Scoping Review

BACKGROUND AND RATIONALE

Peer support models offer a promising, person-centered approach to enhancing communication, self-efficacy, and social connectedness for individuals who use augmentative and alternative communication (AAC). These models are grounded in the theory that reciprocal relationships and shared lived experience provide a mechanism for behavior change (Substance Abuse and Mental Health Services Administration, 2023; Myrick & del Vecchio, 2016). Peer support allows AAC users to draw on shared experiences with communication disabilities to help one another achieve meaningful goals (McLeod, 2024). Activities such as interpersonal sharing, mentoring, mutual self-help, and networking may help reduce feelings of social isolation, improve communication skills, and mitigate barriers to accessing services. To advance peer support intervention development and ensure models are appropriate, acceptable, and effective for individuals who use AAC, a synthesis of the peer support literature in this space is urgently needed. A comprehensive understanding of the current literature is needed to identify research gaps, inform future studies, and guide the development or adaptation of peer support models tailored to AAC users.

PURPOSE STATEMENT AND RESEARCH QUESTIONS

The purpose of this scoping review was to explore the characteristics of peer support research for individuals who use or need AAC. Our aims and research questions (RQ) were:

Aim 1: Describe the models and settings of peer support for AAC users.:

- RQ 1.1. What models of peer support (content, structure, formats, delivery) have been implemented for individuals who use AAC?
- RQ 1.2: In what settings are peer support models most frequently implemented?

Aim 2: Identify the populations involved and roles of stakeholders.

- RQ2.1: What populations (diagnostic groups, age groups) are represented in peer support literature?
- RQ2.1: What is the role of family members, peers, and professionals in AAC peer support models?

Aim 3: Summarize reported outcomes and identify research gaps.

- RQ 3.1 What outcomes are commonly reported in AAC peer support research (e.g., social connection, communication, speech-language, advocacy).

- RQ 3.2: Are there gaps in the literature regarding specific age groups, speech-related disabilities or marginalized AAC user populations?

METHOD

This review followed the PRISMA framework for scoping reviews (PRISMA-SC; Tricco et al., 2018), our protocol is available on Open Science Framework (OSF; Quinn et al., 2025). To be eligible for the review, papers had to (a) focus on individuals who used or needed AAC and (b) described one or more peer support activities, programs or models. In this review, the term "peer" refers to individuals of any age who share a personal experience with a speech or communication-related disability. Interventions that grouped AAC users with age-matched peers without communication-related disabilities were excluded because the use of aged-matched peers who do not share the lived experience of disability in AAC interventions eliminates a significant component of the proposed mechanism of change (Pfieffer et al., 2021, 2024). In the literature, such interventions are frequently labeled "peer mediated AAC interventions", "communication partner instruction" or "peer-networked interventions" and have been evaluated in several reviews (e.g., Biggs & Robinson, 2023; O'Donoghue et al., 2021; Therrien et al, 2016). Quantitative, qualitative and mixed-method studies were included in order to consider different aspects of evaluating peer support. Broad inclusion criteria were set to account for the natural variation in etiology and differences in language and communication functioning among individuals who use AAC and to obtain a comprehensive sample of peer support activities.

The search strategy included comprehensive database searchers (PubMed, PsycINFO, SCOPUS, and ERIC using MeSH terms, and key words related to "AAC" and "peer support" followed by backward and forward citation searching of included articles. The initial search was performed in November 2024 and updated in January of 2025, yielding 1,309 articles. The study team created the screening and data extraction tools (available on OSF) and piloted them with five studies prior to selecting sources and extracting data from included studies. Covidence, a web-based software platform for systematic reviews was used to complete title and abstract screening, full text screening, and data extraction. Each study was screened independently by two reviewers. We resolved disagreements on study selection and data extraction by consensus and discussion with other reviewers if needed. We extracted information from each study to describe the study design, characteristics of participants, and the content, delivery, and structure of existing programs, AAC community engagement and leadership in the program, reported outcomes, barriers to participation, and accommodations to encourage participation.

RESULTS

Fifteen studies met the eligibility criteria and were included in the scoping review. Most studies used qualitative designs (53%) or quasi-experimental designs (20%) and focused on adults (60%). See Appendix I for study, participant, and outcome characteristics tables.

Aim 1: Describe the models and settings of peer support for AAC users

RQ 1.1: What models of peer support (content, structure, formats, delivery) have been implemented for individuals who use AAC?

Peer support was delivered in a variety of ways—often online, and included activities like instruction, group discussion, peer counselling, mutual self-help, and shared social experiences. Common activity types included semi-structured discussions and unstructured conversations (each reported in 47% of studies), followed by education/instruction (40%), mutual self-help (27%), and peer counseling (20%). Fewer studies incorporated role-playing or structured exercises (13%), developing goals or treatment planning (13%), or networking (7%).

Delivery formats were split evenly between online (40%) and in-person (40%), with a smaller proportion using blended approaches (13%). Meeting formats also varied: nearly half (47%) included synchronous activities, while others used asynchronous formats (20%) or a combination of both (20%). The frequency and duration of programs were frequently underreported, with over half of studies not specifying total number of sessions (53%) or total duration (47%).

RQ 1.2: In what settings are peer support models most frequently implemented?

The most common peer support contexts included online forums, Facebook groups, or online simulations (33%), recreational activities (13%), group interventions or therapy (13%), and camps (7%). Other formats such as children's events and classes and e-mentoring programs were also used but reported less frequently. Some programs utilized a combination of small and large group activities (7%), while others involved dyads (13%) or small groups of 3–20 participants. However, a large portion of studies (53%) did not report group size, indicating variability or gaps in reporting.

Aim 2: Identify the populations involved and roles of stakeholders

RQ 2.1: What populations (diagnostic groups, age groups) are represented in peer support literature?

Participants represented a range of communication-related disabilities. The most frequently included populations were individuals with cerebral palsy (40%), aphasia (27%), traumatic brain injury (13%), and autism (13%). Other groups included individuals with ALS, Down syndrome, deaf/hearing impairments, intellectual and

developmental disabilities, dementia, and speech-language delays, each appearing in 7–13% of studies.

Most studies (80%) did not report race or ethnicity, although a minority included participants who were Black, Indigenous, or People of Color (13%) and/or Hispanic or Latino/a/x (13%). Similarly, only one study reported on participant income or socioeconomic status, and two studies (13%) included multiply marginalized people with disabilities. This suggests that the current literature on peer-support programs is not representative of the AAC user population, and points to a need for research inclusive of racially, ethnically, and linguistically diverse individuals.

Age data were inconsistently reported, though programs included participants under 12 (7%), ages 13–18 (13%), ages 31–50 (27%), and 51–65 (20%). This indicates a need for more age-diverse research, particularly in middle childhood and adolescence.

RQ 2.2: What is the role of family members, peers, and professionals in AAC peer support models?

Stakeholder involvement varied across studies. Peer mentors or facilitators were included in 27% of studies, and communication partners (e.g., family, peers, or caregivers) were included in another 27%. Program leadership was most often provided by a professional facilitator or instructor (40%), while others were peer-led (13%) or co-facilitated by professionals and peers (7%). Community engagement was also documented: individuals who use AAC were involved in program evaluation (27%), program delivery (20%), and program design (13%).

Aim 3: Summarize reported outcomes, barriers/facilitators, and identify research gaps

RQ 3.1: What outcomes are commonly reported in AAC peer support research?

Outcomes were underreported across studies. Only 27% of included studies specified outcome measures. Among those, the most frequently reported domains were social connectedness (13%), speech-language or communication outcomes (7%), and program fidelity (7%). No studies reported outcomes related to autonomy, leadership, advocacy, or service access.

RQ 3.2: What barriers and facilitators are reported for participation in AAC peer support programs?

Specific barriers and facilitators were not systematically reported in the table. However, the high prevalence of online and blended delivery formats suggests a response to accessibility needs and flexibility. The limited demographic reporting and

underrepresentation of certain disability groups suggest potential barriers related to equity, inclusion, or program fit.

RQ 3.3: Are there gaps in the literature regarding specific age groups, speech-related disabilities, or marginalized AAC user populations?

Several gaps were evident. Key demographic variables, including race/ethnicity, socioeconomic status, and gender, were often not reported. Most studies failed to include younger children or adolescents in significant numbers, and only 13% included multiply marginalized AAC users. Additionally, despite including various communication disabilities, the overall representation of speech-language impairments (e.g., speech delay, aphasia) was relatively low. These gaps highlight a need for greater inclusion and reporting transparency in future AAC peer support research.

Tables for Scoping Review

Characteristics of Included Studies k = 15

Characteristics	k	%	Characteristics	k	%
			Study Characteristics		
Publication type			**Year of publication**		
Peer-reviewed Journal	15	100	2000- 2010	3	20
Country			2011- 2020	8	53
Australia	1	7	2021- 2025	4	27
Canada	2	13	**Design**		
Israel	1	7	Randomized control trial	1	7
Sweden	2	13	Single-case experimental design	1	7
United Kingdom	1	7	One group pre-test post-test design	3	20
United States of America	8	53	Qualitative research design	8	53
			Mixed methods design	1	7
			Case report	1	7
			Participant Characteristics		
Sample size			**Population**		
≤ 20	11	73	Amyotrophic lateral sclerosis	2	13
21 - 60	2	13	Aphasia	4	27
>60	1	7	Primary progressive aphasia	2	13
Not reported	1	7	Autism	2	13
Number of target participants			Cerebral palsy	6	40

≤10	8	53	Dementia	1	7
11- 25	1	7	Down syndrome	2	13
25 - 50	3	20	Deaf/ hearing impairment	1	7
Not reported	3	20	Intellectual and developmental disability	2	13
Average target participant age (years)			Speech and language delay	2	13
<12	1	7	Traumatic brain injury	2	13
13-18	2	13	**Race/Ethnicity**		
31-50	4	27	Not reported	12	80
51-65	3	20	>60% White	3	20
>65	2	13	Included participants who are Black, Indigenous, and people of color	2	13
Not reported	3	20	Included Participants who are Hispanic or Latino/a/x	2	13
Included mentors or peer facilitators	4	27	**Percent Male**		
Included communication partners	4	27	<50	4	27
Communication modalities used			50 - 70	8	53
Oral speech/ mouth words	7	47	Not reported	3	20
Facial expressions	3	20	**Social determinants of health**		
Gestures	4	27	Included multiply marginalized people with disabilities	2	13
Graphic symbols	6	40	Reported on participant income or socioeconomic status	1	7
ASL/ manual signs	3	20			
Communication board	9	60			
Speech generating device/ Voice output communication aid	3	20			
Pen/paper	5	33			
Not reported					

Peer Support Program or Activity Features

Activity Type			**Program Features**		
Camp	1	7	Education/ instruction	6	40
Recreation	2	13	Semi-structured discussion	7	47
Online forum, Facebook group, or online simulation	5	33	Unstructured conversation	7	47
E-mentoring program	3	20	Role playing or structured exercises	2	13
Children's events and classes	2	13	Peer counseling	3	20
Group intervention/ therapy	2	13	Mutual self help	4	27
Program Delivery			Developing goals/ treatment planning	2	13
Blended (In-person and online)	2	13	Mentoring	2	13
In-person	6	40	Networking	1	7
Online	6	40	Shared social activities	3	20
			Not reported	3	20

Not reported	1	7	**Group Size**		
Meeting Type			Dyads (peers were paired)	2	13
Both synchronous and asynchronous	4	20	3- 5 participants	1	7
Asynchronous	3	20	5 – 20 participants	3	20
Synchronous	7	47	Combination of various groups (small	1	7
Not reported	1	7	and large group activities)		
Total Number of Meetings/Sessions			Not reported	8	53
5- 15	5	33	**Activity or Program Frequency**		
> 15	1	7	Weekly or biweekly	4	27
Not reported	8	53	Varies	2	13
Total Duration			Not reported	7	47
< 1 – 12 weeks	6	40			
13 – 24 weeks	1	7			
Not reported	8	53			

Community Engagement and Leadership

Community Engagement			**Program leadership**		
People who use AAC were involved in the design of the program	2	13	Professional facilitator or instructor	6	40
People who use AAC were involved in the delivery of the program	3	20	Co-facilitated by peers and professionals	1	7
People who use AAC were involved in the evaluation of the program	4	27	Peer-led	2	13
			Not reported	5	33

Outcomes

Reported outcome measures	4	27	Outcome Domains		
No outcome measures reported	11	73	Social connectedness	2	13
			Speech-language or communication	1	7
			Program fidelity	1	7