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Exploring Speech Experiences, CPIB Scores, and AAC Assessment Experiences of Autistic AAC Users with Intermittent, Unreliable, Insufficient, and/or Expensive Speech

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Presenter Information

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Exploring Speech Experiences, CPIB Scores, and AAC Assessment Experiences of Autistic AAC Users with Intermittent, Unreliable, Insufficient, and/or Expensive Speech

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BACKGROUND

- Autistic speaking adults express that access to augmentative and alternative communication (AAC) supports communicative choice¹
- Speaking autistic adults have reported that AAC was not offered to them as children²
- Non-autistic professionals do not possess firsthand knowledge of the autistic internal experiences³
- Autistic speaking experiences⁴
 - Intermittent speech
 - Unreliable speech
 - Insufficient speech
 - Expensive speech⁵
- To date, no tools exist to measure autistic speaking experiences
- The Communication Participation Item Bank (CPIB)⁶ may be applicable to measuring autistic speaking experiences

PURPOSE

To investigate autistic adults' AAC assessment experiences and explore if a modified version of the Communication Participation Item Bank (CPIB) questionnaire could be an effective tool to measure autistic speaking experiences

METHODS

- A survey composed of 62 quantitative and qualitative questions was distributed to autistic AAC user platforms
- Participants for this study were:
 - 18+ years old
 - Autistic
 - Used AAC
 - Had intermittent, unreliable, insufficient and/or expensive speech
 - Lived in the U.S.
- Survey questions included:
 - Speech and AAC assessment experiences
 - Modified CPIB short-form questionnaire
 - Perceptions of the ability of the CPIB questionnaire to capture autistic speech experiences
- Analyses were performed using Python with scipy.stats, sklearn, and statsmodels libraries

RESULTS

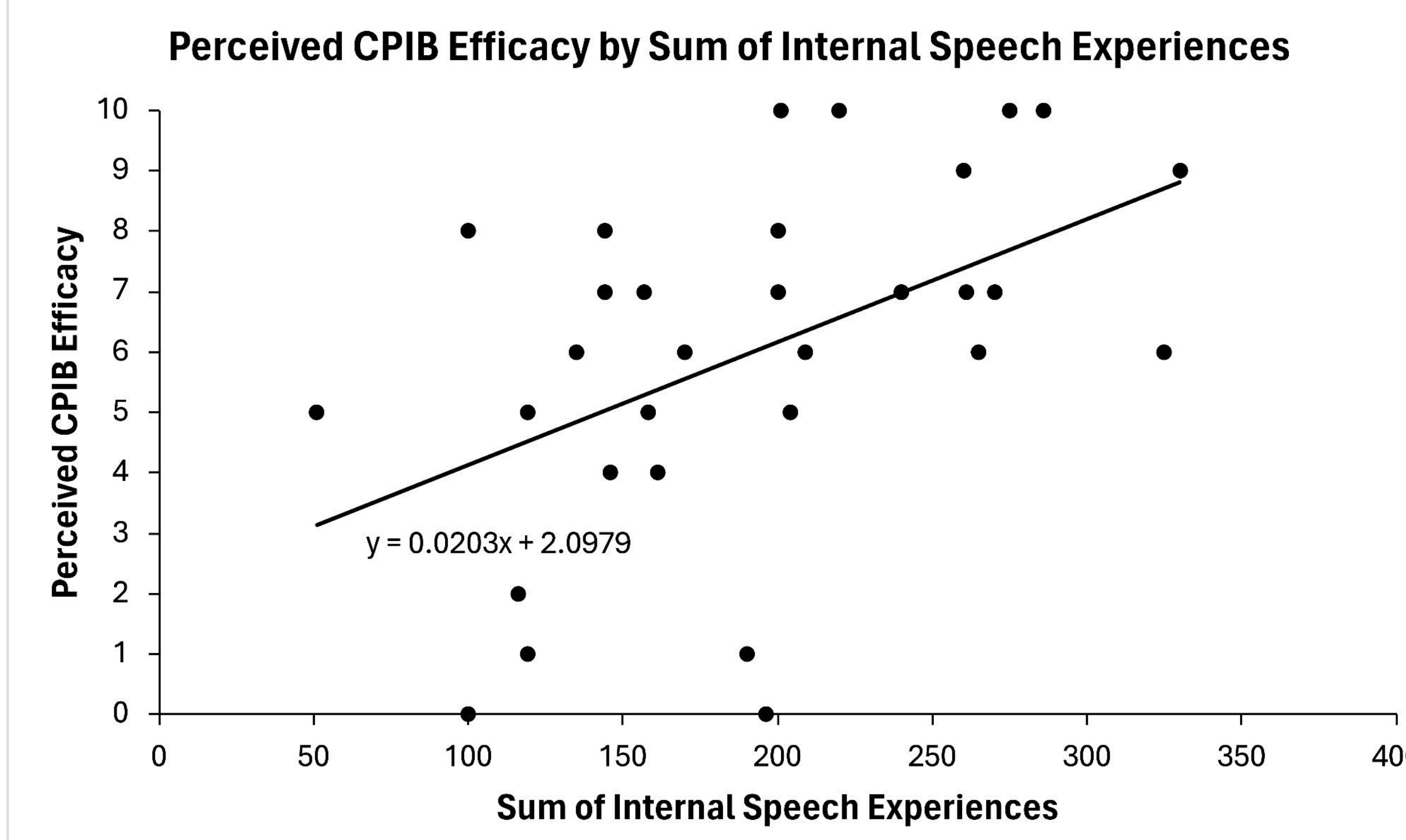
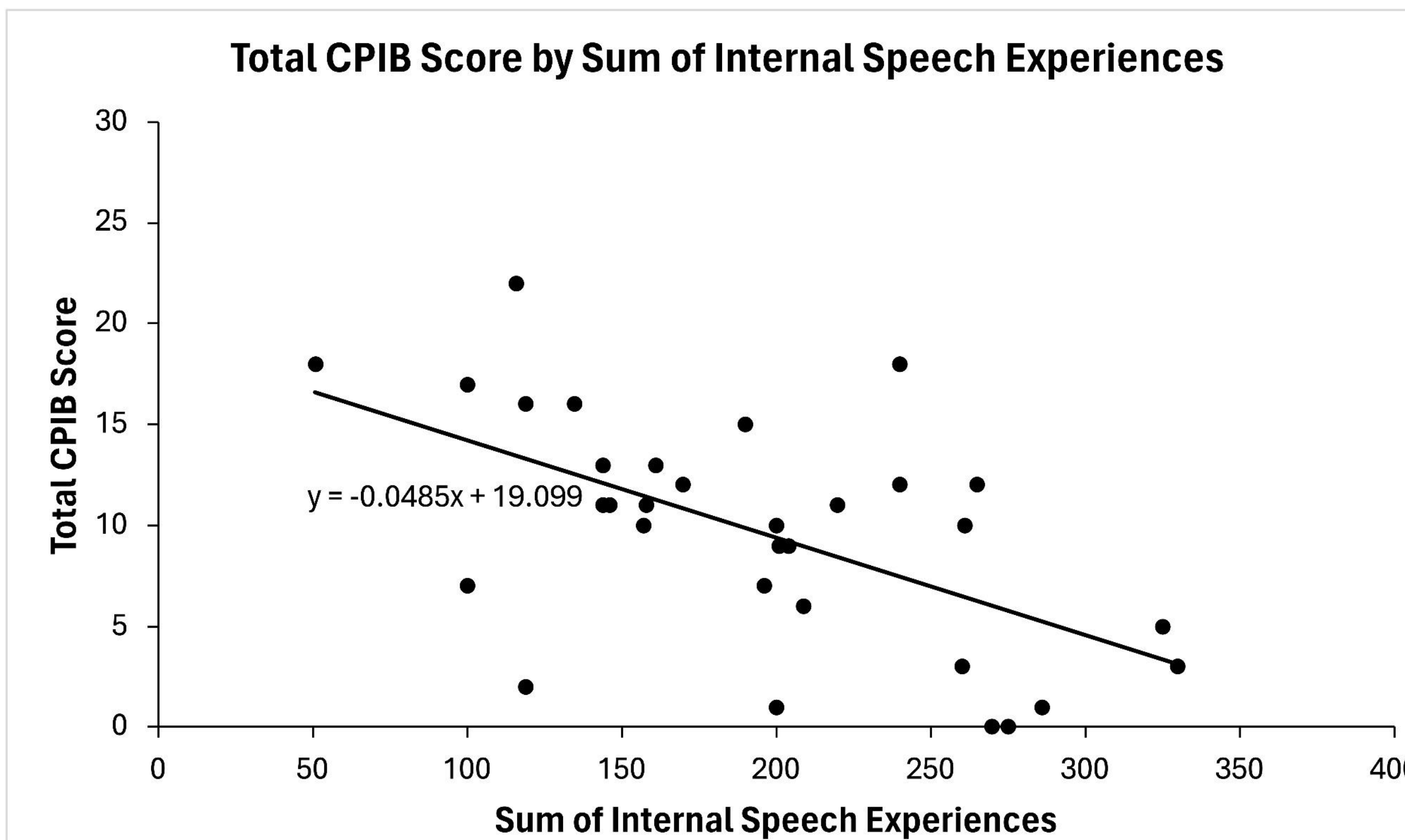
Demographics of Participants

Age	Frequency	% of Respondents
18 - 25 years	20	56%
26 - 35 years	9	25%
36 - 45 years	4	11%
46 - 55 years	2	6%
55+ years	1	3%
Autism Diagnosis		
Professionally diagnosed	29	81%
Self-identified	7	19%
Education Level		
Some high school	2	6%
High School	13	36%
Bachelor's Degree	7	19%
Master's Degree	5	14%
PhD or higher	7	19%
Trade school	1	3%
Prefer not to answer	1	3%
Other	0	0%
How many have had an AAC assessment with a licensed SLP?	6	17%

Spearman Correlation Matrix

Speech Experiences	Intermittent	Unreliable	Insufficient	Expensive	CPIB
Intermittent	1	0.41	0.27	0.34	-0.43
Unreliable	0.41	1	0.38	0.3	-0.39
Insufficient	0.27	0.38	1	0.07	-0.45
Expensive	0.34	0.3	0.07	1	-0.31
CPIB	-0.43	-0.39	-0.45	-0.31	1

Significant correlations (p<0.05) noted in bold



Variables	CPIB Total Score	Perceived CPIB Efficacy
	Coefficient (Standard Error)	
Constant	19.0994* (2.571)	2.0979 (1.351)
Sum of Speech Experiences	-0.0485* (0.013)	0.0203* (0.007)
R squared	0.332	0.241
Adj. R squared	0.31	0.216
F-stat (p value)	14.93 (p=0.001)	9.517 (p=0.004)
Observations	32	32

* = p < 0.05

DISCUSSION

- As the sum of intermittent, unreliable, insufficient, and expensive speech experiences increased, the impact on participation increased, as did the perceived effectiveness of the CPIB tool
- Regression results suggest that other factors may be impacting the CPIB score (e.g., environmental factors, health conditions, etc.)
- Qualitative analyses are still needed to better understand on autistic speech experiences and how these align with CPIB ratings
- Further research is needed to explore potential barriers behind speaking autistic adults accessing formal AAC assessments
- Limitations include:
 - Small sample size
 - Participants may not recall assessment experiences if conducted many years ago

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