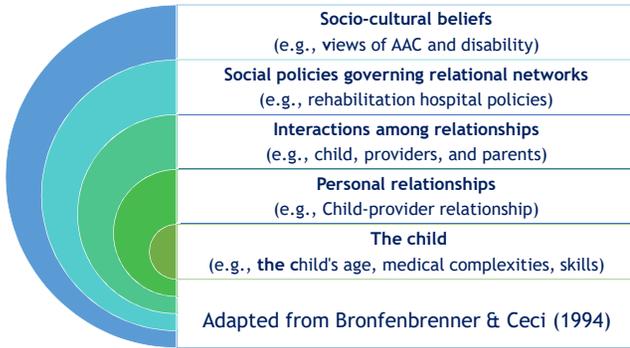


Rationale

- To deliver effective family-centered services and evaluate communication effectiveness within hospitals, one must first understand the complex contextual factors influencing this setting.



- Many children with complex communication needs rely on AAC to communicate with health care providers when hospitalized.
- Frequent communication breakdowns in this setting place these children at risk for negative experiences and poor medical outcomes (Blackstone, Beukelman, & Yorkston, 2015).
- Previously cited barriers in this setting: time constraints, limited staff communicative competence, limited access to AAC tools (Hemsley & Balandin, 2014; Hemsley et al., 2013a, 2013b).
- Little evidence is available to describe the communication patterns of children with complex communication needs in the hospital.
- Observational studies can describe salient features of inpatient interactions to inform future interventions (Hemsley & Balandin, 2014).

Aim

To describe the child-family-provider interaction patterns of a child with complex communication needs on an inpatient rehabilitation unit during natural hospital routines.

Methods

- Following informed consent, naturalistic video-recordings were collected during 10 days of a five-week period.
- Video-recordings occurred (a) between 7:00AM and 7:00PM, (b) during medical encounters, therapy sessions, and feeding sessions, and (c) involved the child and at least one provider
- Recording started upon the medical provider's entrance into the same room as the child participant and was discontinued if (a) an unconsented individual entered the shared space, (b) the provider exited the room, or (c) client privacy was required.

Child Participant - Mae

- 28-month-old girl with a history of prematurity (born 28 weeks gestation), developmental delays, and diagnosis of failure to thrive.
- Admitted to a rehabilitation hospital to participate in an intensive inpatient feeding program.
- Communicated primarily using manual signs, conventional gestures, speech approximations, graphic symbols, and challenging behaviors.

Adult Participants

- Mae's adult communication partners in the hospital (n=28)
- Mae's mother and father (n=2)
 - 26 health care providers: (a) 5 nurses, (b) 4 nursing assistants, (c) 1 physician, (d) 4 physical therapists, (e) 4 occupational therapists, (f) 6 speech-language pathologists, (g) 2 recreational therapists
 - Males (n=3), females (n=23)
 - Average age: 34.4.5 years (range = 23-63 years)

Setting

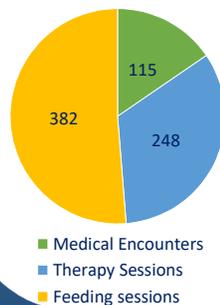
- A 20-bed inpatient pediatric unit in the Mid-Atlantic region of the United States of America.
- Communication contexts:



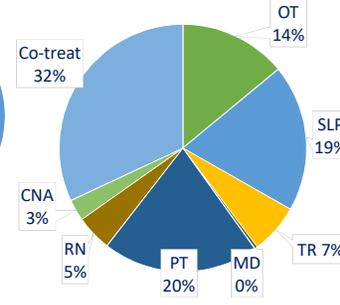
Results

- 49 video samples were collected (duration = 745 minutes)

Minutes of Interaction Across Contexts



Minutes of Interactions Across Profession



Results - Continued

Turn-By-Turn Analysis: For 10-minute samples of each child-family-provider interaction across 2 days, video-recordings were analyzed to describe (a) the conversational turns taken by Mae's mother and health-care providers and (b) Mae's intentional communication turns.

- Providers produced the most turns (54%) followed by Mae (33%), and her mother (12%).
- Of turns taken by adults, 35% were directed to another adult and 65% directed to Mae.
- 76% of provider turns were directed to Mae (24% to Mae's parents) while Mae's mother directed 18% of her turns to Mae (remaining 82% directed to providers).

Parent Involvement: Parents were present for 92% of encounters (683 minutes).

- Mae's mother was present 62.5% of interactions (465.8 min) and Mae's father for 29.2% of interactions (217.2 min).

Mae's Communication: Mae used multimodal communication in all sessions.

- Significant variability in the providers' interpretations of Mae's use of non-symbolic and unaided AAC methods.
- No attempts were made by an adult partner to use low- or high-tech AAC strategies.

Conclusion

- Mae encountered a myriad of medical staff when hospitalized.
- Providers tended to direct the interactions and performed with variable levels of accuracy and interpretation of Mae's unaided AAC attempts.
- Results of this study corroborate past findings (Hemsley & Balandin, 2014) for the need to improve the communicative competence of hospital staff, increase access to AAC tools, and improve collaboration among families and staff to optimize communication in this setting.
- Future research should consider the substantial number of communication partners, parent involvement, time demands, unique settings and activities within the hospital when designing AAC tools and trainings.

References

References are available upon request from the first author at jeg56@psu.edu

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