Shifting Focus: The Importance of Participation in AAC and Autism

**World Health Organizations (2001) Factors Defined**
- Disability and healthy functioning encompass different ends of a fluid and complex continuum.
- Factors contributing to healthy functioning and disability include:
  - Body structures & functions
  - Activity
  - Participation
  - Environmental factors
  - Personal factors (World Health Organization, 2001)

**Augmentative and Alternative Communication (AAC) for Adolescents and Adults with Autism Spectrum Disorder (ASD)**
- Augmentative and Alternative Communication (AAC) is one environmental factor that can benefit individuals with autism spectrum disorder (ASD) and communication disability (Mirenda & Jacobo, 2008).
- Despite the benefits of AAC, adolescents and adults with ASD rarely participate in school, social, or community settings as fully and frequently as their typically-developing counterparts (Roux et al., 2013).

**The Current Study**
- The goal of the current study was to explore AAC interventions that have been completed for adolescents and adults to date to determine which factor(s) have been the focus of intervention.
- If participation is not a focus of intervention, shifting focus toward it in intervention may help support better outcomes relative to school, social, and community participation for adolescents and adults with ASD.
Method: Article Identification

- Systematic review, with a descriptive look at the ICF factors and communication functions and competencies addressed in AAC intervention research for individuals with ASD aged 11 and older
- Followed PRISMA (2009) guidelines
- Searched four databases:
  - PubMed
  - PsycINFO
  - PsycArticles
  - ERIC

Method: Article Inclusion

- Inclusion criteria:
  - Peer-reviewed
  - Published in or after 1995
  - An original intervention study
  - Involved AAC
  - Affected population were only individuals with ASD at or above the age of 11
  - Addressed communication disability
  - Contained analyzable results
- Inter-rater reliability was 95.8% for all variables coded

Results: Flow of Articles

- 413 publications were identified through electronic database search. 4 publications were identified through additional sources
- 47 publications were subjected to full-text analysis for eligibility
- 38 intervention studies from 34 publications met inclusion criteria for the final data analysis
- Of included studies:
  - A total of 38 unique participants were included
  - All studies utilized single-subject methodology

Results: Focus of AAC Interventions for Adolescents and Adults with ASD

- Of the interventions utilized within the included studies:
  - 13 directly addressed the activity factor
  - 4 directly addressed participation
  - 3 directly addressed environmental factors

Heat Map of AAC Intervention Feedback Adolescents and Adults with ASD

- Heat map showing the number of interventions and feedback for adolescents and adults with ASD.
The current study suggests that participation in activities may be an under-addressed influence on the functioning of adolescents and adults with ASD.

Additionally, a recent review of IEPs found that few IEP goals addressed participation in school or other activities (Klang et al., 2016).

Focusing on participation in intervention and progress measurement may improve important life outcomes related to participation for adolescents and adults with ASD who use AAC.

The student will independently use her communication device for the function of information transfer five times in a 90-minute small group classroom activity.

While modeling from the clinician as needed, the student will initiate and maintain a conversation by using her device to make at least three partner-directed comments during a peer interaction.

The student will demonstrate her linguistic (i.e., orthographic) and strategic competence by typing her keyboard to repair a communication breakdown with rehearsed requesting from the clinician (e.g., pretending to keyboard) in 80% of opportunities in which it is required during a 30-minute observation in her work setting.


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