal (to gain positive approval)

: Social Concern Goal (to help others w/ one's skills
and knowledge)

: Social Responsibility Goal (to fulfill duties and
societal obligations)

: Social Status Goal (to attain better social positions)
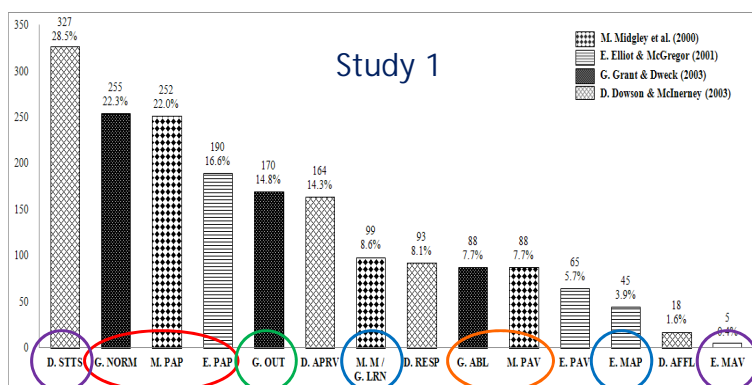
Lee & Bong (2016) *Journal of Educational Psychology*

bMRI

Including Social + Future-Oriented Responses

Study 1

Study 2

Study 3

Lee & Bong (2016) *Journal of Educational Psychology*

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Including Social + Future-Oriented Responses

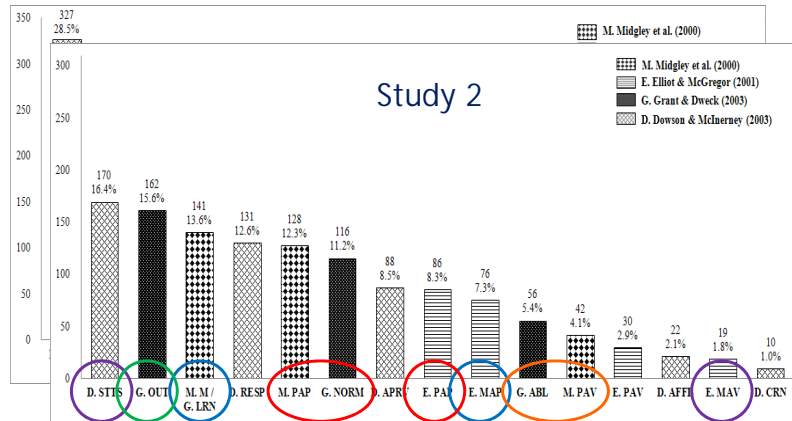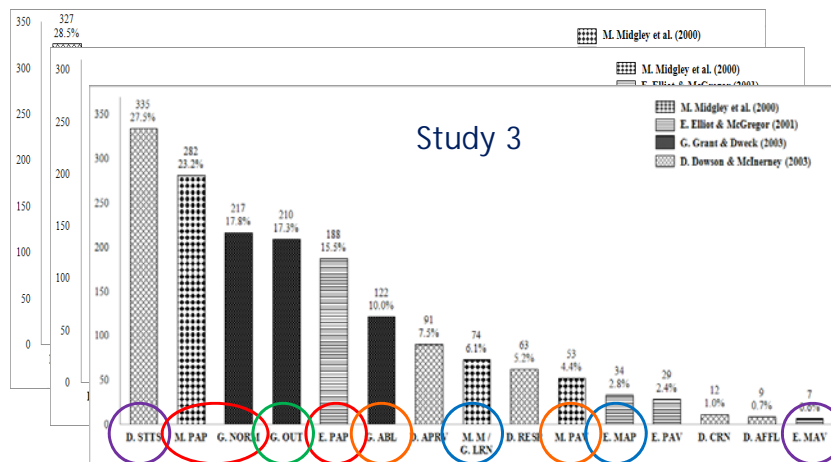

Study 1

Lee & Bong (2016) *Journal of Educational Psychology*

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Including Social + Future-Oriented Responses

Study 2

Lee & Bong (2016) *Journal of Educational Psychology*

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Including Social + Future-Oriented Responses

Study 3
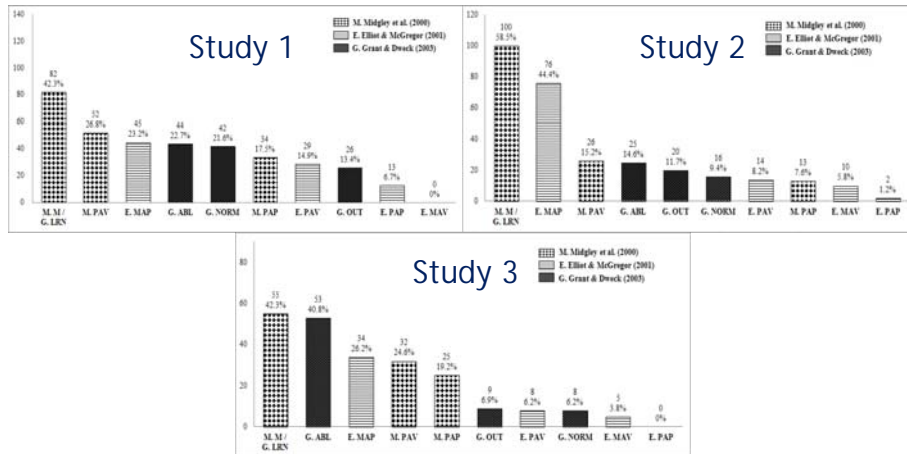
Lee & Bong (2016) *Journal of Educational Psychology*

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Including Only _Present-Oriented_ Responses

Study 1

Study 2

Study 3

Lee & Bong (2016) _Journal of Educational Psychology_

23

Including Only _Present-Oriented_ Responses

Study 1

Lee & Bong (2016) _Journal of Educational Psychology_

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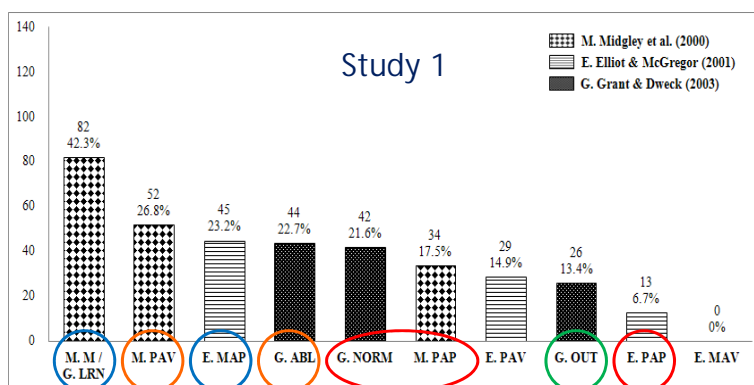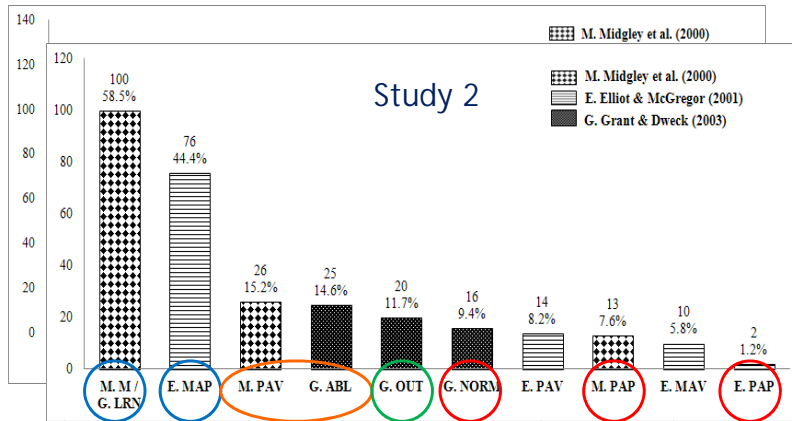Including Only *Present-Oriented* Responses

Study 2

Lee & Bong (2016) *Journal of Educational Psychology*

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Including Only *Present-Oriented* Responses
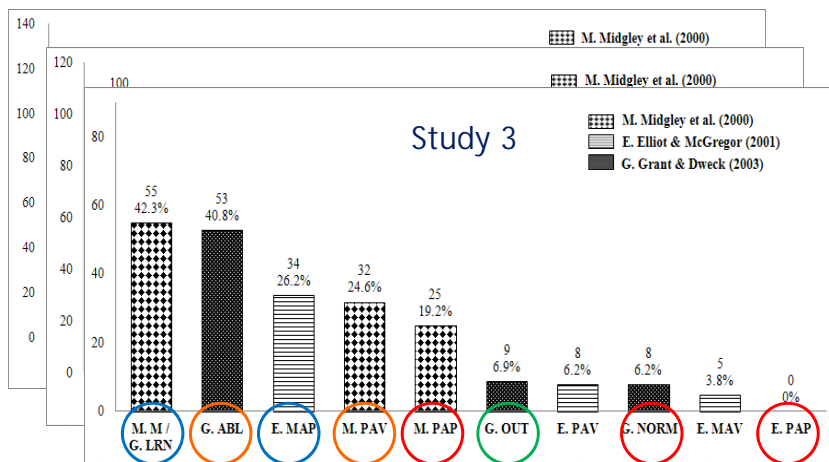
Study 3

Lee & Bong (2016) *Journal of Educational Psychology*

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Major Reasons Students Strive to Achieve at School:

To Improve Competence ✓
To Validate Ability ✓
To Attain Normative Competence ✓
(= To Attain Positive Outcome)

*b*MRI

What Happens When Students Pursue Each of the Achievement Goals?

Survey Studies

Bong, Lee, Chung, & Lee (2016) *Korean Journal of Educational Psychology* with 255 middle school students in Grades 7 to 9

Bong, Lee, Chung, & Lee (2019, manuscript in preparation)
 - Study 1 with 515 middle school students
 - Study 2 with 661 college students
 - Study 3 with 304 middle school students

Chung, Kim, & Bong (2019, manuscript in preparation) with 404 middle school students in Grades 7 to 9

## *5-Factor Achievement Goal Model*

◆ **An important reason that I study math is to…**

- Improve competence → Mastery
- Perform better than others → Normative-Approach
- Avoid performing worse than others → Normative-Avoidance
- Demonstrate competence → Ability-Approach
- Avoid demonstrating a lack of competence → Ability-Avoidance

Bong, Lee, Chung, & Lee (2016) *Korean Journal of Educational Psychology*

Bong, Lee, Chung, & Lee (2016) *Korean Journal of Educational Psychology*

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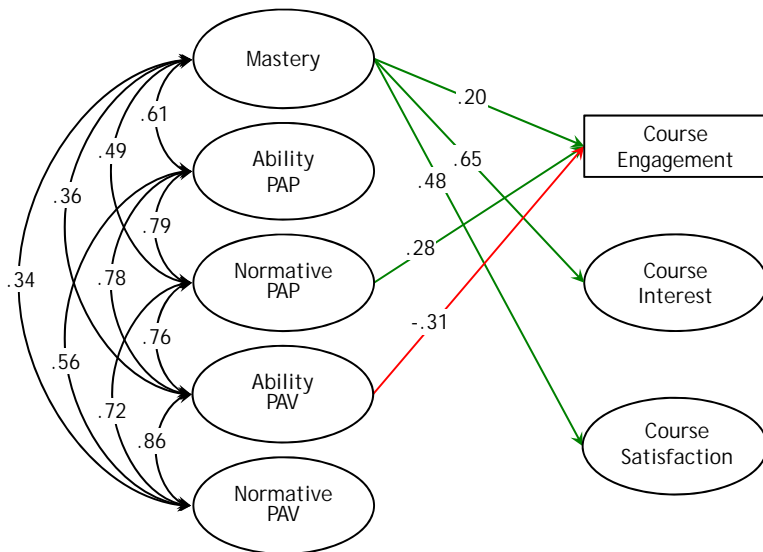Bong, Lee, Chung, & Lee (2019, Study 1, manuscript in preparation)
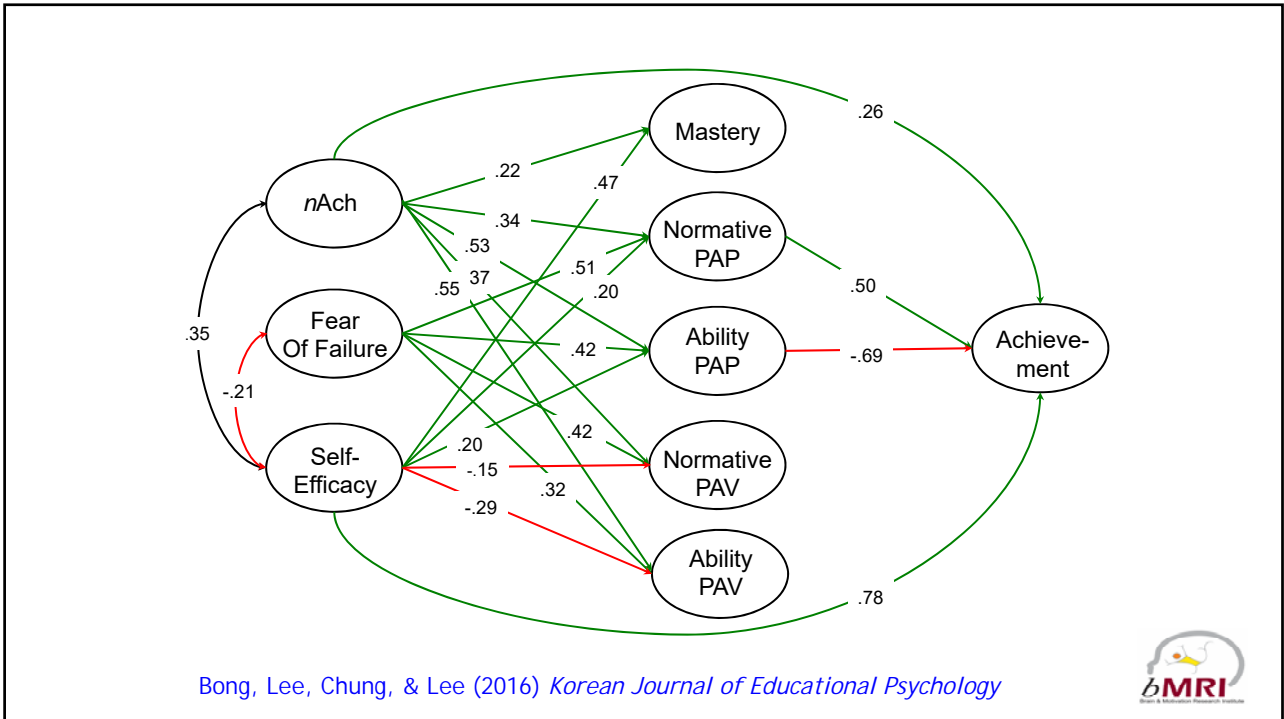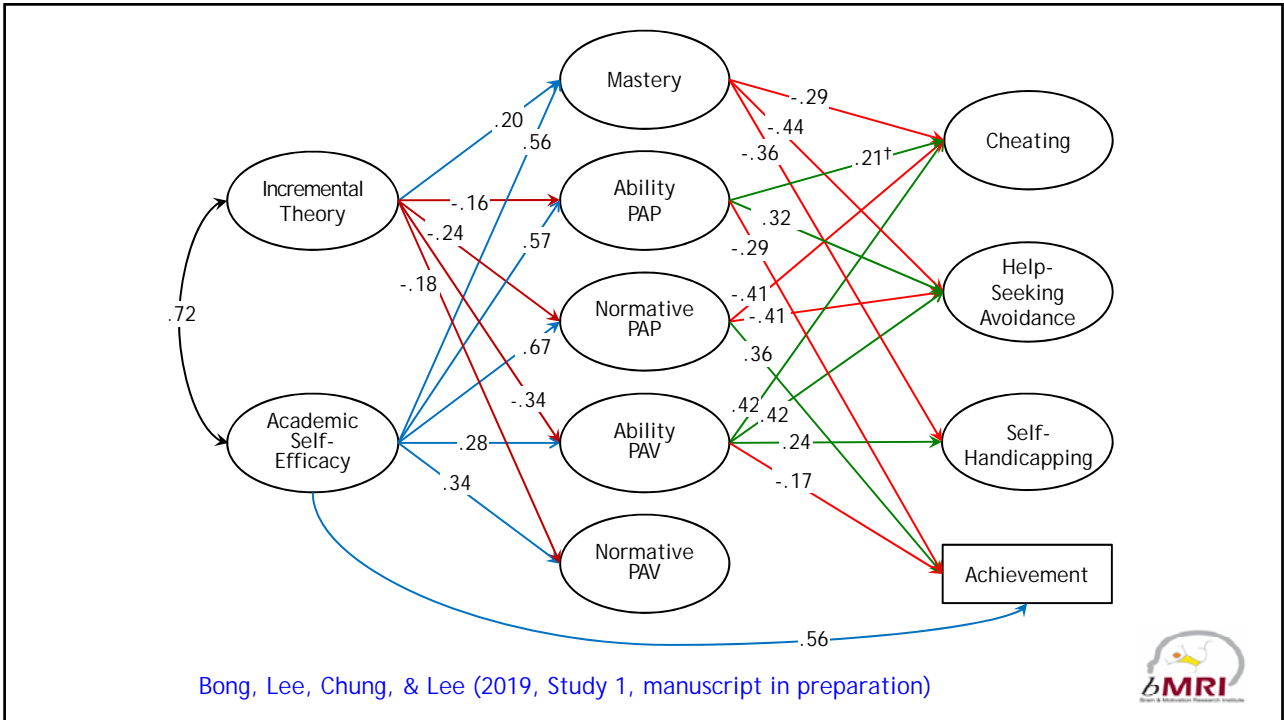
32

Bong, Lee, Chung, & Lee (2019, Study 2, manuscript in preparation)

Experimental Studies

Chung, Kim, & Bong (2019, in revision) *Journal of Educational Psychology*

- Study 1: Cluster randomized trial with 103 elementary school students
- Study 2: Experiment with 50 college students
- Study 3: Experiment with 80 college students

Ability Goal Manipulation

- *"This task was devised to test your ability for reasoning…. It is important that you do well on this task because your performance will show how much of this ability you possess. I will be able to judge how smart you are by examining your problem-solving…. I will share this result with your teacher, as it reveals an important aspect of your ability. I hope you will take advantage of this opportunity to demonstrate your potential ability and earn recognition."*

Chung, Bong, & Kim (2019, in revision) *Journal of Educational Psychology*

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Normative Goal Manipulation

- *"This task was devised to compare your ability for reasoning with that of others…. When I asked other peers of your age to solve this task, … some stood out because they were clearly ahead of their peers. It will be extremely helpful for you to know whether you are superior to others in this ability…. I hope you will take advantage of this opportunity to assess your potential capability by outperforming other students."*

Chung, Bong, & Kim (2019, in revision) *Journal of Educational Psychology*
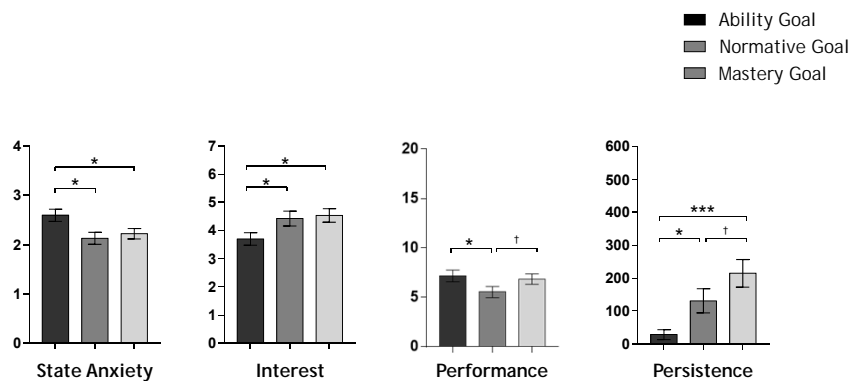
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Mastery Goal Manipulation

♦ *"This task was devised to improve your ability for reasoning.... Each problem requires you to think from various perspectives. In the process of thinking in such a diverse manner, you will be able to learn how to think strategically and improve your thinking skills.... I hope you will take advantage of this opportunity to learn new skills by developing and improving your ability for reasoning."*

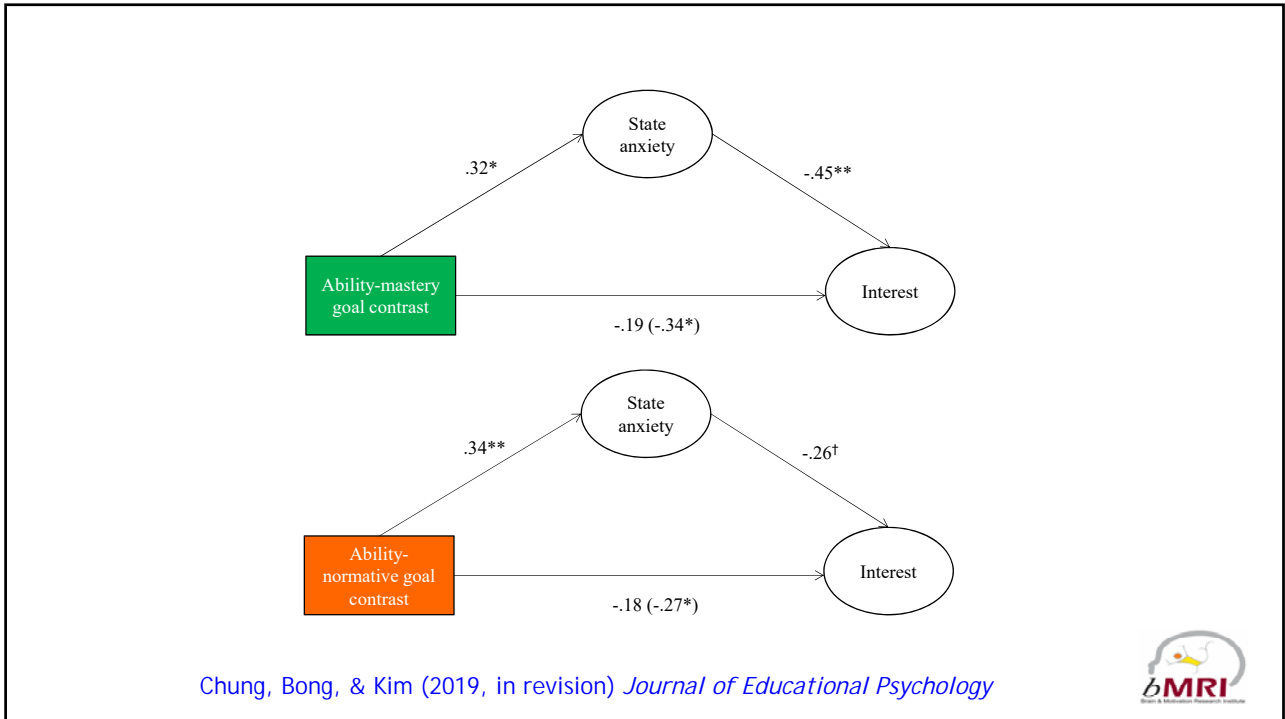Chung, Bong, & Kim (2019, in revision) *Journal of Educational Psychology*

♦ Study 1 *with Elementary School Students*

Chung, Bong, & Kim (2019, in revision) *Journal of Educational Psychology*

State anxiety

.32*

-.45**

Ability-mastery goal contrast

Interest

-.19 (-.34*)

State anxiety

.34**

-.26†

Ability-normative goal contrast

Interest

-.18 (-.27*)

Chung, Bong, & Kim (2019, in revision) *Journal of Educational Psychology*

◆ **Study 2** *with College Students*

■ Ability Goal
■ Normative Goal
□ Mastery Goal

Anxiety   Interest   Challenge appraisal   Reengagement intention
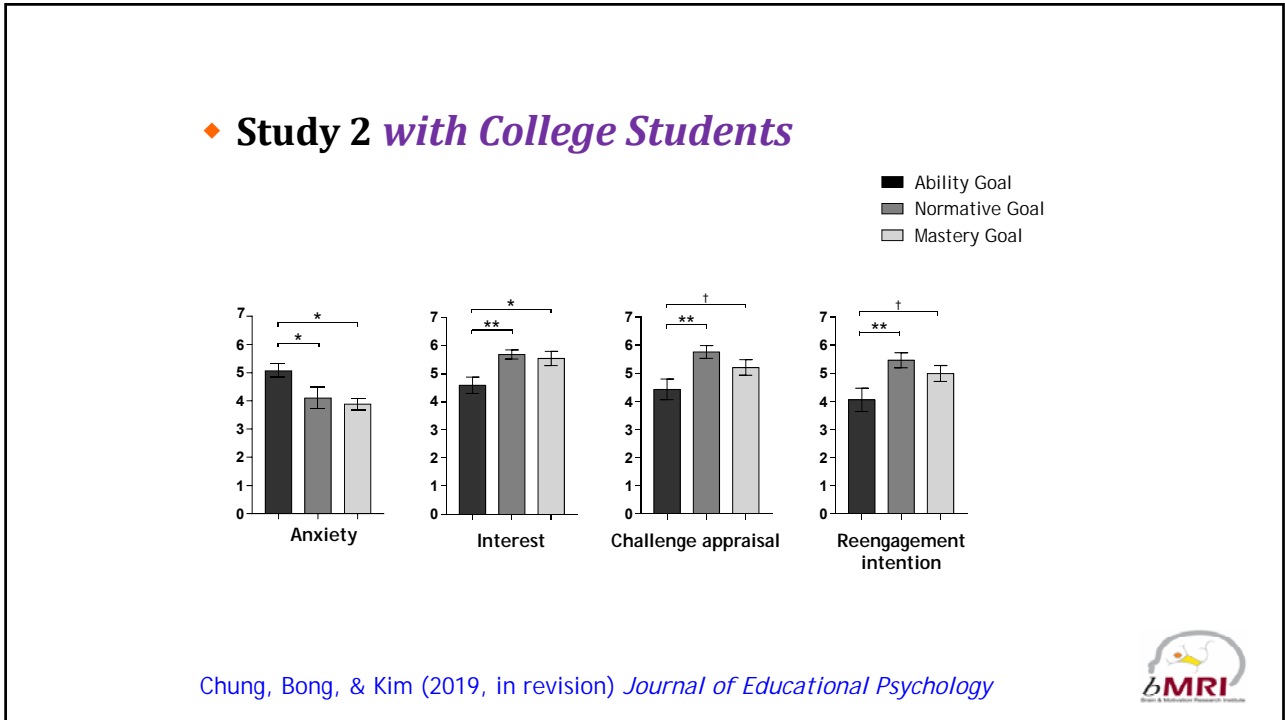
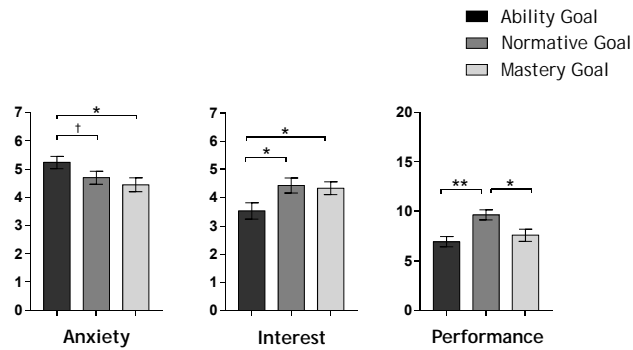Chung, Bong, & Kim (2019, in revision) *Journal of Educational Psychology*

◆ **Study 3** *with Unsolvable Puzzles*

Chung, Bong, & Kim (2019, in revision) *Journal of Educational Psychology*

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Underlying Mechanism of Ability Validation Goals

Ability Goals
→ Heightened Anxiety
→ Deteriorated Motivation
& Performance

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Summary of Findings

Mastery Goal Is
Most Adaptive
Of All Achievement Goals

Because of:
Lowest anxiety and greatest persistence even under difficulties

Normative Goal Is
Helpful for Performance
Often More So Than Mastery Goals

Because of:

Strong n*Ach*
Competitiveness
Seeking of
diagnostic info.

Ability Validation Goal Is
Most Maladaptive

Because of:

Strong implications for
one's self-worth
esp. when failure
looms large

When Would Students Pursue Ability Validation Goals?

Present-Oriented *Mastery Goals*

Study 1	Study 2	Study 3

Percentages of "Learning (Dweck)/Mastery (Midgley)" Goals

42.3%	58.5%	42.3%

Percentages of "Mastery-Approach (Elliot)" Goals

23.2%	44.4%	26.2%

Lee & Bong (2016) *Journal of Educational Psychology*

⟹ Significantly more students in Study 2 responded that they studied:

to gain knowledge;

to improve ability; and

because learning was useful, interesting, and satisfying

Lee & Bong (2016) *Journal of Educational Psychology*

What Was Different in Study 2?

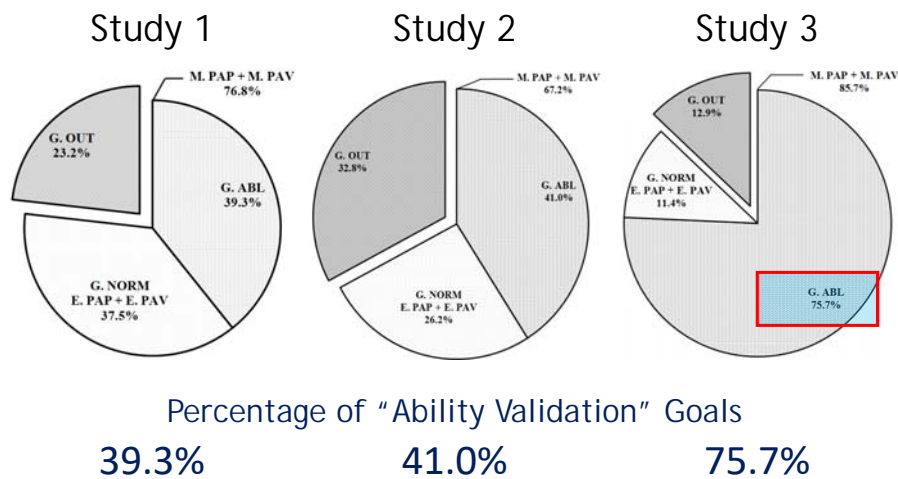⟹ High-school equalized school district + No ability grouping at school

⟹ The only group of students in this research who were free of extreme pressure, competition, and fear of negative evaluation

Lee & Bong (2016) *Journal of Educational Psychology*

Present-Oriented _Performance Goals_

Study 1   Study 2   Study 3

Percentage of "Ability Validation" Goals

39.3%   41.0%   75.7%

Lee & Bong (2016) *Journal of Educational Psychology*

➡ An overwhelming majority of the performance goal responses in Study 3 described studying either:

     to demonstrate ability;

     to avoid demonstrating a lack of ability; or

     to protect one's pride

Lee & Bong (2016) *Journal of Educational Psychology*

What Was Different in Study 3?

$\Rightarrow$ The only group of students who attended a school with between-class ability grouping in core subjects, known to induce extreme fear of failure, negative evaluation, and humiliation

Lee & Bong (2016) *Journal of Educational Psychology*

bMRI

Concluding Thoughts

⇨ Threats from Within

  : Fear of Failure

  : Entity Theory of Intelligence / Fixed Mindset

  : Contingent Self-Worth on Others' Approval

⇨ Threats from Outside

  : Competition

  : Normative Evaluation

  : Ability Grouping

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http://bmri.korea.ac.kr

ご清聴
ありがとうございますいました!

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