Conducting Language Intervention Research with Children and Families Who are Culturally and Linguistically Diverse

Anne Larson, Carol Scheffner Hammer, Judy Carta, Lauren Cycyk, & Melissa Baralt
Workgroup on Cultural and Linguistic Diversity, Bridging the Word Gap Research Network

Background

The proportion of young children from culturally and linguistically diverse (CLD) backgrounds continues to grow. In 2009, more than 63% of children in Early Head Start had a racial or ethnic background other than white, and at least 30% were exposed to a language other than English [LOTE; (Vogel et al., 2011)]. Yet, the majority of existing language interventions are designed for children from English-speaking, majority backgrounds, and there is little research guiding practitioners in making decisions for interventions that best support the language skills of CLD populations.

We completed a research synthesis of early language interventions to answer the following questions:
1) What interventions are being used and for whom they are designed;
2) How are CLD factors considered in the intervention;
3) What is the methodological rigor of the studies;
4) What outcomes and measures are being used;
5) What is the effectiveness of interventions in CLD populations; and
6) What is known about participant engagement with the interventions and the social validity of the interventions?

Here, we present the results of the review and implications for research.

Methods

Peer-reviewed articles from 1975-2016 with children from birth-5;11 (or their adult counterparts) were included if studies:
- Reported different outcomes for participants from two or more CLD groups,
- Considered language and/or culture as a moderator of study outcomes,
- Specifically designed or adapted the intervention for CLD participants, or
- Used variations in measurement for participants from different language backgrounds or cultural groups

Thirty-eight articles representing 39 studies were included and coded for the synthesis. Interrater coding reliability was 87.7%.

Intervention Description

- Four categories of interventions were identified (see Figure 1).
- Most frequently occurred in early childhood programs (see Figure 2)
- Interventions primarily focused on children's expressive and/or receptive language (76% and 70%, respectively)
- The majority (67%) of interventions were delivered in English and a LOTE; however, not all participants received both languages.
- Intervention agents included early childhood educators (38%), researchers (33%), and parents (28%).
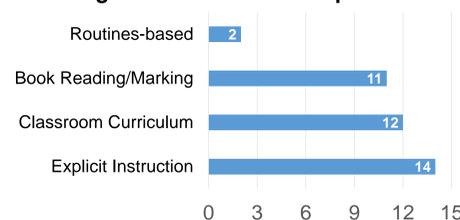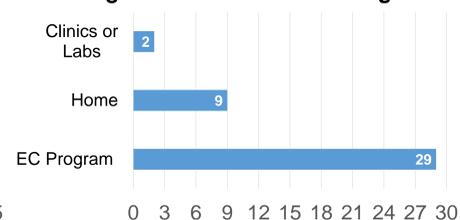

Figure 1 Intervention Emphasis

(Routines-based 2; Book Reading/Marking 11; Classroom Curriculum 12; Explicit Instruction 14)

Figure 2. Intervention Setting

(Clinics or Labs 2; Home 9; EC Program 29)

Participant Description

- Most studies (92%) included child participants.
- Over half of the studies (58%) included participants from a minority cultural group.
- Most studies (92%) included participants who spoke a LOTE (see Figure 3).
- 81% of studies provided information on child language dominance or proficiency.
- Age of exposure to was rarely reported (n = 5) whereas classroom language was reported in a6 studies.
- Few studies (n = 4) included children under 3 or with disabilities (n = 8).

Figure 3. Number of Studies Including Speakers of a LOTE
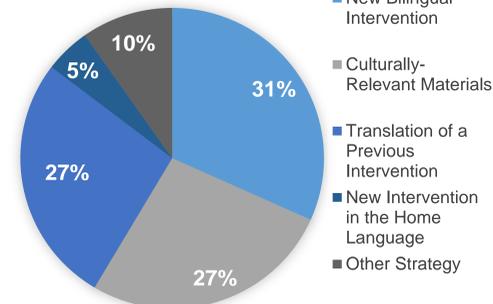
(Other Language 9; Spanish 32)
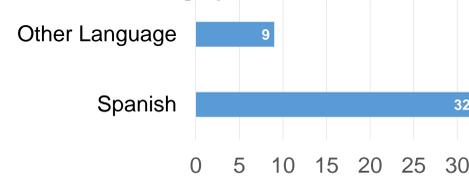
Consideration of CLD Factors

Design
- Most studies (70%) were specifically designed or adapted for CLD populations (see Figure 4).
- Studies most often gathered information through consultation with individuals who represented the CLD participants (n = 7) or by literature review (n = 7).
- Half of studies specified a match between the linguistic and/or cultural background of at least some interventionists and participants.

Figure 4. Design Adaptation Strategies

(New Bilingual Intervention 31%; Culturally-Relevant Materials 27%; Translation of a Previous Intervention 27%; New Intervention in the Home Language 5%; Other Strategy 10%)

Implementation and Engagement
- 26 studies (65%) measured implementation fidelity – primarily with observations, checklists, logs, or questionnaires.
- 3 studies posited cultural or linguistic influences on participants' implementation of the interventions (Binger et al., 2008; Elder et al., 2003; Lim & Cole, 2002).
- 8 studies measured engagement and described strategies for increasing engagement of parents (n = 6) and teachers (n = 2).

Methodological Rigor

- Most studies (n = 29) used group experimental designs, but only 17 reported on group equivalence.
- Reporting on reliability of measures used in the study varied widely, and most studies (n = 25) did not comment on the validity of measures.
- Use of blind assessors was rarely reported (n = 7)
- Almost half of studies (n = 19) did not include effect sizes

Outcomes & Measures

- Most studies (79%) assessed child vocabulary as an outcome (see Figure 5)
- Fewer than 25% of studies administered language samples.
- Several studies (n = 19) assessed in English and the child's LOTE.
- When authors did not use bilingual procedures, they gathered information from teachers or parents to determine the language of assessment.

Figure 5. Vocabulary Measurement

(Not Assessed 20%; Receptive Vocab 29%; Both Recep & Exp Vocab 12%; Expressive Vocab; 39%)
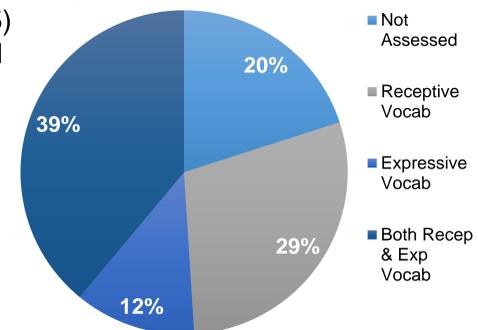
Effectiveness

- All studies reported positive effects on child English language skills (n = 20) and/or child skills in a LOTE (n = 17)
- A third of studies (33%) conducted statistical analyses to determine influence of linguistic factors, including children's initial language skills.
- Other studies posited a mismatch between the intervention and culture which may have affected child language outcomes.

Social Acceptance & Engagement

- 12 studies reported on the social acceptance of the intervention.
- 8 studies included a measure of participant engagement (usually parents).

Research Implications & Conclusions

There are several effective language-promoting interventions available, but a dearth of studies with participants from minority groups (e.g., African, Asian, and Native Americans), under age 3, with disabilities, and who speak a language other than English or Spanish. Future research should:
- Specify participant racial, ethnic, and linguistic characteristics (e.g., country of origin, age of exposure to a LOTE, language proficiency and dominance).
- Test interventions with different types of caregivers, and determine whether non-parental agents should match the CLD background of participants.
- Evaluate language-promoting interventions in the natural environment with materials representative of participants' language and cultural background.
- Develop measures for the home language and English, and come to consensus regarding the use of measures for comparison across studies.
- Critically examine relation between culture and effectiveness by gathering information on participant characteristics prior to intervention, designing interventions that build on participants' funds of knowledge, and measuring engagement and social validity throughout the intervention.