# Oregon Kindergarten Assessment: A Theoretical and Empirical View

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## Background

• Federal and state investment in early learning and K-12 systems alignment e.g., inclusive data/assessment



- Kindergarten entry assessments
  - Federally supported e.g., RttT, ELC, EAGs
  - 2010 (7 states); 2011 (25); 2012-present (43+)
     (Connors-Tadros, 2014)



#### Background cont.

- Oregon Kindergarten Assessment (OKA)
  - Baseline learning-related behavioral and academic skills screening data
  - Inform decision-making
  - Identify achievement gaps
  - Single assessment (Oregon Department of Education, 2013)
- Piloted 12-13, Field Tested 13-14
- Our research targets these purposes



## Potential and Important Inquiry

• OKA a research-based gauge of interrelated entry skills (Tindal, Irvin, & Nese, Manuscript submitted for publication) though potential floor effects and hypersensitivity may impact utility (Catts, Petscher, Schatschneider, Bridges, & Mendoza, 2009; Francis, Shaywitz, Stuebing, Shaywitz, & Fletcher, 1996; Paris, 2005)



Construct Validity (interplay of early skills)
Predictive Validity (end-of-year K achievement)



# Theoretical Basis (Sfard, 1998)

#### **Acquisition Metaphor (AM)**

- Individual, inward-focused development
- Self-identification and possession

#### **Participation Metaphor (PM)**

- Outward-focused bonds/ community
- Group-identification and sharing

"the individual/social dichotomy does not imply a controversy as to the definition of learning, but rather rests on differing visions of the mechanism of learning" (p. 7)



## **Empirical Basis for the AM**

Develop technically adequate measures to:

- 1. Screen for risk, gauge status, monitor change
- 2. Establish valid/parsimonious tests

Early Literacy (alphabetic and phonemic)
Early Math (numeracy and operations)

Interrelated and predictive



## **Empirical Basis for the PM**

Develop technically adequate measures to:

- Identify key learning-related and social behaviors
- 2. Screen for risk, gauge status, monitor change

Self-regulation (listening, following directions)

Social-emotional (sharing, working cooperatively)

Interrelated and predictive of achievement



## Theoretical-Empirical Takeaways

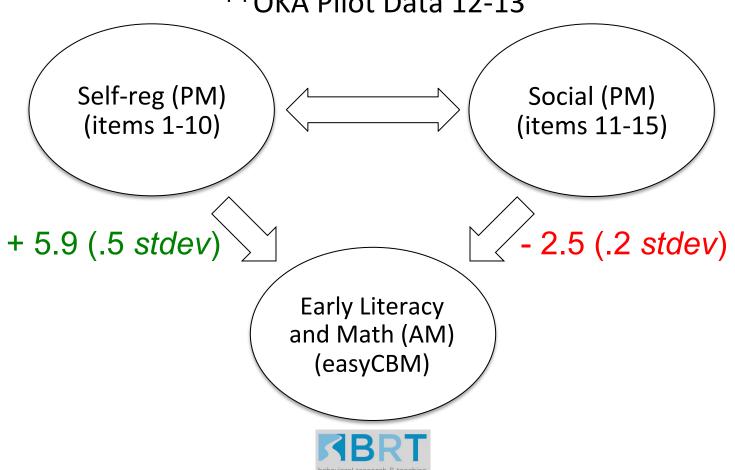
- AM (early literacy/emergent reading and numeracy); PM (self-regulation/social-emotional)
- AM/PM skills are identifiable/measurable early in (pre)school and over time
- AM/PM (status and growth) are complexly intertwined and positively related over kindergarten and beyond



## Preliminary Evidence of Theoretical & Empirical Framework in the OKA

Tindal, Irvin and Nese (Manuscript submitted for publication)

\*\*OKA Pilot Data 12-13



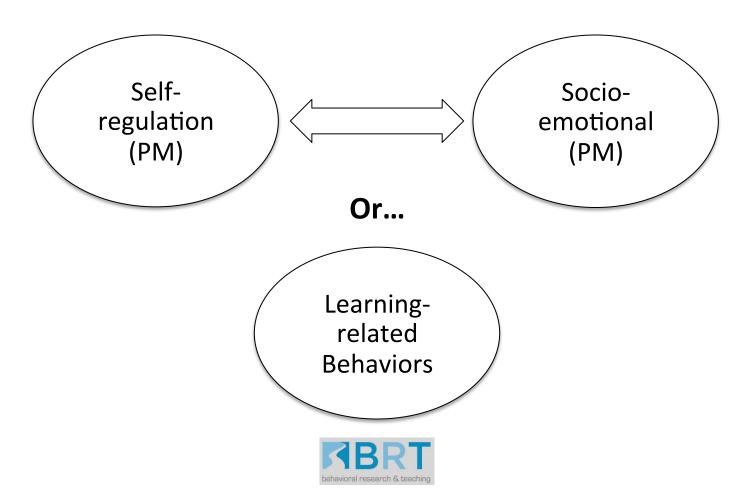
## Tindal et al. Takeaways

- Early literacy and math are often low (effective baseline) – supplement with learning-related behaviors to support students
- Self-regulation and social behaviors may not be distinct – behaviors that appear related to both
- The influence of learning behaviors on achievement skills is complex (+/-)

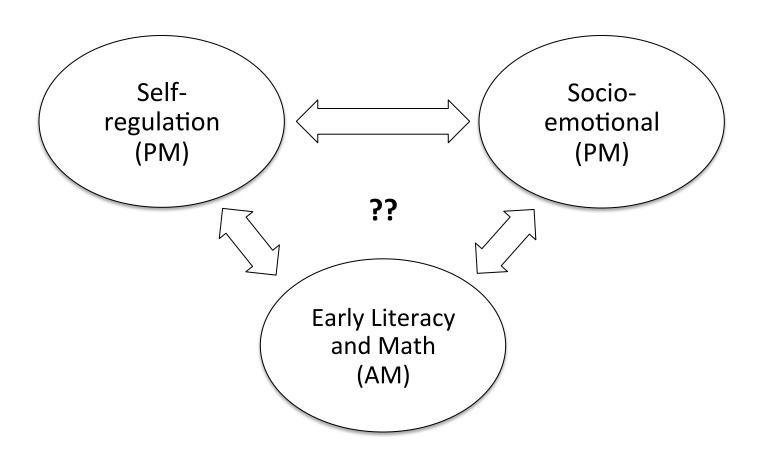


#### **Current Research**

1. How are students' entry skills (i.e., self-regulation, socialemotional and early academic) related in the OKA?



#### Current Research cont.



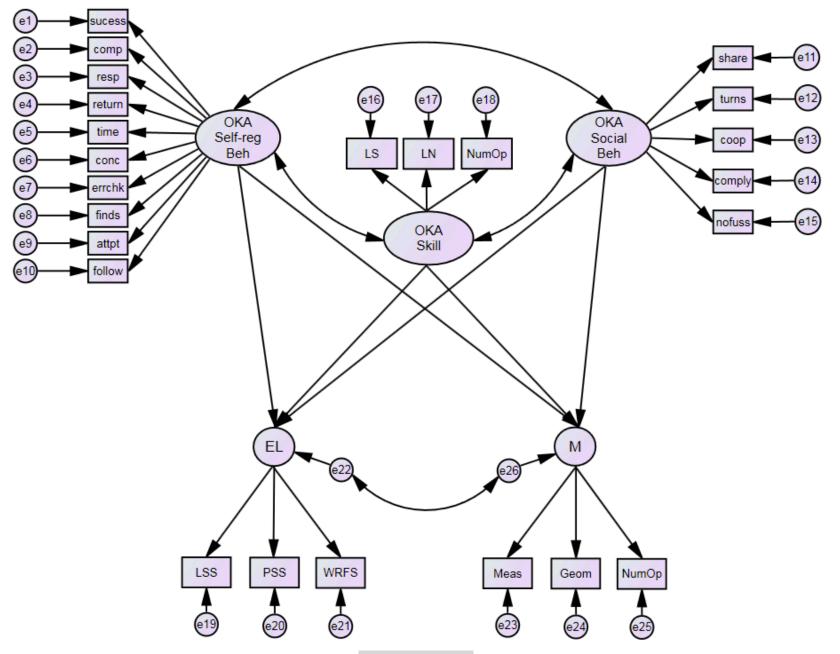


#### Current Research cont.

- 2. What are the effects of kindergartners' entry skills on end-of-year early literacy/reading and mathematics? (i.e., letter sounding, phoneme segmenting, word reading and mathematics spring scores)
- 3. ...when controlling for key student-level demographic factors?

(i.e., race/ethnicity, gender, SPED status and ELL status)







#### **Future Considerations & Questions**

- Given the complexity of measuring learning-related behaviors—characterizing their interplay and influence on early achievement, does the OKA "snapshot view" need expanded and measured over time to (better) inform instructional decision-making?...to incorporate other key skills?...to predict growth?...to identify risk?
- Do learning-related behaviors change (grow) over time—with some petering out, becoming more crucial, or different behaviors arising?



#### For More Information

http://www.brtprojects.org

http://easyCBM.com





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## Thank you.

# Questions and comments are welcome.

