Measuring Motivation in Children Served by Head Start

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Project Description

This study examines a newly developed, computer based, measure of children's motivation orientation, or how they deal with setbacks and failures inherent to learning situations, in a culturally diverse sample of children enrolled in the Miami-Dade Head Start program. Multilevel modeling will be utilized to examine the concurrent and predictive validity of the newly developed measure of motivation orientation in relation to other school readiness outcomes (i.e. early science, technology, engineering, and mathematics (STEM), language, and approaches to learning) across the preschool year. Results will allow for evaluation of early childhood interventions that aim to close the national school readiness achievement gap by targeting motivation orientation, a powerful domain-general skill.

Research Questions

- Is the newly developed direct assessment of motivation orientation reliable, sensitive, and response process valid in a sample of preschoolers from low-income families?
- Does the newly developed measure relate concurrently to approaches to learning?
- Does the newly developed measure predict gains in school readiness outcomes (STEM, language, and approaches to learning skills) across the preschool year?

Sample

This study is being conducted in collaboration with Miami-Dade County Head Start. The final sample consists of 316 children, across 35 classrooms, in 9 Head Start Centers. Mean age of children was 51.38 months (range = 37.9 to 62.7) and 52.5 percent of children were female (n=166).

Methods

This study employs the use of multilevel modeling to examine the concurrent and predictive validity of a newly developed measure of motivation orientation. Multilevel modeling was chosen because it controls for the nested nature of the data, specifically, children are nested within classrooms and this approach partitions child level and classroom level variance. The newly developed measure of motivation orientation will be examined concurrently with a teacher rating scale of approaches to learning, and will be used to predict spring school readiness outcomes (STEM, language, and approaches to learning) controlling for fall scores. Similarly the newly developed measure will be examined for test retest, and response process validity. These steps are taken to ensure that this measure is valid and reliable for use among children served by Head Start.

Progress Update

Scores on CABoOM ranged from 0 to 18 with a mean of 5.32 and a standard deviation of 3.30 (N=316). The retest sample ranged from 0 to 16 with a mean of 3.27 and a standard deviation of 3.80 (N=60). The ICC for CABoOM was .863 indicating strong test –retest reliability. The scholar is still waiting on data to be scored by the developers of the language outcome measure. The CABoOM did not relate concurrently to the measure of approaches to learning nor did it predict the science outcome measure. Complete analyses and discussion of findings will be presented at the grantee meeting.

Implications for policy/practice

Sensitive and reliable measurement of motivation orientation will allow for identification of children utilizing less than optimal motivational strategies so that they may be targeted by interventions, thus mitigating the risk that they enter kindergarten less

well prepared to learn. Furthermore, domain-general and malleable skills like motivation orientation are ideal targets for intervention because they translate across all readiness areas and relate to academic success in later grades.

Implications for research

Results from this study will support more sensitive and reliable measurement of motivation orientation among preschool children from low-income families. Such measurement is necessary to evaluate the efficacy of interventions targeting adaptive motivational strategies, and currently no reliable or valid measure exists for this at-risk population.

For more information

Please email the scholar or his mentor.

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