

## Perspectives of Families and School-Based Speech-Language Pathologists on the AAC Experience

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## Families' Experiences with AAC

- Family Impact
- Facilitators and Barriers to Successful Ongoing AAC Use

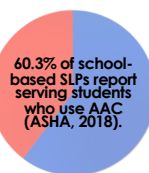
Facilitators	Barriers
Technology	
Inclusive Communities	Negative Attitudes
Respectful Interactions with Others	Limited Social Opportunities
Family Involvement	Poor Service Delivery (Knowledge, Availability, Collaboration)

- AAC and Culturally/Linguistically Diverse Populations

(Angelo et al., 2000; Crisp et al., 2014; Lund & Light, 2007; McNaughton et al., 2008; Parette, 2000)

## SLPs' Experiences with AAC

- SLPs may not receive sufficient preservice education in AAC
- Other time and caseload demands limits time for collaboration and training others
- SLPs also have their own opinions as to what factors facilitate or hinder successful AAC use



"Parents are willing to get them. Parents are willing to buy them, but parent's aren't willing to use them at home. . . and I don't think it's maybe that they don't value it, maybe they don't realize the potential of what could be said and done."

(Bailey et al., 2006, p. 148)

(Bailey et al., 2006; Costigan & Light, 2010; Johnson et al., 2006; Kent-Walsh et al., 2008; Marvin et al., 2003; Soto et al., 2001)

## Family-Centered Services

- Provide information the family needs to make informed decisions
- Respect family goals and priorities; provide individualized services
- Sensitive to family's needs and demands, acknowledging that AAC impacts family roles
- Support families in integrating SGD into meaningful family routines

*If SLPs are providing family-centered services, families should theoretically be satisfied with the services they receive.*

(Bailey Jr. et al., 2006; Dunst, 2002; Mandak et al., 2007; Parette et al., 2000; Shelton & Stepanek, 1994)

## But...

- Families still experience dissatisfaction with AAC services
- Implementation gap between ideal and actual practice
- Parents perceive family-centered services to be occurring less frequently than SLPs

"Nobody sat down and said this is why we use AAC and this is what it is going to mean in the future."  
(Marshall & Goldbart, 2008, p. 94)

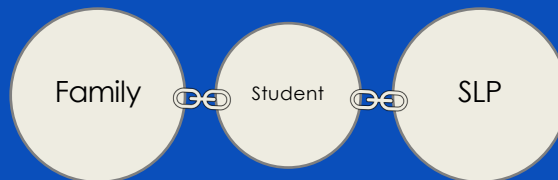
"My daughter did not receive help from an SLP to learn her device. We looked for two years before settling for a speech therapy student. I felt like we were pulling her [speech therapy student] along in baby steps."  
(McNaughton et al., 2008, p. 49)

(Crais et al., 2006; Crisp et al., 2014; Mandak & Light, 2017, 2018; Marshall & Goldbart, 2008; McNaughton et al., 2008)

We can't compare what we know about SLP and family perspectives equally.

SLP PERSPECTIVES  $\neq$  FAMILY PERSPECTIVES

## PURPOSE



Compare Perspectives of Paired Parents and SLPs

## Procedure

- Recruited Both Families and SLPs
  - 250 School Districts
  - Social Media
  - ASHA SIGs
  - SGD Sales Representatives

tobii dynamox

PRC  
Prentke Romich Company

Saltillo

## Survey

- Online Questionnaire via Qualtrics
- 56-61 Questions
- Families and SLPs answer the same questions about:

Assessment

Support  
Provided

Student  
Goals

Use of the  
SGD

Knowledge  
&  
Perceptions

Family-  
Centered  
Services

## Comparing Perspectives: Percent Agreement



### Strict Agreement

Answers between SLP and family are exactly the same

### Loose Agreement

Answers are similar but not exact (typically within 1 point on any given scale)

*Loose agreement was added to the strict agreement that had already been established within the pair.*

Crais et al. (2006): percentage of yes/no questions answered in agreement

## Participants

### Paired

- 13 Family-SLP Dyads
- All family participants were mothers

### Unpaired

- Additional 31 SLPs
- Additional 9 Parents

Student's Demographic Information

Pair	Student's Current Grade <sup>1</sup>	SGD	Grade Student Started Using SGD <sup>1</sup>	Diagnosis <sup>1</sup>	State
1	1 <sup>st</sup>	iPad with TouchChat	Pre-K	Autism	PA
2	K	iPad with Go Talk NOW <sup>1</sup> and/or Wego with TouchChat <sup>2</sup>	Pre-K	Salla disease	SD
3	4 <sup>th</sup>	Tobii Dynavox Indi	4 <sup>th</sup>	Autism	SD
4	1 <sup>st</sup>	PRC Accent	1 <sup>st</sup>	Autism	NH
5	Pre-K	iPad with TouchChat	Pre-K	Apraxia of Speech and Sensory Processing Disorder	IL
6	Pre-K	PRC Accent	Pre-K	Autism	IL
7	4 <sup>th</sup>	PRC Accent	Pre-K	Autism and Corpus Callosum disorder	IL
8	K	Saltillo NOVA Chat	Pre-K	Down syndrome	IL
9	1 <sup>st</sup>	iPad with TouchChat	K	Apraxia of Speech	IL
10	Pre-K	PRC Accent	Pre-K	Autism	MO
11	K	Forbes Pro Slate with Proloquo2Go	Pre-K	Autism	ID
12	5 <sup>th</sup>	iPad with Speak for Yourself <sup>2</sup> and Sono Flex <sup>1</sup>	3 <sup>rd</sup>	Autism	VA
13	6 <sup>th</sup>	iPad with TouchChat	6 <sup>th</sup>	Apraxia of Speech	CT

<sup>1</sup>As reported by the student's parent

<sup>2</sup>As reported by the student's SLP



## RESULTS

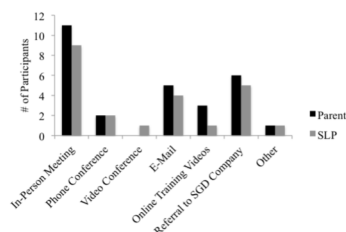
### Assessment

- Average Agreement: 90% (range: 66.6-100%)
- Two pairs disagreed on the level of family involvement
- All agreed SGD was a "good fit", but specific information about other systems trialed during assessment was not gathered
- In more than half of pairs, SLPs had not conducted the assessment
- Wait time for assessments

### Support Provided

- Average Agreement: 62% (range: 30-88.9%)
- Domain with Lowest Agreement
- Parents and SLPs have different support preferences

*How Support was Provided*



### Student Goals

- Average Agreement: 81% (range: 46.7-100%)
  - Majority of Pairs Satisfied with Goals
  - Four Pairs Did Not Agree on Parent Involvement
    - Parents Reported Greater Family Involvement than SLPs did
  - Oral Speech vs. AAC
- 
- Majority Unpaired SLPs Satisfied With Goals
  - Majority of Unpaired Parents Dissatisfied; Goals Not Meaningful/Relevant
    - Some Unpaired Parents and SLPs Reported Family Were Not Consulted

## Use of SGD

- Average Agreement: 78% (range: 40-100%)
- Type of Device
  - Use of iPads and Communication Apps
- Facilitators- Team Collaboration and Buy-In
- Barriers
  - 5 Pairs Agreed on Barriers
  - Most-Cited Barriers For Pairs and Unpaired SLPs
    - Teachers'/Paraprofessionals' Knowledge of the SGD
    - Family's Knowledge of the SGD
    - Student's Knowledge of the SGD
  - Most-Cited Barriers for Unpaired Parents
    - Teachers'/Paraprofessionals' Knowledge of the SGD
    - SLP's Knowledge of the SGD
    - Availability of Device Throughout the Day

## Knowledge and Perceptions of SGD

- Average Agreement: 78% (range: 50-92.9%)
  - Knowledge: Editing, Navigating, Support Student, Handle Technology Breakdowns
    - Pairs Agreed More on SLP's Knowledge than Family's Knowledge
  - Pairs Agreed More on SLP's Perceptions of Burden and Stigma
- 
- Unpaired Parents Reported their SLP was Not Knowledgeable

## Family-Centered Services/Family-SLP Relationship

- Average Agreement: 78% (range: 46.2-100%)
- Seven Pairs Satisfied With Communication

Average Levels of Enjoyment and Frustration				
	Enjoyment		Frustration	
	Paired	Unpaired	Paired	Unpaired
Parents	8.3	3.4	1.9	6.9
SLPs	8.9	7.5	2.3	3

Scale: 1-10

Pair	The SLP understands the...					
	Family's background	Family's challenges with having a child who uses an SGD	Family's priorities for their child's communication	Family's concerns about the SGD	Family's preferences	Student's unique needs
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
Total Pairs in Agreement <sup>1</sup> (%)	9 (69.2%)	12 (92.3%)	10 (76.9%)	10 (76.9%)	10 (76.9%)	10 (76.9%)

	Strict agreement
	Loose agreement (off by 1)
	Do not meet loose agreement requirements, but rate on the same half of the scale (off by more than 1)
	Do not agree; rate on opposite ends of the scale (e.g. disagree vs. agree)
	Agreement could not be achieved; one party reported neutrally

## Unpaired SLPs

	The SLP understands the...					
	Family's background	Family's challenges with having a child who uses an SGD	Family's priorities for their child's communication	Family's concerns about the SGD	Family's preferences	Student's unique needs
Strongly agree	7 (22.6%)	8 (25.8%)	8 (25.8%)	7 (22.6%)	7 (22.6%)	9 (29.0%)
Agree	15 (48.4%)	8 (25.8%)	13 (41.9%)	16 (51.6%)	15 (48.4%)	15 (48.4%)
Somewhat agree	7 (22.6%)	11 (35.5%)	8 (25.8%)	4 (12.9%)	6 (19.4%)	6 (19.4%)
Neither agree nor disagree	1 (3.2%)	3 (9.7%)		3 (9.7%)	2 (6.5%)	
Somewhat disagree	1 (3.2%)	1 (3.2%)	2 (6.5%)	1 (3.2%)	1 (3.2%)	1 (3.2%)
Disagree						
Strongly disagree						

## Unpaired Parents

	The SLP understands my...					
	Family's background	Family's challenges with having a child who uses an SGD	Family's priorities for my child's communication	Family's concerns about the SGD	Family's preferences	Child's unique needs
Strongly agree	3 (33.3%)	2 (22.2%)	2 (22.2%)	1 (11.1%)	1 (11.1%)	1 (11.1%)
Agree	4 (44.4%)	1 (11.1%)		1 (11.1%)	2 (22.2%)	1 (11.1%)
Somewhat agree	1 (11.1%)					1 (11.1%)
Neither agree nor disagree					1 (11.1%)	
Somewhat disagree		2 (22.2%)	1 (11.1%)	1 (11.1%)	1 (11.1%)	1 (11.1%)
Disagree		3 (33.3%)	1 (11.1%)	4 (44.4%)	3 (33.3%)	2 (22.2%)
Strongly disagree	1 (11.1%)	1 (11.1%)	5 (55.6%)	2 (22.2%)	1 (11.1%)	3 (33.3%)

## Overall Agreement Within Pairs

Pair	Number of Questions Included (n)	Strict Agreement	Strict + Loose Agreement
1	59	50.8%	81.4%
2	63	46%	84.1%
3	59	42.4%	69.5%
4	63	33.3%	65.1%
5	63	39.7%	88.9%
6	63	73.1%	93.4%
7	59	40.1%	67.8%
8	63	44.4%	73%
9	63	39.7%	73%
10	54	33.3%	66.7%
11	59	50.8%	74.6%
12	59	44.1%	81.4%
13	63	39.7%	74.6%
Average		44.4%	76.4%

## Future Research

- Larger and More Diverse Sample Size
- Any and All Domains Could be Explored Further
  - Assessment- Process
  - Support- What is Most Effective
  - Knowledge & Perceptions- How to Improve/Trainings
- Improve Data Analysis

## DISCUSSION

Recruitment of Dyads  
Data Collection Methods  
Analysis of Dyadic Data

### Recruitment of Dyads

- Selection Bias in Pairs
  - More likely to recruit pairs when satisfied
  - Responses from unpaired parents not reflected in any paired responses
  - Difficult to recruit families when AAC is not a priority
  - Difficult to get SLPs who view AAC negatively to participate
- 239 individuals responded to the survey
  - 69 participants (29%) completed the survey
  - 121 participants left at the survey definition of an SGD or mention of a code to match family and SLP responses of a specific student

### Data Collection Methods

Are there other formats that would be more appropriate to capture the experiences of and relationship within pairs?

### Analysis of Dyadic Data



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