

Look who is talking: Understanding the linguistic environments of family child care homes

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Introduction

- High quality early childhood education programs demonstrate positive effects for children's cognitive and social development in ways that offset socioeconomic risk factors (Center on the Developing Child at Harvard University, 2007)
- A large number of children (70.6%) with high socioeconomic risk factors are cared for by family child care providers in Georgia (DECAL, 2016).
- Unfortunately, the quality of these settings is highly variable and generally lower than center-based care (Phillips & Morse, 2011).
- Many states are implementing Tiered Quality Rating and Improvement Systems (TQRIS) to help parents choose high quality settings for their children.
- However, only limited research exists on TQRIS systems and FCCs.
- Given the importance of quality of care to young children's language development (Hirsh-Pasek et al., 2015; Weisleder & Fernald, 2013), there is a need to investigate certain characteristics of quality such as the richness of the language environment and the interactions between staff and children within the context of FCC learning environment.
- Georgia's Tiered Quality Rating system (TQRIS) provides an ecologically valid context to assess, improve, and communicate the quality of early childhood settings.

Purpose

This study was designed to examine linguistic provider-child interactions, global classroom quality, and tiered quality ratings in the FCC environment.

Hypotheses

- H₁:** It was predicted that providers who received higher TQRIS ratings would have greater language interactions.
- H₂:** It was hypothesized that providers' language interactions would be related to the TQRIS ratings.

Methodology

Participants: English speaking FCC providers who were participating in Georgia's TQRIS Validation Study ($N=69$), stratified across three rating categories:

TQRIS Star Rating	N
1	13
2	34
3	22

Global Quality: *The Classroom Assessment Scoring System (CLASS-Toddler;* LaParo, Hamre, & Pianta 2008)

Emotional and Behavioral Support: (a) positive climate (b) negative climate, (c) teacher sensitivity, regard for child perspectives, behavior guidance.

Engaged Support for Learning: (a) facilitation of learning and development, (b) quality of feedback, and (c) language modeling.

Linguistic Quality:

•FCC Providers wore LENA DLP's for up to 2.5 hours in the morning while they were engaged in their typical instructional routines.

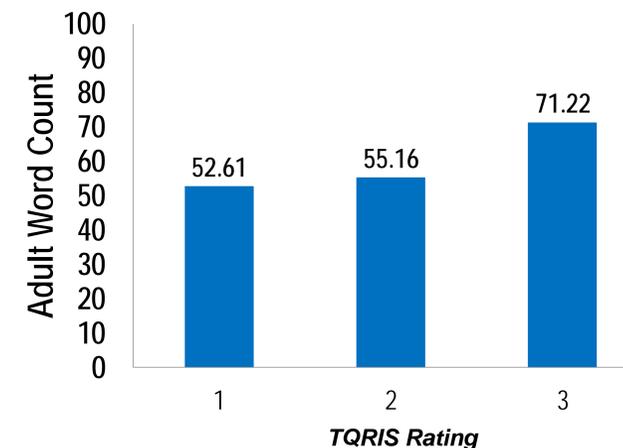
•Recordings were processed using the LENA SP software.

Data Analysis

- Adult Word Count was standardized to account for the varying durations of the language samples.
- IVs = TQRIS Ratings Note: total # of kids was used as a covariate
- DVs = AWC and CLASS dimensions
- Intercorrelations between AWC and CLASS- Toddler domains were computed. Note: the reverse score of the negative climate dimension was used for these analyses.

Findings

Figure 1: Average AWC By Provider TQRIS Rating



- On average, providers who received lower TQRIS ratings spoke significantly fewer words per minute than providers who received the highest TQRIS ratings, $F(1,74)=5.87$, $p=.02$, $\eta^2=.07$. Providers with the highest ratings spoke 14 more words per minute, on average.
- When the total number of children was added as a covariate the mean difference is more pronounced, $F(1,73)=8.707$, $p=.004$, $\eta^2=.10$. Providers with the highest TQRIS ratings spoke on average 17 more words per minute.

Figure 2. Relation Between CLASS Emotional Support for Learning and AWC

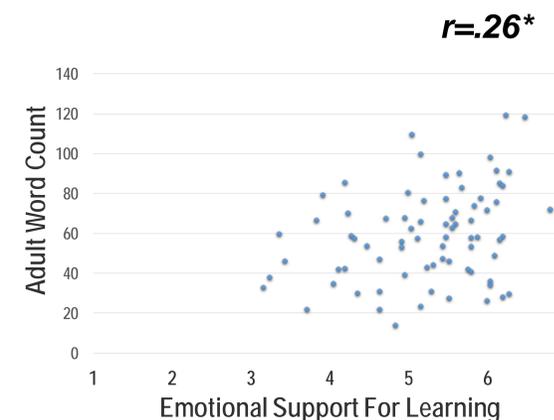
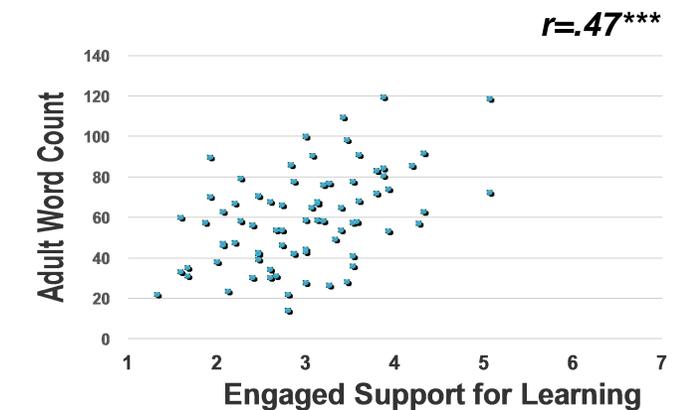


Figure 3. Relation Between CLASS Engaged Support for Learning and AWC



Summary/Conclusions

- Providers who received higher TQRIS ratings spoke more words on average per minute than providers with lower TQRIS ratings.
- Both CLASS-Toddler domains were positively correlated with AWC but the magnitude of the correlation was stronger for the Engaged Support for Learning domain.

References

- Center on the Developing Child at Harvard University. (2007). *A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children*. <http://www.developingchild.harvard.edu>
- Department of Early Care and Learning (2016). *Economic Impact of the Early Care and Education Industry in Georgia*.
- Hirsh-Pasek, K. et al. (2015). The contribution of early communication quality to low-income children's language success. *Psychological Science*, 26(7), 1071-1083. doi: 10.1177/0956797615581493
- La Paro, K.M., Hamre, K. & Pianta, R. C. (2008). *Classroom Assessment Scoring System Toddler (CLASS-Toddler)*. Baltimore, MD: Paul Brookes.
- Phillips, B.M. & Morse, E.E. (2011). Family child care learning environments: Caregiver knowledge and practices related to early literacy and mathematics. *Early Childhood Education Journal*, 39, 213-222. doi: 10.1007/s10643-011-0456-y
- Weisleder, A. & Fernald A. (2013). Talking to children matters: Early language experience strengthens processing and builds vocabulary. *Psychological Science*, 24 (11), 2143-2152. doi: 10.1177/0956797613488145

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