

Importance of Understanding Cultural Difference in Communication: within Minimally verbal children

Suma Suswaram, M.A.S.L.P.
Ph.D. Student
University of Kansas

OverView

- Study aims
- Literature review
- Measures
- Discussion: Potential problems

Specific Aims

1. To measure prelinguistic nonverbal language skills in African American and European American minimally verbal children
 - a) Nonverbal skills as observed
 - b) Nonverbal skills as reported by parents
2. To explore potential home environmental factors contributing to the development of nonverbal prelinguistic skills in children with minimally verbal skills in African American and European American communities

Introduction

- Culture, community and expectations shape language, communication and interactions (Everett, 2012)
- Racial groups within the U.S. carry within them a unique culture. Culture defined as a group's shared historical experienced (Morgan, 2002)
- African Americans, the second largest minority group, engage in communication drastically different from the dominant culture, European Americans
- Differences found in verbal speech, written language and nonverbal communication (Hecht et al., 2003).
- For example, African American Vernacular English (AAVE), a form of English with its own set of grammatical rule separate from Standard English subjugated to linguistic imperialism seen as degrades form of English (Williams et. al., 2009)

African Americans and Communication Disorders

- African American cultural experience stems from systemic, societal, cultural, and historical oppression (Schiele, 2005)
- They are under-represented in clinical (George, 2014), health and medical research (Shavers-Hornaday et al., 2010)
- With SLP, only 3.4% of professionals identify as African Americans including those from mixed racial background, however, 92.1% identify as white only (ASHA, 2017).

African American Language Environment

- Highly context driven, rely on nonverbal cues, physical context, and convey meaning different as compared to European American (Feldman, 2001)
- Do not talk extensively to their infants, or maintain the children's topic of conversation (Ward, 1971)
- Families not explicitly teaching children to communicate. Children simply imbedded into the adult world, and allowed to understand the rules of language and communication (Hammer & Weiss, 2000)
- Clarity on the values placed and value shift on nonverbal communication remain unclear

Minimal Verbal and culture

- Majority of individuals with minimally verbal abilities communication using nonverbal communication. **They produce few words either through speech, symbol or signs and not yet combining words into phrases, nonverbal communication**
- Cultural differences in nonverbal communication, derived through adult communication
- Research on prelinguistic nonverbal communication restricted to clinical settings and from between countries (Huttunen et al., 2013)
- Within country research on nonverbal differences harder to study and not available for African American communities

Impact

- Linguistic difference easier to detect than cultural differences on a languages.
 - Example, assessment adaptation for Spanish vs. English speaker is easier than Assessment adaptation for English speaking African Americans and European Americans
- Unidentified language differences based on culture can result in:
 - Implicit prejudices and bias exhibited by professionals (Washington, 1988; Morgan, 2002),
 - Lack of culturally appropriate assessments (Hyter & Salas-Provence, 2019)
 - Recommendation assuming language development and interaction style are based on the European American, middle-class, dyadic interaction model (Morgan, 2002)

Looking ahead....

- Cultural difference in language made visible to population serving African Americans
- Understand nonverbal communication in a cohesive manner by comparing dominant culture and the cultural-minorities
- Child rearing practices to increase appropriateness of intervention and inform recommendation

Current Study

Aim 1: Prelinguistic nonverbal language skills in African American and European American minimally verbal children

Triangulation of structure and unstructured parent interview, and objective direct observation using mixed research design

Instruments:

1. Semi-structure interview developed using ethnographic principles
2. Communication Matrix, a structured parent informant report measure
3. Communication Complexity Scale (CCS), an objective measure of expressive language skills for minimal verbal individuals (Brady et al., 2012, 2018)

Aim 2: Potential home environmental factors contributing to the development of nonverbal prelinguistic skills in minimally verbal children in African American and European American communities

- Theory informing the aim: Skinner's Language Acquisition Theory and Albert Bandura's Social Learning Theory (SLT)
- Home environment plays an important role in development of necessary skills for living, including prelinguistic skills (Collins et al., 2000)
- Home Observation for Measurement of the Environment (HOME) for early childhood (EC) which includes qualitative and quantitative

Semi-Structure Interview

- Passive and active interview
- Passive scheduled for first meet, increasing rapport and trust with family
 - Questions on demographic data, child's daily activities, communication interventions, medical history and family structure
- Active interview gathering information on parents views, values, child-rearing practices around nonverbal skills and child's nonverbal communication
 - Nonverbal communication questions - based on the inventory of documented prelinguistic nonverbal developed through literature review

Semi-Structured Interview

- I. Communication:
 - 1. Initial probes: Values, beliefs, child-rearing practices related to communication practices
 - 2. Eye contact
 - 3. Gestures use
 - 4. Facial Expression
- II. Expectations
- III. Support
 - 1. Emotional
 - 2. Social
- IV. Community and child

Communication Complexity Scale (CCS)

- CCS will be used to code child's expressive communication using 10-minute home video collected by the interviewer
- Based on parent report, most communicative episode of the child will video tapped
- Three videos of 10-minute duration will be collected
- Coding interval of 30 second observation and 10 second coding paradigm will be used to code the videos
- Primary coder – All videos, secondary coder – 30% of the videos
- All Coders will have attained 75% reliability in live coding environment

Communication Matrix

- Structured parent interview phone interview after interview after receiving
- To compare the semi-structured interview
- Communication Matrix is used to document expressive language skills for children with severe or multiple disabilities
- Only level I to IV will be administered due to its relevance to nonverbal communication

HOME measures

- Early childhood version, 55 items divided into eight subscales and 12 items
- The interview will be audio-recorded, and the second coder will code 30% of the interview
- Observation based information will be video tapped for language stimulation, physical environment, and Variety in Daily Stimulation, and Enrichment

Participants

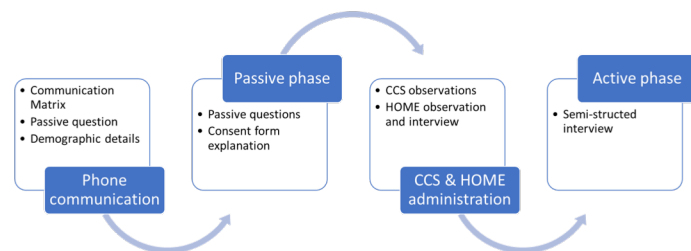
- Two groups, African American defined as individuals from African descent, and European Americans defined as European descent.
- Parent-child dyad (N = 20)
- Children between the age of 3 to 5 years
 - As prelinguistic nonverbal skills differs as the age increases (Brady et al., 2018)
 - prelinguistic difference within the early age will promote higher quality of life for African American children with minimally verbal abilities (Calderon, 2000)

Participant Inclusion Criteria

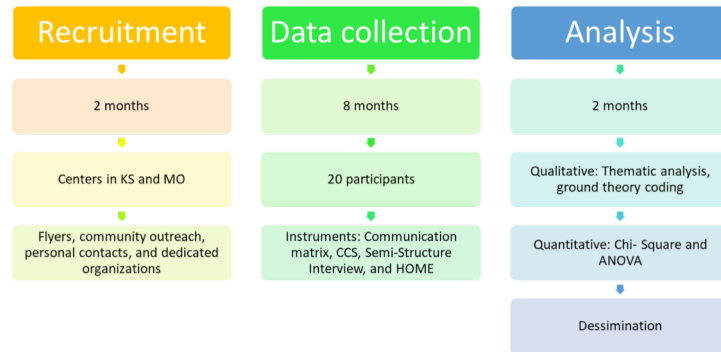
| Parent Inclusion | Participant number | Language | Role | Race | State(s) |
|---------------------------|--------------------|------------------|--------------------|-------------------------------------|--------------------|
| African American Parents | N = 10 | English Speaking | Primary care takes | One or both parent African American | Kansas or Missouri |
| European American Parents | N = 10 | English Speaking | Primary care takes | Both parents European American | Kansas or Missouri |

| Child inclusion | Number of participants | Verbal abilities | Age | Diagnosis | State(s) |
|---------------------------|------------------------|------------------|--------------|--|------------------------------|
| African American Children | N = 10 | Minimally verbal | 3 to 5 years | Developmental delay: diagnosed by professional | Medically Kansas or Missouri |
| African American Children | N = 10 | Minimally verbal | 3 to 5 years | Developmental delay: diagnosed by professional | Medically Kansas or Missouri |

Measures and Timeline



Overall Project Timeline



Potential Problems and discussion

- No statistically significant difference
- Recruitment difficulty and thoughts on possible recruitment
- Studying individuals with minimally verbal vs typically developing children
- Balance between using qualitative method and collecting large data
- Assessment data collection within home environment, HOME measure take a long time.
- Appropriateness of using HOME for African Americans
- Multiple measures and participant retainment
- Bias due to exposure and how to handle

References

- Everett, D. L. (2012). *Language: The cultural tool*. Vintage.
- Morgan, M. (2002). *Language, discourse and power in African American culture* (Vol. 20). Cambridge University Press.
- Hecht, M. L., Hecht, M. L., Jackson, R. L., & Ribeau, S. A. (2003). *African American communication: Exploring identity and culture*. Routledge.
- Henderson, C. D. (2018). *Factors Contributing to the Overrepresentation of Black Elementary Students in Special Education in Suburban Public School Settings*. Gwynedd Mercy University.
- Huttunen, K. H., Pine, K. J., Thurnham, A. J., & Khan, C. (2013). The changing role of gesture in linguistic development: A developmental trajectory and a cross-cultural comparison between British and Finnish children. *Journal of psycholinguistic research*, 42(1), 81-101.

References

- Williams, C. J., & McLeod, S. (2012). Speech-language pathologists' assessment and intervention practices with multilingual children. *International Journal of Speech-Language Pathology*, 14(3), 292-305.
- Peña, E. D. (2007). Lost in translation: Methodological considerations in cross-cultural research. *Child development*, 78(4), 1255-1264.