

## Targeting Motivational Processes to Intensify Reading Interventions: Promise and Pitfalls

Pacific Coast Research Conference, February 2020

### Presenters



**Jessica R. Toste, PhD**  
The University of Texas at Austin  
✉ jrtoste@austin.utexas.edu  
📧 @DrToste



**Lisa Didion, PhD**  
University of Iowa  
✉ lisa-didionjohnston@uiowa.edu  
📧 @LisaDidionPhD



**Stephanie Al Otaiba, PhD**  
Southern Methodist University  
✉ salotaiba@smu.edu

### Advance Organizer

1. Rationale & framing
2. Mindset to intensify reading interventions (Al Otaiba)
3. Self-determination program to increase ORF (Didion)
4. Relations between motivation and reading (Toste)
5. Points for consideration

### Reading Intervention

- Delivery of effective instruction is especially important as students who have not yet attained proficiency by 4<sup>th</sup> grade, rarely catch up with peers
- Not *all* students respond to standardized, research-based reading interventions
  - Response data from controlled studies suggests that an estimated 5% of students require more intensive intervention

Brasseur-Hock et al., 2011; Francis et al., 1996; Fuchs et al., 2012; Moats, 1999; Wanzek & Vaughn, 2009; Vaughn et al., 2003

### Reading Intervention

- There is no “silver bullet” program that will meet the needs of students with the most intensive needs
- Research-based instruction is intensified by adjusting content, grouping, and/or dosage of intervention
  - Focus on reading skills alone may be insufficient; may require attention given to students’ **psychosocial needs**

Denton, 2012; Fuchs, Fuchs, & Compton, 2012; Fuchs, Fuchs, & Malone, 2017; Vaughn & Wanzek, 2014

### Motivation and Reading

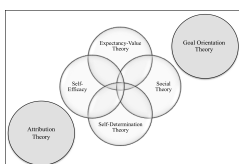
- Researchers generally believe that motivation supports cognitive ability, rather than operates independent from it
  - Goal-directed actions and engagement
  - Persistence in the face of obstacles and adversity
  - More time spent reading outside of school

**What is motivation exactly?**

Multon, Brown, & Lent, 1991; Schunk, 1991; Schunk & Zimmerman, 2012; Vansteenkiste, Lens, & Deci, 2006; Wigfield & Guthrie, 1997

## Operationalization of Motivation

- Multi-dimensional construct with extensive literature base derived from many theories (and subtheories)
- We do not fully understand the extent to which different constructs are conflated nor the extent to which similar constructs are treated as distinct



Schiefele, Schaffner, Moller, & Wigfield, 2012

## Operationalization of Motivation

- Motivation is generally concerned with the energization and direction of human behavior
- Individual actions are driven by thoughts, goals, beliefs, and values rather than predicted behavioral consequences

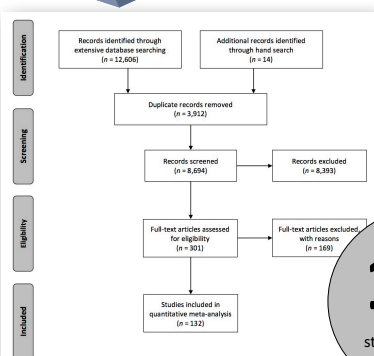
cf. Pintrich, 2003

## A Meta-Analytic Review of the Relations Between Motivation and Reading Achievement for K-12 Students

Jessica R. Toste, Lisa Didion, Peng Peng, Marissa Filderman, & Amanda McClelland

## Research Questions

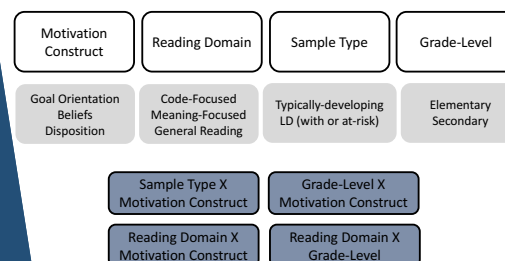
1. Is there is a significant correlation between K-12 students' motivation and reading achievement and, if so, what is strength of this relation?
2. Is the relation between motivation and reading affected by the motivation construct, reading domain, sample type, or grade-level?
3. Are there significant interactions that moderate the relation between motivation and reading?
4. For studies with multiple measured time points (i.e., across 12-months or more), how are motivation and reading related to one another over time?



**132**

studies included in final dataset

## Coding Procedures



### Motivation & Reading Achievement

- Relation between motivation and reading moderate and significant,  $r = .22$ ,  $p < .001$ , 95% CI [.19, .25]

### Moderation Analyses

Motivation  
Construct



Reading Domain



Sample Type



Grade-Level



- **Beliefs** showed a stronger relation with reading than goal orientation ( $\beta = .19$ ,  $p = .02$ )
- **Disposition** showed a stronger relation with reading than goal orientation ( $\beta = .16$ ,  $p < .001$ )

### Interaction Effects

Sample Type X  
Motivation Construct

Grade-Level X  
Motivation Construct

Reading Domain X  
Motivation Construct

Reading Domain X  
Grade-Level

- No significant interactions

### Longitudinal Studies

- Partial correlation model with longitudinal studies ( $k = 8$ )
- Findings suggest that reading is stronger predictor of motivation than motivation is of reading,  $\beta = .08$ ,  $p = .02$

### Applications to Intervention

- Potentially meaningful differences in application of motivation constructs
- Evidence for the bidirectional nature of the relationship
- Connection between reading achievement and motivation presents an opportunity to explore methods to improve responsiveness to reading interventions

**Thank You!**