

Occupational Therapy Practice Guidelines for Autistic People Across the Lifespan

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Importance: Occupational therapy practitioners need evidence to support interventions that promote subjective well-being among autistic people and their families through optimal engagement and participation in occupations.

Objective: These Practice Guidelines are informed by systematic reviews to expand knowledge of interventions that promote access, inclusion, engagement, and optimal participation in occupations that are meaningful to autistic people. Our intent was to foster occupational therapy practitioners' clinical decision-making and reasoning when working with autistic people and their care partners.

Method: These Practice Guidelines were developed on the basis of four systematic reviews, supporting evidence and literature, along with continued revisions and integration through an iterative and collaborative process.

Results: A total of 98 articles were included in the systematic reviews, which are the foundation for practice recommendations in these guidelines. Forty-eight of the systematic review articles were used to inform the clinical recommendations included in these Practice Guidelines.

Conclusions and Recommendations: Strong to moderate evidence indicates the need for multidisciplinary, goal-oriented interventions to support autistic people in different contexts. Although there is only emerging evidence in the inclusion of autistic people's strengths, interests, and perspectives to guide occupational therapy interventions, such practices can enhance the delivery of neurodiversity-affirming and trauma-informed practices. In addition, evidence is needed to support participation in activities of daily living (ADLs) for autistic youths. We recommend the use of strengths-based language to describe autistic people and the use of environmental adaptations, care partner education, and coaching to enhance occupational therapy service delivery.

Plain-Language Summary: The literature is sparse regarding neurodiversity-affirming and trauma-informed practices for autistic youths, as well as for participation in activities of daily living (ADLs). These Practice Guidelines provide new information on positive mental health development; self-determination; ADLs, instrumental ADLs, play, and leisure occupations for children, adolescents, and adults; person-centered planning for adolescents and adults; and rest and sleep. Information on health management is also provided.

Positionality Statement: This article uses the identity-first language *autistic people.* This nonableist language describes their strengths and abilities and is a conscious decision. This language is favored by autistic communities and self-advocates and has been adopted by health care professionals and researchers (Bottema-Beutel et al., 2021; Kenny et al., 2016). However, we respect the use of person-first language and have made a conscious decision to include research articles that have used this language.

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Autism is often characterized by social communication differences and patterns of behavior, interests, or activities that may facilitate or hinder coping and adaptation. The current prevalence rate of autism among children in the United States is 1 in 36 children

(Maenner et al., 2023), and hence there is an urgent need to develop supports and services that accommodate the autistic community's differences and abilities while valuing them holistically (Botha et al., 2022; Kornblau & Robertson, 2021). Chang and Coster's

(2014) conceptual framework describes participation in life situations as active involvement in activities that are intrinsically social and occur in a societally defined context. Autistic people can face challenges that are due to societal attitudes and barriers that can greatly affect their participation in these contexts (Dwyer, 2022). The clinical and research communities have historically viewed autistic differences as deficits, an idea that has driven the research, for example, in the area of interests. These differences have historically been pathologized, and research evidence has been geared toward successful reductions (Patten, 2022) in these "restricted and repetitive" interests (Murthi et al., 2023).

As we shift our thinking in line with the advocacy community as to the importance and relevance of autistic interests, the research will, we hope, follow. In the occupational therapy profession, as well as special education and other related services, viewing people's differences as deficits results in a focus on intervention and support or remediation instead of task or environmental modifications (Patten, 2022). The focus of such research has led members of the autistic community to camouflage or mask their symptoms, leading to exhaustion, burnout, anxiety, depression, and other negative mental health challenges. The concept of neurodiversity, in contrast, is reimagined and adapted from the term biodiversity (Singer, 2017). From the original description of neurodiversity, and through the inclusion of principles from the social model of disability, there is a growing acceptance that interventions need to be reimagined for the autistic community to accommodate both individual needs while emphasizing societal restrictions and challenges (Dwyer, 2022). As autistic people increasingly engage in self-advocacy, research and practice are moving beyond a deficit-based approach and are beginning to view the nuanced differences between nonautistic and autistic performance as rooted in a lack of understanding between the nonautistic and autistic communities (Chen et al., 2021; Davis & Crompton, 2021).

As research and practice communities expand their understanding of autistic people's experiences, racial and ethnic inequities in diagnosis and service access persist. Studies have consistently shown disparities in the timely diagnosis of autism: White autistic children are diagnosed earlier than peers from historically marginalized groups (e.g., Durkin et al., 2017), and the latter access fewer intervention services (McManus et al., 2020). Later autism diagnoses and decreased intervention services matter because an early diagnosis positively influences developmental trajectories (Gabbay-Dizdar et al., 2022), and research shows that the intensity of intervention services, in particular early in life, result in increased functional outcomes for autistic people (McManus et al., 2019). Within autism research, recent investigations have pointed to the underrepresentation of historically marginalized racial and ethnic groups (e.g., Cascio et al., 2021;

Steinbrenner et al., 2022; West et al., 2016), including underrepresentation in occupational therapy research (Little et al., 2024).

The inclusion of historically marginalized racial and ethnic groups in research is critical for many reasons, including, but not limited to, understanding how social systems work in unison to support autistic people, whether intervention efficacy may be generalizable across all people with autism, and how community members from marginalized communities perceive interventions. Moreover, research in occupational therapy with minoritized autistic people may be approached using frameworks such as minority stress models (Botha et al., 2022; Patten, 2022), which have explained the detrimental impacts that arise from a combination of proximal stressors (from internalized ableism) and distal stressors from a society not inherently designed and built to accommodate their needs. In addition, the concept of intersectionality may be used to study the ways in which socially constructed frameworks about specific identities intersect to perpetuate and reinforce exclusion and marginalization (Crenshaw, 1991).

Although systemic barriers stem from racial and ethnic identities among autistic individuals, ableist ideologies hinder access to services along the lifespan of this population (Jones et al., 2020). As Bottema-Beutel et al. (2021) explained, autism research is filled with ableist language that has the potential to harm autistic people. Ableism consists of "beliefs and practices that devalue and discriminate against people with physical, intellectual, or psychiatric disabilities and often rests on the assumption that disabled people need to be 'fixed' in one form or the other" (Smith, n.d.). Language choices are important and can inform attitudes toward and a general understanding of autism and how autistic people are perceived. Researchers should center and value autistic perspectives in their research and writing (Botha, 2021; Bottema-Beutel et al., 2021). Clinicians and researchers can use neutral and nonvalue-laden terminologies as descriptors to characterize autistic people's cognitive functioning, challenge areas, and sensory or support needs. When professionals use neutral language, the accuracy, validity, and utility of non-value-laden descriptors increase, and an understanding of this population in nonautistic communities expands (Murthi et al., 2023; Natri et al., 2023; Pukki et al., 2022). Researchers and clinicians are increasingly taking autistic perspectives into account in their writing and participatory action research, and they are partnering with autistic researchers who research autism to incorporate into their work their expertise to inform education, practice, and research.

In these Practice Guidelines, we avoid ableist language, which includes the medicalization of autism (e.g., "special" needs or interests, "normal" or "typical" vs. autistic, "high" vs. "low" functioning), which often does not represent the experience of the autistic

person. As occupational therapy practitioners, we can instead discuss people's level of support needs, the barriers that autistic people face daily, and differences between the autistic and nonautistic experiences (Patten, 2022). We understand that autistic people's interests are heterogeneous, diverse, and wide ranging. Some positive outcomes of using interests in autism research have been reduced anxiety and a calming effect (Patten Koenig & Hough-Williams, 2017), improved self-efficacy and self-determination, improved social communication, and development of knowledge and expertise in the participants' area of interests (Murthi et al., 2023). Hence, the goal of these Practice Guidelines is to acknowledge and respect autistic people's interests and to explore the existing evidence base to include interest-driven interventions (Gordon et al., 2015; Martin et al., 2020). Although we avoid ableist language throughout these Practice Guidelines, readers may note that the clinical recommendation tables include research that uses ableist language. This discrepancy is due to the nature of research published between 2013 and 2021, much of which may have been completed when remediation was emphasized and therefore used behavior modification and deficitfocused practices. The language in the tables reflects that used in the original articles and seeks to provide additional clinical rationales and strategies as part of these Practice Guidelines to support the adoption of neurodiversity-affirming and strengths-based practices for this population (Murthi et al., 2023).

These Practice Guidelines are based on four questions presented in several systematic review briefs (Baker et al., 2023; Benevides et al., 2023a, 2023b; Jirikowic et al., 2023a, 2023b; Little et al., 2023a, 2023b, 2023c, 2023d; Tomchek, Baker, et al., 2023; Tomchek, Dean, et al., 2023; Watling et al., 2023) and include autistic researchers as authors of three of the four review articles. Although acknowledging the hurdles associated with systematic reviews, in particular the time lag between dissemination and implementation of results, we opted to use Systematic Review Briefs in developing these Practice Guidelines because we were drawn to their inherent comprehensiveness. The systematic review questions were developed through continued collaborations and listening sessions with autistic community members, many of whom participated as authors (Appendix Figure A.1). The current Practice Guidelines updates the 2016 Occupational Therapy Practice Guidelines for Individuals With Autism Spectrum Disorder (Tomchek & Patten Koenig, 2016). The previous guidelines, which were based on a systematic review of research within the scope of occupational therapy, had minimal autistic community member input and focused on interventions for (1) social skills, social communication, restricted and repeated behaviors, play performance, and leisure participation; (2) sensory integration and sensory-based practice; (3) performance in work, activities of daily living (ADLs), instrumental activities of

daily living (IADLs), and education; and (4) parent self-efficacy, family coping, and resiliency and family participation in daily life routines. At the time the prior Practice Guidelines were published, autistic priorities for research had not been well elucidated in the literature. This has since changed considerably given that research priorities have been identified by autistic people as well as their families (Clark & Adams, 2020; Davis & Crompton, 2021; Poulsen et al., 2022; Roche et al., 2021).

By integrating community member engagement and feedback into the current Practice Guidelines, we elucidated a different set of priorities addressed in the current review; specifically, these Practice Guidelines focus on positive mental health development; self-determination and self-advocacy; ADLs and IADLs, rest and sleep, work, education, play, and leisure occupations for children, adolescents, and adults; social participation and health management; person-, student-, and family-centered planning for adolescents and adults; and interventions to support participation in basic ADLs and IADLs among autistic children and adolescents (birth–18 yr).

Systematic Review Questions

These Practice Guidelines are based on the following four questions:

- 1. What are the interventions in the scope of occupational therapy to support (or improve) self-determination and positive mental health for people on the autism spectrum (Patten et al., 2023a, 2023b)?
- 2. What are the interventions within the scope of occupational therapy to address participation in ADLs, IADLs, rest and sleep, work, education, play, leisure, social participation, and health management among autistic children and adolescents (birth–18 yr; Baker et al., 2023; Little et al., 2023a, 2023b, 2023c, 2023d; Tomchek, Baker, et al., 2023; Tomchek, Dean, et al., 2023)?
- 3. What are the person-, student-, or family-centered planning approaches within the scope of occupational therapy that foster the achievement of participation goals for autistic people and their families (Benevides et al., 2023a, 2023b; Watling et al., 2023)?
- 4. Within the scope of occupational therapy, what interventions are effective for autistic people >18 yr that address participation in ADLs, IADLs, rest and sleep, work, education, play, leisure, social participation, and health management (Jirikowic et al., 2023a, 2023b)?

Goals of These Practice Guidelines

Through these Practice Guidelines, the American Occupational Therapy Association (AOTA) aims to help occupational therapy practitioners, as well as the people who manage, reimburse, or set policy regarding

occupational therapy services, understand occupational therapy's contribution in providing services to people on the autism spectrum and their care partners. These guidelines can also serve as a reference for health care professionals, health care facility managers, education professionals, education and health care regulators, third-party payers, managed care organizations, and those who conduct research to advance care of autistic persons.

These Practice Guidelines were commissioned, edited, and endorsed by AOTA without external funding being sought or obtained. They were financially supported entirely by AOTA and were developed without any involvement of industry. All authors of the reviews completed conflict-of-interest disclosure forms, with no conflicts noted. AOTA reviews Practice Guidelines, and updates them as needed, every 5 yr to keep recommendations on each topic current according to criteria established by ECRI (2020). Guideline topics are evaluated by a multidisciplinary advisory group consisting of AOTA members, nonmember content experts, and external community members. These Practice Guidelines were reviewed and revised on the basis of feedback from a group of content experts on autism that included practitioners, advocates, researchers, educators, practitioners, and policy experts. Reviewers who agreed to be identified are listed in the Acknowledgments.

These Practice Guidelines report the findings from systematic reviews of published scientific research focused on topic-specific questions. The systematic reviews were conducted according to the Cochrane Collaboration methodology (Higgins et al., 2019) and are reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines for conducting systematic reviews (Moher et al., 2009). The protocol and questions were developed with input from a multidisciplinary advisory group that also included consumers and information end users. A medical research librarian conducted searches of the literature, and review teams evaluated the search results and synthesized the findings (see the Appendix for an overview of the systematic review methods and findings). Interventions that were described in sources other than the published literature and that did not meet the inclusion criteria were excluded from the reviews.

Occupational therapy practitioners should not consider these Practice Guidelines to be a source of comprehensive information about autism or about application of the occupational therapy process. The occupational therapy practitioner makes the ultimate clinical judgment regarding the appropriateness of a given intervention considering a specific client's or group's circumstances, needs, and response to intervention, as well as the evidence available to support the intervention. Examples of how evidence can

inform practice with autistic people are included in the "Case Illustrations and Evigraphs" section.

AOTA supported the systematic reviews on the effectiveness of interventions within the scope of occupational therapy for autistic people as part of its Evidence-Based Practice (EBP) Program. AOTA's EBP Program is based on the principle that the EBP of occupational therapy relies on the integration of information from three sources: (1) clinical experience and reasoning, (2) preferences of clients and their families, and (3) findings from the best available research. The systematic reviews and these Practice Guidelines report the findings from the best available research.

Clinical Recommendations for Occupational Therapy Interventions for Autistic People

Clinical recommendations are the final phase of the synthesis of systematic review findings. The findings for each systematic review question are graded in terms of how confident a practitioner can feel that using the interventions presented will improve the outcomes of interest to their clients. The grade is based on the specificity of the intervention, number of studies supporting the intervention, levels of evidence of the studies, quality of the studies, and significance of the study findings. Interventions included in the clinical recommendations are specific to a population, and the articles that describe them provide sufficient detail for practitioners to understand the intervention and the outcomes of interest.

Describing the strength of clinical recommendations is an important part of communicating an intervention's efficacy to practitioners and other users. The recommendations for these Practice Guidelines were evaluated and finalized by AOTA staff, the AOTA research methodologist, and systematic review and Practice Guidelines authors. AOTA uses the grading methodology provided by the U.S. Preventive Services Task Force (2018) for clinical recommendations. The clinical recommendations pertaining to each review, along with the studies' level of evidence and supporting details, are presented in Tables 1 through 4.

For the purpose of these Practice Guidelines, we report recommendations graded A, B, and D, the grades that best support clinical decision-making:

- A: There is strong evidence that occupational therapy practitioners should routinely provide the intervention to eligible clients. Strong evidence was found that the intervention improves important outcomes and that benefits substantially outweigh harms.
- B: There is moderate evidence that occupational therapy practitioners should routinely provide the intervention to eligible clients. There is high certainty that the net benefit is moderate, or there is moderate certainty that the net benefit is moderate to substantial.

Table 1. Clinical Recommendations for Improving Self-Determination and Positive Mental Health

Grade/Evidence Level	Citation	Intervention Details	
		Self-Determination	
Self-Advocacy Inte	erventions		
B: Moderate	interventions for autistic mi autistic persons are expected	Recommendation: Practitioners could consider providing group or both group and individual self-advocacy interventions for autistic middle-school and college students to enhance self-advocacy skills, where autistic persons are expected to advocate for accommodations in an academic setting (45-min-5-hr sessions, 1-5 days/wk, from 1 wk to 1 semester).	
3b	Gillespie-Lynch et al. (2017)	Population: $N=28$ autistic college students age 21–23 yr ($M=22$ yr; 35.7% female)	
		Setting: College, United States	
		Intervention: Development of a mentorship program through 1-on-1 and group collaborations with autistic students. Students also were given opportunities to take on leadership roles in the program. The first semester focused on social skills; the second semester on self-advocacy.	
		Delivery method: Group and individual sessions	
		Dose: Group meetings: 1 hr/wk, 9–10 wk 1-on-1 meetings: 1 hr/wk, 14 wk	
		Improvements: Decreased anxiety, increased social skills and communication, friendships that developed organically within groups, increased self-efficacy in academics, organic inclusion of autistic students in the program	
3b	Hotez et al. (2018)	 Population: First year: N = 13 autistic college students age 17–28 yr (M = 19.07 yr; 12.5% female) Second year: N = 10 autistic college students age 17–22 yr (M = 18.8 yr; 20% female) 	
		Intervention: Students were invited to participate in individualized or group mentorship sessions with a structured curriculum that included student feedback and was appropriately modified each year. Opportunities to practice skills were provided through role plays, social games, and the creation of leadership roles in the program. Students could transition from being mentees to mentors in the program. Students who became mentors were provided additional support from experienced mentors who supported them during their meetings with mentees and gave individualized feedback.	
		Setting: College, United States	
		Delivery method: Group and individual	
		Dose: - First summer transition: 1 wk, 5 days, 5 hr/day - Second summer transition: 1 wk, 5 days, 5 hr/day	
		Improvement: Improved self-advocacy-related knowledge and skills, development of a program that uses autistic expertise integrally, increased empathy and social skills	
3b	Onwumere et al. (2021)	Population: $N=13$ autistic middle-school students, age 10–11 yr ($M=NR$; % female $=NR$)	
		Intervention: Occupational therapy group interventions focused on IADLs, social participation and interest, self-advocacy, community integration, executive functions, self-regulation, and strategies for learning	

Table 1. Clinical Recommendations for Improving Self-Determination and Positive Mental Health (Cont.)

Grade/Evidence Level	Citation	Intervention Details
		Setting: Middle school, United States
		Delivery method: Group
		Dose: Groups met for 40–45 min, 1×wk during the academic school year
		Improvement: A significant number of students reported improvement in self- determination, 70% goal attainment in executive function tasks
Interest-Based Inte	erventions	
B: Moderate	middle-school-age autistic	ners could consider providing group, interest-based interventions, either with students alone (with parents receiving parallel group sessions) or with I, to improve knowledge of ASD and develop mastery and competence in 0–90 min, for 6–14 wk).
2b	Gordon et al. (2015)	Population: $N = 48$ autistic youths age 9–14 yr ($M = 11.45$; 16.7% female)
		Setting: Clinic, United Kingdom
		Intervention: Child and parent were invited to attend the PEGASUS program. Psychosocial education was provided to address awareness about autism diagnosis and ASD self-awareness knowledge, including strategies to help young people use knowledge of autism to gain an insight into their strengths and abilities and find ways to use their strengths. Parents' sessions included short presentations, discussions, and games. Children's sessions included fun activities, visual games, and home tasks.
		Delivery method: Parents and children attended separate, parallel group sessions
		Dose: Sessions took place 1×/wk and lasted for 1.5 hr for 6 wk
		Improvement: The intervention group showed significantly better ASD knowledge and ASD self-awareness related to strengths and challenges.
2b	Martin et al. (2020)	Population: $N=30$ autistic students age 10–14 yr and $N=79$ nonautistic peers, age 10–14 yr (15–20 students/club)
		Setting: School, United States
		Intervention: Inclusive group program with autistic and nonautistic students. Informal after-school clubs that taught engineering activities in an inclusive setting. A specialized 12-activity curriculum was developed.
		Delivery method: Two teachers facilitated each club session.
		Dose: Sessions took place weekly at either lunchtime or after school. 30–50 min/club for 12–14 wk.
		Improvement: The intervention group showed significantly better self-efficacy, interest in engineering, vicarious experiences, science appreciation, and understanding of engineering design process as well as a 50%–100% increase in social skills demonstrated by spontaneous, reciprocal conversations. Qualitatively, autistic students could engage in their interests, complete projects, and effectively communicate with their peers.
		Mental Health
CBT Interventions		
A: Strong	appropriate, to improve anx	ners should provide small-group (individual and/or family) CBT, when ciety, social responsiveness, and expression of challenges and to decrease addition behaviors for autistic children, adolescents, and young adults r, over 16–36 wk).

Table 1. Clinical Recommendations for Improving Self-Determination and Positive Mental Health (Cont.)

Grade/Evidence Level	Citation	Intervention Details
1b	Frank et al. (2022)	Population: $N=167$ autistic youths age 7–13 yr ($M=9.90$ yr; 20.4% female)
		Setting: Clinic, home, and community, United States
		Intervention: TAASD study protocol, with participants randomly assigned to one of two CBT interventions, or a control group of treatment as usual (TAU; $n=19$). The two CBT interventions followed the BIACA protocol ($n=76$), which included anxiety coping skills, hierarchy building, in vivo exposures, learning social skills, and friendship-building exercises. In the manualized Coping Cat (Kendall & Hedtke, 2006) intervention ($n=72$), participants learned to alleviate anxiety-inducing thoughts, feelings, and emotions by creating a plan. The second part of the CBT program involved facing in vivo exposures and reacting to those situations by implementing the plan created by the participant. This was followed by homework assignments.
		Delivery method: Individual and family
		Dose: All groups lasted 16 wk. The BIACA group had a 90-min session 1×/wk (45 for children and 45 for parents); the Coping Cat group had a 60-min session 1×/week and two dedicated parent sessions, then 10–15-min checkins weekly.
		Improvement: Children exposed to higher accommodation behaviors (ways family modifies routines and expectations on the basis of the child's anxiety) exhibited higher stress levels postintervention. Many parents provided detrimental accommodations before treatment; however, both CBT interventions led to a significant reduction in accommodation frequency posttreatment compared with TAU. This program significantly reduced negative accommodating behaviors.
1b	Hesselmark et al. (2014)	Population: $N = 54$ autistic adults age 19–53 yr ($M = 31.8$; 45.3% female)
		Setting: Community, Sweden
		Intervention: Comparative effectiveness trial, with participants randomly assigned to either a CBT group or a social recreation group. CBT group intervention: a dialectical behavior therapy was implemented but adapted to accommodate participants' executive dysfunction and social skills challenges. Therapy included a structured and strict agenda, with psychoeducation (e.g., lectures) in a group setting, social skills training, and behavior modification using cognitive strategies such as role playing, exposure to anxiety situations, and conducting behavior analyses. The social recreation group followed a more open social group structure without an emphasis on CBT or other behavior strategies, and this group relied on the group setting and interest-based activities such as visiting museums, cooking, boating, and going to the cinema.
		Delivery method: Group
		Dose: 36 weekly 3-hr sessions in groups of 6–8
		Improvement: No differences between groups were noted; both groups reported a significant increase in quality of life posttreatment. Although both interventions are promising, the dropout rate was lower in the CBT group, and that group rated themselves as improved in their expression of challenges.

Table 1. Clinical Recommendations for Improving Self-Determination and Positive Mental Health (Cont.)

Grade/Evidence Level	Citation	Intervention Details
1b	Wood et al. (2015)	Population: $N=33$ autistic adolescents age 11–15 yr ($M=12.3; 30\%$ female)
		Setting: Community, United States
		Intervention: The BIACA module (Wood et al., 2009) was used to adapt CBT and teach behavioral skills in a modular format. Participants attended 3 sessions teaching basic coping skills and 8 sessions of in vivo exposure to ensure anxiety reduction through cognitive restructuring and behavioral activation. Positive social skills and coping strategies were taught to autistic adolescents with higher anxiety in the real world.
		Delivery method: Individual and family
		Dose: 90-min sessions, 1×wk for 16 wk (30 min with adolescents + 30 min with parents + 30 min with parents and adolescents)
		Improvement: The CBT group significantly outperformed the wait-list group, with parents rating considerable improvement in anxiety symptoms and improvement in social responsiveness.
Mindfulness-Based	I Interventions	
B: Moderate		ners could consider providing MBSR interventions (group training and home sion in autistic adults (group: 2–2.5 hr, 1×/wk, 8–9 wk, and 40–60 min e).
2b	Spek et al. (2013)	Population: $N=41$ autistic adults age 18–63 yr ($M=42.35; 34.1\%$ female)
		Setting: Clinic, the Netherlands
		Intervention: MBT-AS, including mindful eating, body scans, mindful breathing, mindful walking exercises, yoga, meditation, other movement exercises, and a home program.
		Delivery method: Individual after an initial group training with 10–11 participants
		Dose: Individual sessions, 2.5 hr/wk for 9 wk; home program, 40–60 min of meditation, 6 days/wk
		Improvement: A significant reduction in depression in the intervention group was noted.
2b	Pagni et al. (2020)	Population: $N = 28$ autistic adults age 18–64 yr ($M = 31.5$; 33% female)
		Setting: Community, home, United States
		Intervention: Focusing attention on a challenge and the management of emotions and thoughts in a nonjudgmental manner. MBSR included breath awareness exercises, body exercises, mindful awareness and focusing on triggers during communication, and characterizing personal stressors during daily living. Home assignments included breath awareness, calendars to record unpleasant and pleasant feelings, and communication calendars.
		Delivery method: Group and home
		Dose: 2 hr 1×/week for 8 wk with about 45 min daily home practice
		Improvement: A significant reduction in depression was observed in the intervention group.

Table 1. Clinical Recommendations for Improving Self-Determination and Positive Mental Health (Cont.)

Grade/Evidence		
Level	Citation	Intervention Details
PEERS Program		
B: Moderate	Recommendation: Practitioners could consider providing the PEERS® program to improve peer friendship and social skills and to decrease social anxiety and challenging behaviors for autistic youths and adolescents.	
1b	Schohl et al. (2014)	Population: N = 58 autistic adolescents age 11–16 yr (M = 15.5; 19% female) Setting: Community, United States Intervention: The PEERS program to improve peer friendship and social skills was implemented using the commercially available manual (adapted from Laugeson et al., 2009). The program focused on developing and maintaining friendships using the rules taught in the program, homework review, and practicing skills through role play and practice sessions for the adolescent group. Delivery method: Separate groups for parents and adolescents Dose: 90-min session 1×/wk for 14 wk Improvement: Compared with the control group, the intervention group significantly improved their knowledge of the PEERS program and its concepts and improved their friendship skills and get-togethers with their peers. Social anxiety decreased, as did challenging behaviors. Both invited and hosted get-togethers increased for the PEERS group participants.

Note. ADLs = activities of daily living; ASD = autism spectrum disorder; BIACA = Behavioral Interventions for Anxiety in Children with Autism; CBT = cognitive-behavioral therapy; IADLs = instrumental activities of daily living; MBSR = mindfulness-based stress reduction; MBT-AS = mindfulness-based therapy for autism spectrum disorders; NR = not reported; PEERS = Program for the Education and Enrichment of Relational Skills; PEGASUS = Psychoeducation Group for Autism Spectrum Understanding and Support; TAASD = Treatment of Anxiety in Autism Spectrum Disorder.

 D: It is recommended that occupational therapy practitioners *not* provide the intervention to eligible clients. At least fair evidence was found that the intervention is ineffective or that harms outweigh benefits. In these reviews, we did not find Grade D evidence.

These grades are reported in Tables 1 through 4 and designated with green, indicating *should consider* if appropriate (A), or yellow, indicating *could consider* if appropriate (B). None of the studies included in these reviews reported adverse events or harms related to the interventions evaluated (D).

The complete findings from the systematic reviews can be found in the Systematic Review Briefs on this topic published in the *American Journal of Occupational Therapy* (Baker et al., 2023; Benevides et al., 2023a, 2023b; Jirikowic et al., 2023a, 2023b; Little et al., 2023a, 2023b, 2023c, 2023d; Tomchek, Baker, et al., 2023; Tomchek, Dean, et al., 2023; Watling et al., 2023). As always, practitioners' clinical decisions should be informed by the evidence presented in these Practice Guidelines in combination with their clinical experience and the client's particular goals.

Translating Clinical Recommendations Into Practice

Clinical Reasoning Considerations

Very rarely will practitioners find an evidence-based intervention that perfectly fits their clinical setting and the client's specific needs. Occupational therapy practitioners need to consider several questions as they evaluate the research and consider whether they can use an intervention, or adapt it in a well-reasoned way, to exact meet the client's needs (Highfield et al., 2015):

- 1. Exactly what intervention do I need to provide?
 - What types of client outcomes am I looking for?
 - Do the studies located provide enough detail on the intervention so that I know what to do and how to do it?
- 2. How well do the conditions in which I will provide the intervention match those in the studies?
 - What are the demographic characteristics (e.g., age, gender, diagnosis, comorbidities) of the participants in the research studies?

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management

Grade/Evidence Level	Citation	Intervention Details
		ADLs
Feeding Interventi	ons	
B: Moderate	interventions for autistic child	rs could consider providing clinic-based parent-only or parent-child dyadic feeding lren age 2-8 yr to improve mealtime behaviors and food selectivity (10-11, over 12-20 wk, and 3 possible booster sessions over an additional 6 wk).
2b	Johnson et al. (2019)	Population: $N = 42$ autistic children age 2–7 yr ($M = 5$; 5% female)
		Setting: Clinic, United States
		Intervention: Parent-only training for feeding on behavioral strategies (e.g., antecedent prevention, reinforcement, stimulus control and fading, shaping, and chaining) to address food selectivity, food refusal, disruptive mealtime behaviors, and adaptive feeding skills. Parent training methods included direct instruction, modeling, and role playing.
		Delivery method: Individual, clinic-based
		Dose: Eleven 60–90-min sessions distributed over 20 wk (7 weekly followed by 4 every other wk) plus 1 home visit and up to 3 additional telehealth parent coaching appointments
		Improvement: The intervention group demonstrated significantly greater improvement in food selectivity and mealtime behaviors from baseline to study completion compared with the wait-list control group.
2b	Sharp et al. (2019)	Population: $N = 38$ autistic children, age 3–8 yr ($M = 5.6$; 15.8% female)
		Setting: Clinic, United States
		Intervention: Parent training on feeding difficulties in ASD, nutrition planning, structuring mealtimes, and behavior strategies followed by in vivo coaching of parent–child dyads during meal demonstrations.
		Delivery method: Group, clinic based
		Dose: 10 90-min sessions over 12 wk plus optional booster sessions at Weeks 14, 16, and 20
		Improvement: The intervention group demonstrated significantly greater improvements in mealtime behaviors than the control group.
		Education
Teacher-Focused	Interventions for Classroom	Engagement
B: Moderate	Recommendation: Practitioners could consider providing manualized, explicit teaching coaching interventions, through group and individual delivery, to teachers of kindergarten through 2nd grade, to improve classroom engagement related to social interactions for autistic students (teacher training: 3 days, 18 hr total for initial training, followed by 2–4 coaching sessions/mo for 8 mo; students received the intervention over the course of a school year).	
1b	Morgan et al. (2018)	Population: $N=197$ autistic children enrolled in kindergarten-second grade (age NR; % female NR)
		Setting: School, United Kingdom
		Intervention: Classroom-based intervention using the SCERTS® model to improve active engagement in the classroom and social communication. Intervention steps included assessment and selection of goals, integration of goals with target activities, and teacher coaching to implement strategies for 25 hr/wk across classroom activities.

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
LEVEI	Gitation	Delivery method: Group and individual; classroom based
		Dose: Teachers received 3-day (18 hr) initial training followed by 2-4 coaching sessions/month for 8 mo. Students received the intervention over the course of a school year.
		Improvement: The intervention group demonstrated significantly higher scores in classroom engagement related to social interaction.
Student-Focused I	nterventions for Classroom	Engagement
B: Moderate	promote engagement in da through individual or group	ners could consider providing student-focused explicit teaching interventions to illy classroom routines for autistic students, age 4–10 yr or in Grades 3–5, interactions, to improve goal behaviors or following directions, transitioning ting stuck (5–40-min sessions, either daily for 2 wk or through 28 lessons year).
2b	Hanrahan et al. (2020)	Population: $N = 15$ autistic children, ages 5–10 yr ($M = 6.8$; 6.6% female
		Setting: School, United Kingdom
		Intervention: Individually developed social story to address a target behavio (e.g., sit during circle time, turn taking) that was presented to each participant via an electronic device (iPad). Each story was approximately 5 min long.
		Delivery method: Individual, school based
		Dose: 1×/school day (5 min) for 2 wk
		Improvement: The intervention group showed significantly greater improvement on goal behaviors from baseline to the 6-wk follow-up compared with the control group.
2b	Kenworthy et al. (2014)	Population: $N = 67$ autistic children in Grades 3–5, ages 7–11 yr ($M = NR$; 13.4% female)
		Setting: School, United States
		Intervention: Unstuck and On-Target lessons that used experiments, videos visuals, and discussion to teach flexibility, goal setting and planning
		Delivery method: Group, school based
		Dose: 28 lessons (30–40 min) provided over the course of a school year + 2 parent training sessions and 1 classroom teacher session
		Improvement: Compared with the social skills group, the intervention group demonstrated significantly greater improvement in the ability to follow directions, transition smoothly, and avoid getting stuck.
		Play
School-Based Play	Interventions	
B: Moderate	Recommendation: Practitioners could consider providing school-based play interventions, individual and group, to increase engagement and encourage spontaneous and symbolic play for autistic children ages 3–10 yr (1×/wk to 2×/day, 20–60-min sessions, ranging from 5 wk to over the course of a school year	
1b	Boyd et al. (2018)	Population: N = 161 autistic children age 36–60 mo (M intervention group = 49.06 mo, M control group = 50.12 mo; 14.8% female)
		Setting: Preschool, United States

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
		Intervention: Advancing social communication and play intervention focused on increasing children's engagement with adults, peers, and objects, with an emphasis on social interaction, requesting, and joint attention
		Delivery method: Individual and group
		Dose: Individual sessions distributed throughout the week for a total of 40 min and 3 group activities per school day for 1 school year
		Improvement: The intervention group showed a significant increase in overall classroom engagement, but not play specifically.
2b	Doernberg et al. (2021)	Population: $N=25$ autistic children, age 6–9 yr ($M=7.33$ yr; 12% female)
		Setting: School, United States
		Intervention: A pretend play intervention that focused on improving imagination in storytelling, organization of a story, and frequency and variety of emotions expressed using prompts, modeling, scaffolding, and so on
		Delivery method: Individual
		Dose: 1 20-min session/wk for 5 wk
		Improvement: The intervention group showed significant increases in imagination scores compared with the wait-list control group. The intervention group was able to describe their own emotions more appropriately from baseline to outcome.
2b	Goods et al. (2013)	Population: $N = 15$ autistic children, age 3–5 yr ($M = 4.3$; % female NR)
		Setting: School, United States
		Intervention: JASPER, which focused on using toys to help create play routines that would facilitate reciprocal interaction between interventionist and child
		Delivery method: Individual
		Dose: 2 30-min sessions/wk for 12 wk
		Improvement: The treatment group spent less time unengaged and showed a significant increase in diversity of spontaneous play compared with the control group.
3b	Wolfberg et al. (2015)	Population: $N = 48$ autistic children, age 5–10 yr ($M = NR$; 15% female)
		Setting: School
		Intervention: Integrated play groups that focused on guided participation in play to promote social communication, reciprocity, and relationships with peers as well as increasing symbolic play
		Delivery method: Group
		Dose: 1-hr sessions 2×/wk for 12 wk
		Improvement: Children showed significant increases in symbolic play and social domain scores and notable decreases in unengaged and manipulation sensory play behaviors.

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
Clinic-Based Peer-	Mediated Play Interventions	
B: Moderate		ers could consider providing a clinic-based peer-mediated intervention with e play in autistic children age 6–12 (1 hr, 1×/wk, 10 wk).
1b	Kent et al. (2021)	Population: $N=65$ autistic children, age 6–12 yr (M intervention group = 8.68, M control group = 8.44; 12.3% female)
		Setting: Clinic, Australia
		Intervention: The Play, Language, and Friendship intervention, which included peer modeling, video modeling, and therapist modeling as well as parent involvement and resources (initiate play, play with a sibling, focus on social language)
		Delivery method: Modeling play with therapist, peer, and a target child, followed by a play session between the peer and child
		Dose: 1-hr sessions, 1×/wk, for 10 wk
		Improvement: The intervention group showed significantly greater changes in play performance than the wait-list control. Children with lower play skills at baseline benefited more from the intervention than those with higher play skills at baseline.
Clinic-Based Interv	rentions to Improve Play Per	formance
B: Moderate	modeling, video modeling, t	hers could consider providing a clinic-based intervention, including peer cherapist modeling, and parent involvement to improve play performance for yr (1-hr session, 1×/wk for 10 wk).
1b	Kent et al. (2021)	Population: $N=65$ autistic children age 6–12 yr (M intervention group = 8.68, M control group = 8.44; 12.3% female)
		Setting: Clinic, Australia
		Intervention: The Play, Language, and Friendship intervention, which included peer modeling, video modeling, and therapist modeling as well as parent involvement and resources (initiate play, play with a sibling, focus on social language)
		Delivery method: Modeling play with therapist, peer, and a target child, followed by a play session between the peer and child
		Dose: 1-hr sessions, 1×/wk, for 10 wk
		Improvement: The intervention group showed significantly greater changes in play performance than the wait-list control. Children with lower play skills at baseline benefited more from the intervention than those with higher play skills at baseline.
2b	Strauss et al. (2014)	Population: $N=30$ preschool-age autistic children (M age $=42.97$ mo; 20% female)
		Setting: Clinic, Italy
		Intervention: The intervention was split into structured ABA procedures and flexible child-oriented teaching strategies. The structured ABA group used behavior modification techniques and discrete-trial training to target desired behaviors. The flexible strategies involved scaffolding and facilitating opportunities for a child to embed desired activities in socially coordinated play.

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
		Delivery method: Group
		Dose: 2×/day for 45 min, 7.5 hr/wk for 4 mo
		Improvement: Children in the flexible child-oriented approach engaged in more functional, constructive, and symbolic play; increased persistence in peer activities; and showed a less negative response to social interaction compared with those in the structured ABA group. Children in the structured ABA group showed greater adherence to adult-directed games with rules.
		Sleep
Parent Education	1	
B: Moderate	parent sleep education inte	ners could consider engaging parents (groups or individuals) in clinic-based reventions to enhance sleep participation (behavior, latency, and efficiency) for 2–21 yr (60–120-min sessions over 2–8 wk, weekly or biweekly, and potential
2b	Johnson et al. (2013)	Population: $N = 33$ autistic children age 2–6 yr (M intervention group = 3.51, M control group = 3.6; 21.2% female)
		Setting: Clinic, United States
		Intervention: Behavioral parent training through direct instruction, modeling, and role playing. Topics included basic behavioral principles, prevention techniques for bedtime routines, reinforcement and extinction procedures to address sleep problems, and stimulus control.
		Delivery method: Individual, clinic based
		Dose: 5 60–90-min sessions over 8 wk
		Improvement: The intervention group improved more significantly on parent-reported sleep behaviors compared with the general psychoeducation control group.
2b	Malow et al. (2014)	Population: $N=80$ autistic children age 2–10 yr (M Intervention Group 1 = 5.9, M Intervention Group 2 = 5.6; 20% female)
		Setting: Clinic, United States
		Interventions: Intervention 1: Group-based parent education program on children's sleep behaviors Intervention 2: Individual-based parent education program on children's sleep behaviors
		Delivery method: Group or individual
		Dose: 1 2-hr session/wk for 2 wk plus 2 individual follow-up phone calls
		Improvement: Both modes of delivery yielded significant improvement in sleep latency, sleep efficiency, night wakings, sleep duration, and bedtime resistance in a pre-post assessment.
2b	Papadopoulos et al. (2019)	Population: $N=61$ autistic children with ADHD age 5–13 yr (M intervention group = 10.3, M usual-care group = 9.8; 11.5% female)
		Setting: Clinic, United States

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
		Intervention: Parent consultations and psychoeducation on behavioral management strategies specific to sleep management (e.g., graduated extinction, bedtime fading, "bedtime pass," relaxation training)
		Delivery method: Individual, clinic based
		Dose: 2 face-to-face, 60-min sessions spaced 2 wk apart plus 1 follow-up phone call
		Improvement: The intervention group demonstrated a significantly greater decrease in child sleep problems at 3 mo postintervention compared with the control group (not maintained at a 6-mo follow-up) and a significant improvement in sleep duration at 6 mo postintervention.
		Social Participation
Clinic-Based Inter	ventions for School-Age Au	tistic Children
A: Strong	social participation among seducation, and supporting of	ners could consider providing clinic-based multifaceted approaches to supporting school-age autistic children, including increased socialization with peers, parent child self-regulation (45–90-min sessions, 1–5×/wk, some added follow-up booster 0–60-min sessions 1×/wk, 6–12 wk for parents).
1b	Dekker et al. (2019)	Population: $N=122$ autistic children age 9.5–13 yr ($M=11; 15.57\%$ female)
		Setting: Clinic, the Netherlands
		Interventions: SST-PTI, or SST alone vs. usual care
		Delivery method: Group
		Dose: 90-min sessions 1×/wk for 15 wk, with 3 90-min booster sessions in the following 2–6 mo
		Improvement: Children in the SST and the SST-PTI conditions improved significantly more on measures of social functioning and cooperation than children in the usual-care group. Children in the SST-PTI group improved significantly more on cooperation compared with the SST and usual-care groups
1b	Lopata et al. (2021)	Population: $N=88$ autistic children age 7–12 yr ($M=9.77$; 14.77% female)
		Setting: Clinic, United States
		Intervention: A wait-list control group was compared with a comprehensive outpatient intervention that included skills groups, therapeutic activities, a behavioral system, and parent training.
		Delivery method: Group
		Dose: 2 90-min sessions/wk over 18 wk and 6 90-min sessions of parent education
		Improvement: The intervention group demonstrated significantly increased social skills per parent report compared with the wait-list control group. The groups demonstrated no significant differences in observations of social interactions.
2b	De Korte et al. (2020)	Population: $N = 44$ autistic children age 3–8 yr ($M = 6.35$; 15.9% female)
		Setting: Clinic, the Netherlands

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
		Intervention: PRT (Koegel et al., 2017) techniques were taught to parents either in a parent-child session or a robot-child session via a humanoid robot.
		Delivery method: Parent-child dyad, individual, and teacher sessions
		Dose: 45-min session 1×/wk for 20 wk and 1 90-min school visit session
		Improvement: The robot–child PRT group showed a significantly higher increase on parent-reported socialization compared with the parent–child PRT group.
2b	Deckers et al. (2016)	Population: $N = 52$ autistic children age 8–12 yr ($M = 10.1$; 9.62% female)
		Setting: Clinic, the Netherlands
		Intervention: SST with highly structured sessions focused on basic and advanced social skills, with homework given to children and parents so they could practice skills outside of the sessions
		Delivery method: Group
		Dose: 1-hr sessions 1×/wk for 12 wk with the child, and 3 1-hr parent sessions
		Improvement: The SST group showed a significant increase in social skills as reported by parents and teachers compared with the wait-list control group.
2b	Nowell et al. (2019)	Population: $N = 17$ autistic children age 6–8 yr (M age = 6.82; 23.53% female)
		Setting: Clinic, United States
		Intervention: The GoriLLA group intervention sessions consisted of parent and child large- and small-group activities targeting social communication and self-regulation.
		Delivery method: Group
		Dose: 90-min sessions 1×/wk for 12 wk, with 20–30-min parent breakout sessions weekly
		Improvement: The intervention group showed a significantly higher increase in social communication as compared with the wait-list control group.
2b	Thomeer et al. (2019)	Population: $N = 57$ autistic children age 7–12 yr ($M = 9.15$; 15.8% female)
		Setting: Clinic, United States
		Intervention: The summer MAX program (see Lopata et al., 2013) targeted social communication, face—emotion recognition, interpretation of nonliteral language, and interest expansion and involved intensive skills instruction and a therapeutic activity.
		Delivery method: Group
		Dose: 70-min sessions, 5×/week for 5 wk

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
		Improvement: Compared with the wait-list control group, the intervention group showed significantly higher parent-reported social skills.
2b	Wood et al. (2014)	Population: $N = 13$ autistic children age 7–11 yr (M age = 8.77; 23.1% female)
		Setting: Clinic, United States
		Intervention: Families in the treatment condition received CBT focused on coping skills training followed by exposure to a hierarchy of feared situations ranging from least to most distressing. Social coaching was provided on friendship skills and appropriate peer interactions.
		Delivery method: Individual and family
		Dose: 90-min sessions (30 min with the child, 60 min with parents/family) 1×/wk for 32 wk
		Improvement: The intervention group showed significant improvements in frequency and positivity of peer interactions compared with the wait-list control group.
Web-Based Social	Interaction Interventions	
B: Moderate	training for parents of autis	ners could consider providing self-guided or therapist-assisted web-based tic children, 18–73 mo, to increase the child's social participation (range = 12 75-min sessions over 12 wk (with a potential of 2 30-min coaching
1b	Ibañez et al. (2018)	Population: $N=104$ autistic children age 18–60 mo ($M=43.8; 26.9\%$ female)
		Setting: Online, United States
		Intervention: The web-based parent tutorial Enhancing Interactions During Daily Routines, included 3 sections: (1) introductory material; (2) description and illustration of four daily routines (bath time, snack time, play time, and bedtime); and (3) toolbox modules describing specific, evidence-based behavioral strategies for enhancing children's cooperation and participation with routines. The control group received services as usual.
		Delivery method: Online
		Dose: The tutorial was 6 hr and was available to parents for 1 mo; parents completed the tutorial within 4-5 online sessions, each lasting a little over 1 hr.
		Improvement: The intervention group was significantly more improved than the control group on both engagement and social relating for up to 3 mo.
2b	Ingersoll et al. (2016)	Population: $N = 27$ autistic children age 19–73 mo (M self-directed group = 46.08, M therapist-directed group = 41.57; 29.63% female)
		Setting: Online, United States
		Intervention: ImPACT Online, a parent-mediated intervention that targets social communication during everyday routines and activities; one group received a therapist-assisted delivery of the online materials, and the other group was self-directed.

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
		Dose: The website contained 12 self-directed lessons; each took approximately 75 min to complete. In the self-directed group, parents were encouraged to complete 1 lesson/wk over the course of 12 wk. The therapist-assisted group had access to the website and received 2 30-min coaching sessions/wk (24 total) from a trained therapist through videoconferencing.
		Improvement: Both groups' socialization scores improved. Self-directed ImPACT Online was as effective as the therapist-assisted intervention.
Paraprofessional [*]	Training Intervention	
B: Moderate	students age 6-11 yr to playground to socialize, d	oners could consider providing the Remaking Recess intervention for autistic support school paraprofessionals in providing students support on the lecrease solitary play, and identify friends (16 sessions, 10–60 min long, daily of 60 kk, or over 12 wk).
2b	Kretzmann et al. (2015)	Population: $N = 24$ autistic children age 6–11 yr ($M = 8.3$; 25% female)
		Setting: School, United States
		Intervention: The Remaking Recess intervention, which aims to help school paraprofessionals support children with ASD on the playground was administered. It consisted of information sharing, active coaching on the playground, and systematic support fading. Children who were not engaged on the playground were provided support to socialize. School paraprofessionals were coached on prompts and when to fade prompts.
		Delivery method: Group-based intervention delivered on playground during recess
		Dose: Targeted total of 16 sessions overall that varied between 10–60 min; daily active coaching for 2 wk (8–10 sessions), followed by consultation over the next 6 wk (6–8 sessions)
		Improvement: The intervention group showed significantly more engagement on the playground compared with the wait-list control group; engagement on the playground more than doubled in the intervention group. In addition, paraprofessionals who received coaching showed significantly higher rates of responsive behaviors to autistic children with ASD on the playground compared with controls.
2b	Shih et al. (2019)	Population: $N=80$ autistic children in kindergarten-fifth grade ($M=8$ yr 8.75% female)
		Setting: School, United States
		Intervention: The Remaking Recess intervention, which aimed to help school paraprofessionals support children with ASD on the playground. It consisted of information sharing, active coaching on the playground, and systematic support fading. Children who were not engaged on the playground were provided support to socialize, and school paraprofessionals were coached on prompts and when to fade prompts.
		Delivery method: Group-based intervention delivered on playground during school recess
		Dose: 16 20–30-min sessions over 12 wk
		Improvement: The intervention group showed a significant decrease in time spent in solitary play vs. children in the wait-list control group as well as

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
		significant gains in social network salience and friend identification. Neither group showed changes in engagement in games with rules on the playground.
Interventions With	Neurotypical Peers	
B: Moderate		oners could consider providing group interventions using neurotypical peers to a manng autistic children (age 4–14 yr; 8–100 sessions, 15–60 min, over
1b	Kasari et al. (2016)	Population: $N = 137$ autistic children age 6–11 yr ($M = 8.18$; 19.77% female)
		Setting: School, United States
		Intervention: The two intervention conditions (Engage, Skills) followed the same format: (1) welcome, (2) snacks, (3) a mindfulness exercise, (4) homework check-in, (5) lesson/focus skill of the week, (6) activity with group, and (7) conclusion. The Engage condition was peer mediated, and group sessions included autistic children and neurotypically developing pee mentors who had been selected and trained to deliver a portion of the intervention. The Skills condition included only autistic students, and clinicians facilitated the group sessions using manualized lesson plans.
		Delivery method: Group format, with 2–3 typically developing peers for each child with ASD included in the Engage group
		Dose: 16 sessions (2×/week for 8 wk); each session was 30-45 min
		Improvement: Children in the Skills group showed significantly increased playground socialization and decreased playground isolation compared with the Engage group.
2b	Dean et al. (2020)	Population: $N = 62$ autistic adolescents ($M = 14.72$ yr; 12.9% female)
		Setting: School, United States
		Intervention: The two intervention conditions (Engage, Skills) followed the same format: (1) welcome, (2) snacks, (3) a mindfulness exercise, (4) homework check-in, (5) lesson/focus skill of the week, (6) activity with group, and (7) conclusion. The Engage condition was peer mediated, and group sessions included autistic adolescents and peer mentors who had been selected and trained to deliver a portion of the intervention. The Skills condition included only autistic students and those with social challenges, and clinicians facilitated the group sessions using lesson plans provided in the manual.
		Delivery method: Group
		Dose: Each intervention occurred 40–60 min 1×/wk for 8 wk in a classroom during lunch or after school.
		Improvement: Both groups showed a significant increase in joint engagement during unstructured free time (e.g., recess, lunch). The Skills group self-reported significantly more problem behaviors from baseline to follow-up compared with the Engage group, and teacher-reported social skills showed significantly greater gains in the Skills group.
2b	Szumski et al. (2019)	Population: $N = 52$ autistic children age 3.6–7.6 yr ($M = 5.10$; 30.8% female)

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
		Setting: School, United States
		Intervention: The study compared 3 groups in the natural classroom setting: (1) PT/ST (Odom et al., 1997), (2) ICPS (Shure, 2000), and (3) a control group. The PT/ST intervention involved structured play-based tasks in which children are taught social skills (e.g., sharing toys, persistence in initiating social interactions, requesting to share objects), and in the ICPS intervention groups of children engaged in play to help them learn to solve problems and resolve social conflicts using dialogue.
		Delivery method: PT/ST was delivered in dyads, matching an autistic child to one with TD child and a therapist or teacher facilitator. ICPS was delivered with groups of 6–8 autistic and nonautistic children.
		Dose: PT/ST lasted 100 sessions, for 15–20 min/day $5\times$ /week; ICPS lasted 59 sessions, 10–20 min/day $5\times$ /week.
		Improvement: The PT/ST group showed a significant increase in teacher-reported social interaction child abilities. The ICPS group showed a similar, significant effect on teacher-reported problematic social interaction compared with the control group.
Clinic-Based Interv	entions for Autistic Children	n (Early Childhood)
B: Moderate	Recommendation: Practitioners could consider providing group and individual, online or in person, clinic-based parent education to improve social participation among autistic children during early childhood $(1-4\times/wk, 60-120 \text{ min}, \text{ over } 6-20 \text{ wk})$.	
1b	Tonge et al. (2014)	Population: $N=105$ autistic children age 23–70 mo ($M=46.5$; 15.5% female)
		Setting: Clinic, Australia
		Intervention: Parents in the PEBM skills training condition received a manual-based education and behavior management skills training package. Parents in the parent education and counseling group received only a manual-based education program without the skills training activities the PEBM group completed.
		Delivery method: Group and individual
		Dose: 10 90-min group sessions alternated with 10 60-min individual sessions over a 20-wk period
		Improvement: Participants in the intervention group showed significant increases in parent-reported communication scores compared with the control group.
2b	Barrett et al. (2020)	Population: $N=21$ autistic children age 18–56 mo (M treatment group = 35.7 mo, M control group = 38.22 mo; 9.52% female)
		Setting: Clinic, United States
		Intervention: PRISM, a model of intervention that is grounded in an antecedent-behavior-consequence framework, incorporates principles of PRT, and uses social activities as reinforcement, was used. The PRISM group was compared with a wait-list control group.
		Delivery method: Individual and family

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
20101	Challen	Dose: Individual sessions for up to 8 hr/wk and parent education sessions for up to 2 hr/wk for 6 mo.
		Improvement: The treatment group demonstrated a significant increase in social responsiveness compared with the wait-list control group.
2b	Blackman et al. (2020)	Population: $N = 18$ autistic children <8 yr ($M = 4.4$; 22.2% female)
		Setting: Clinic, United States
		Intervention: Parents received education on ABA and behavior managemen skills and had access to an online discussion forum.
		Delivery method: In person or online
		Dose: 1 60–75-min, in-person session/wk for 6 wk, or a self-paced, onlin training completed over 6 wk
		Improvement: Both methods of delivery (in person and online) showed a significant increase in parent–child social interaction scores.
Clinic-Based Inter	ventions for Adolescents	
B: Moderate	interventions that allow au	ners could consider providing clinic-based group or group and individual tistic adolescents to socialize with neurotypical peers in order to provide Is (1 90-min session/wk for 14–20 wk).
2b	Ko et al. (2019)	Population: $N=35$ autistic adolescents age 12–17 yr ($M=13.5; 31.4\%$ female)
		Setting: Clinic, United States
		Intervention: Participants who took part in the START program (Vernon et al., 2018), which uses a social club format with same-age neurotypical peers as well as unstructured and structured socialization opportunities, were compared with those in a wait-list control group.
		Delivery method: Group
		Dose: 90-min sessions 1×/wk for 20 wk
		Improvement: Postintervention, the START group asked significantly more questions during socialization opportunities compared with the wait-list control group.
2b	Vernon et al. (2018)	Population: N = 35 autistic adolescents age 12–17 yr (M intervention group = 13.25, M wait-list control group = 13.64; 31.4% female)
		Setting: Clinic, United States
		Intervention: The START intervention, which focuses on targeting social skills identified as having the largest negative impact on each adolescent social success. Skills were operationally defined, modeled, and practiced individually and in group sessions.
		Delivery method: Individual and group
		Dose: 90-min sessions 1×/wk for 20 wk
		Improvement: The intervention group showed significant improvements in social skills compared with the wait-list control group.

Table 2. Clinical Recommendations for Clients Age ≤18 yr: ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (Cont.)

Grade/Evidence Level	Citation	Intervention Details
2b	Schohl et al. (2014)	Population: $N = 58$ autistic adolescents age 11–16 yr (M age = 13.56; 19% female)
		Setting: Clinic, United States
		Intervention: The PEERS intervention, which focused on teaching social skills, rules, and steps of appropriate social etiquette and learning how to make and maintain friends. This was achieved through role playing, modeling, behavioral rehearsal, and coaching.
		Delivery method: Group
		Dose: 90-min sessions 1×/wk for 14 wk
		Improvement: The intervention group significantly improved in knowledge of PEERS concepts and friendship skills and showed a significant decrease in social anxiety compared with the wait-list control group.

Note. ABA = applied behavior analysis; ADHD = attention deficit hyperactivity disorder; ADLs = activities of daily living; ASD = autism spectrum disorder; CBT = cognitive—behavioral therapy; GoriLLA = Growing, Learning, and Living with Autism; IADLs = instrumental activities of daily living; ICPS = I Can Problem Solve; ImPACT = Immediate Post-concussion Assessment and Cognitive Testing; JASPER = Joint Attention Symbolic Play Engagement and Regulation; NR = Not reported; PEBM = parent education and behavioral management; PEERS = Program for the Education and Enrichment of Relational Skills; PRISM = Practical, Robust Implementation and Sustainability Model; PT/ST = Play Time/Social Time; PRT = Pivotal Response Treatment; SCERTS = Social Communication, Emotional Regulation, and Transactional Support; SST = social skills training; SST-PTI = social skills training with parent-teacher involvement; START = Social Tools And Rules for Teens.

- In which setting (e.g., inpatient, home, community, school) did the studies take place?
- Do any contextual factors (e.g., resources, policies) that are different from those in the studies influence my ability to provide the intervention?
- 3. How flexible is the intervention, and how much can I modify or adapt it?
 - If my setting or client population differs from those of the studies, can I modify or adapt the intervention without changing its integrity?
 - If I modify or adapt the intervention, what client characteristics (e.g., comorbidities) do I need to consider?
 - Can I be proactive and plan how to modify or adapt the intervention before I start implementing it?
 - Can I make minimal changes to the intervention, such as reordering the content of
 the sessions, or does the need for substantial
 changes indicate I should select another
 intervention?

To modify or adapt evidence-based interventions in practice, practitioners must plan and proactively think through the changes they need to make to fit the intervention to the client and practice setting. In addition, they must document how and why they altered the researched intervention so others in their setting know how to implement the intervention and why the changes were made. If an intervention must be

adapted extensively, it may not be the right fit for the situation. If extensive adaptations to the intervention are necessary, the intervention is probably not right for the client or setting. If the practitioner finds that the intervention does not suit the client, they should not use that intervention.

Case Illustrations and Evigraphs

The case studies in this section illustrate how occupational therapy practitioners can translate evidence from the systematic reviews to professional practice when collaborating with autistic individuals. Each case study highlights interventions that are supported by evidence and expert opinion. Evigraphs developed by AOTA staff based on the clinical recommendations are also included (Figures 1–3); each evigraph can be used to guide decisions and actions for practitioners to take. Practitioners must consider each potential intervention in relation to the client's individual goals, interests, habits, routines, and environment and choose interventions that strongly align with or are supportive of these factors in the context of the client's occupational profile.

Case Study 1: Jade

Occupational Profile

Jade's occupational therapist initiated the evaluation using AOTA's (2021) Occupational Profile Template

Table 3. Clinical Recommendations: Person-Centered, Student-Centered, or Family-Centered Planning Approaches

Grade/Evidence Level	Citation	Intervention Details
	ions for Autistic Adults (Ag	
B: Moderate	with PCP components to im and increase empowerment	pers could consider using mentoring programs (nonautistic or autistic mentors) aprove knowledge, decrease symptom reports, develop self-selected goals, and perceived social support, among other outcomes, in community-based in hr, 1×/day, 1–2×/wk, 5 days–6 mo).
3b	Hotez et al. (2018)	Population: $N=10$ autistic youths transitioning to college, age 17–22 yr ($M=18.8$ yr; 20% female)
		Setting: University, United States
		Intervention: The Summer Transition Program—2, including a structured curriculum adapted each term in response to participant input, group games, role play, and 1-on-1 meetings with autistic and nonautistic mentors. Curriculum content included self-advocacy skills, self-efficacy, autism knowledge, disability identity, social skills, executive functioning skills, self-regulation skills, interview and employment skills, and writing skills.
		Delivery method: Classroom-based group instruction and undergraduate student mentor delivering individualized support.
		Dose: 5 hr/day for 5 days (25 hr total)
		Improvement: Participants showed increased self-reported knowledge about autism, decreased symptom reports, increased identification of how disability can be a strength, and increased identification for why and when disclosure of disability is important in college.
3b	Martin et al. (2017)	Population: $N = 12$ autistic adults >18 yr ($M = NR$; % female NR)
		Setting: Community, United Kingdom
		Intervention: Community-based mentoring program focused on achieving self-identified goals for autistic mentees paired with an autistic mentor matched for interests. Autistic mentors received training in mentoring and had passed a criminal background check before mentoring.
		Delivery method: Face-to-face meetings between mentor and mentee in a public location chosen by both
		Dose: 1 hr/wk for 6 mo (~24 hr total)
		Improvement: Forty percent of mentees experienced an increase in self-selected goals at posttest. Mentees perceived that matching of mentors was highly important for success and that mentoring enabled progress toward goals. Mentees stated that they felt empowered.
3b	Siew et al. (2017)	Population: $N=10$ undergraduate autistic students age 17–20 yr ($M=18$ yr; 30% female)
		Setting: University, Australia
		Intervention: Curtin Specialist Mentoring Program (Siew et al., 2017) with 1-on-1 peer mentoring from a nonautistic postgraduate mentor. Mentors received training using a manualized approach, and researchers matched them according to interests.
		Delivery method: 1-on-1 mentoring with optional group meetings
		Dose: Mentor-mentee pairs met 1 hr/wk for 1 semester. Optional social group sessions were offered weekly.

Table 3. Clinical Recommendations: Person-Centered, Student-Centered, or Family-Centered Planning Approaches (Cont.)

Grade/Evidence Level	Citation	Intervention Details
		Improvement: Statistically increased scores of autistic persons' perceived social support. Statistically reduced levels of apprehension in communicating with others were noted. Mentoring was positive when it included the following: constant and stable sources of support, peer supports, and flexible and individualized support focused on mentee goals.
3b	Thompson et al. (2020)	Population: $N=30$ undergraduate autistic students (M age $=22.3$ yr; age range NR; 27% female)
		Setting: University, Australia
		Intervention: Curtin Specialist Mentoring Program with 1-on-1 peer mentoring from a nonautistic postgraduate mentor. Mentors received training using a manualized approach, and researchers matched them according to interests and provided weekly supervision for mentors.
		Delivery method: 1-on-1 mentoring with optional group meetings
		Dose: Depended on the university where this was conducted. One university required mentor-mentee pairs to meet for 1 hr/wk for 1 semester; the other university required mentor-mentee dyads to meet 1-2 hr 2×/wk for 1 semester. Optional social group sessions ran weekly.
		Improvement: A significant decrease in total autistic traits, including communication and motivation symptoms, was noted. Active ingredients were developing partnerships and understanding, modeling and practicing communication, psychological supports, and grading and planning skills.
3b	Todd et al. (2019)	Population: $N=16$ autistic college students, age 19–28 yr ($M=22.3$ yr, 19.7% female)
		Setting: University, United States
		Intervention: IFiT curriculum to provide mentored support for physical fitness; nonautistic peer mentors received training. Paired dyads exercised together and focused on preferred exercise activities identified by autistic participants and implemented at the time and location of participant preferences.
		Delivery method: Paired dyads
		Dose: Sessions of at least 30 min of moderate to vigorous physical activity with aerobic and strength training 2.5 hr/wk for 10 wk (25 hr total)
		Improvement: Thirty percent had a significant improvement in cardiorespiratory fitness; 25% had a significant improvement in upper body muscular endurance. There was an 89.1% adherence rate for the IFiT program ($M=18/20$ sessions). Three qualitative themes were noted: (1) gains in motor competence and knowledge of exercise, (2) improved health (sleep, energy, strength, gastrointestinal health), and (3) a sense of belonging.
Multicomponent St	ructured Module Interventio	ns With PCP Components for Autistic Adults (Age ≥18 Yr)
B: Moderate	Recommendation: Practitioners could consider using multicomponent structured module interventions with PCP components, in university, community, or clinic settings, to improve social and self-determination outcomes for transition-age autistic adults (1–2-hr sessions, 1×/wk, for 10–19 wk).	
2b	Nadig et al. (2018)	Population: $N = 26$ autistic adults age 18–32 yr ($M = 21.99$; 32% female).
		Setting: Community, Canada
		Intervention: McGill transition support program with 5 modules in 3 domains (Social Communication, Self-Determination, and Working With Others) facilitated by graduate students

Table 3. Clinical Recommendations: Person-Centered, Student-Centered, or Family-Centered Planning Approaches (Cont.)

Grade/Evidence Level	Citation	Intervention Details
		Delivery method: Groups of 4–6
		Dose: 2-hr sessions 1×/wk, for 10 wk (20 hr total)
		Improvement: Considerably improved interpersonal cognitive problem-solving skills were noted in the intervention group vs. a control group. Perceived skill attainment was observed on a researcher-developed scale, as rated by autistic adults and their parents at the posttest compared with the pretest.
2b	Oswald et al. (2018)	Population: $N = 44$ autistic adults age 18–38 yr ($M = 25.1$; 31.7% female)
		Setting: Clinic, United States
		Intervention: ACCESS program curriculum with social coaches (parent or close relative)
		Delivery method: In-person in a clinical setting
		Dose: 1.5 hr/wk for 19 wk (\sim 28.5 hr total)
		Improvement: Participants reported significant improvement in coping skills compared with the control group. The social coach reported significant improvements in adaptive behaviors and in self-determination skills.
2b	Ashbaugh et al. (2017)	Population: $N=3$ autistic college students age 18–25 yr ($M=21.47$; 66.6% female)
		Setting: University, United States
		Intervention: Structured social planning with 5 components: motivational interests, social activity choice, organizational skill training, peer mentoring, and social skills training
		Delivery method: Clinician- and doctoral-student delivered 1-on-1 sessions with peer mentoring by nonautistic college students
		Dose: 1-hr session 1×/wk for 10 wk (10 hr total)
		Improvement: All participants increased their number of informal social activities, extracurricular events attended, and number of peer interactions from baseline to the intervention phase. Ratings of satisfaction from pre- to postintervention increased, as did GPA ratings.
Coaching Interventi	ons With Caregivers of You	ng Children on the Autism Spectrum
B: Moderate	Recommendation: Practitioners could consider using coaching interventions (individual or group, in person or remote) with caregivers of autistic young children to improve individualized family or child goals and caregiver sense of competence, empowerment, or self-efficacy (45-min sessions, 1×/wk, for 10–12 wk).	
2b	Azari et al. (2019)	Population: $N=33$ caregivers of autistic children age 3–10 yr (M intervention group = 6.5, M control group = 7.12; 21% female)
		Setting: Home and clinic, Iran
		Intervention: Treatment group caregivers received the CI-ASD intervention, which focuses on adapting the environment to the child's sensory needs using coaching. There also was a wait-list control group that received no intervention.
		Delivery method: Individual and group
		Dose: 1 45-min session/wk, of which 2 were group and 10 were individual sessions

Table 3. Clinical Recommendations: Person-Centered, Student-Centered, or Family-Centered Planning Approaches (Cont.)

Grade/Evidence Level	Citation	Intervention Details
		Improvement: Statistically significant improvements were noted for goal achievement and the COPM Satisfaction and Importance scales in the intervention group compared with the wait-list control for up to 4 wk postintervention.
3b (qualitative findings)	ladarola et al. (2020)	Population: $N=9$ caregivers of autistic children age 2–7 yr ($M=30.7$; age range NR; 89% female)
		Setting: Community, United States
		Intervention: Mind the Gap intervention, which has 7 modules, including video, PowerPoints, information sheets, worksheets, and engagement activities, delivered by peer coaches (other parents of children on the autism spectrum, matched for cultural background and language, and supervised by a psychologist)
		Delivery method: In person, phone, or teleconference
		Dose: Coaching 1×/wk for 12 wk (unclear intensity)
		Improvement: Family empowerment and autism knowledge increased at posttest compared with pretest, and caregiver self-efficacy (agency) stayed similar from pretest to posttest.
3b	Angelin et al. (2021)	Population: $N=36$ caregivers of children age 3–12 yr with ASD, ID, ADHD or sensory disorders (M intervention group $=5.5$ yr; M control group $=5.2$ yr 47.2% female)
		Setting: Clinic, India
		Intervention: Treatment group mothers were interviewed to identify goals via GAS; group sessions focused on warm-up activities and identifying action plans to address a maximum of 2 goals in a timeframe using Occupational Performance Coaching. Control group mothers did not receive coaching. Both groups of mothers had children enrolled in standard outpatient occupational therapy for children on the autism spectrum.
		Delivery method: Group
		Dose: 1-hr session, 1×/wk for 10 sessions
		<i>Improvement:</i> The treatment group had statistically higher COPM Satisfaction and Performance scores at posttest than the control group $(p < .001)$.
3b	Little et al. (2018)	Population: $N = 17$ caregivers of autistic children age 2–7 yr ($M = 3.9$; 22.2% female).
		Setting: Online, United States
		Intervention: Occupation-Based Coaching (strengths-based support or caregiver to advance child's function) using 5 principles: (1) use of authentic contexts, (2) family interests/routines, (3) caregiver interactions and responsiveness, (4) reflection and feedback, and (5) joint plans (caregiver and provider)
		Delivery method: Individual, online
		Dose: 60 min/wk, 1×/week for 12 wk

Table 3. Clinical Recommendations: Person-Centered, Student-Centered, or Family-Centered Planning Approaches (Cont.)

Grade/Evidence Level	Citation	Intervention Details
		Improvement: Significant improvement on the APCP, GAS, and the COPM-2 were noted.

Note. ACCESS = Acquiring Career, Coping, Executive-Control, and Social Skills; ADHD = attention deficit hyperactivity disorder; APCP = Assessment of Preschool Children's Participation; ASD = autism spectrum disorder; CI-ASD = Contextual Intervention adapted for Autism Spectrum Disorder; COPM = Canadian Occupational Performance Measure; COPM-2 = COPM, 2nd Edition; GAS = goal attainment scaling; GPA = grade point average; ID = intellectual disability; IFit = Into Fitness Together; NR = not reported; PCP = person-centered planning.

as a guide to collect relevant information. Jade is a 6-yr-old soon-to-be-kindergartener. She lives in an apartment with her mother, Betsy, and 3-yr-old brother, Derek, on the west side of Chicago. Betsy has lived in this neighborhood for much of her life. Her mother lives close by, as does her sister's family. Betsy and her children are active in their church and connect with family on the weekends. Betsy works in the office at the public school Jade will attend next fall.

Jade has a strong bond with Betsy and spends most of her time with her. Betsy describes Jade as spirited, energetic, smart, strong, and independent. She notes that Jade is "a wiz with her cell phone and anything with a screen." She loves how Jade immediately dances when she hears music and relayed that the Sunday school teacher says Jade has "never heard a song she didn't like." Jade loves Junie B. Jones and always picks a Junie B. Jones book to read with Betsy. She is protective of Derek, and if he is hurt she tries to comfort him with hugs.

Jade was diagnosed with autism spectrum disorder at age 5 yr. Her speech has been delayed since early in life. In addition, Betsy has had long-standing concerns about how Jade responds in specific situations. As long as she can remember, it has been challenging to take Jade to stores because she will become upset and will run off if she is not in a cart. Jade also has difficulty while at the park playing with her cousins and other children; Betsy says Jade does not respond when peers try to engage her, and she prefers to walk around the perimeter of the park. Betsy indicates that Jade is selective about when she engages in play with her cousins at family gatherings and most often does so if all are moving (e.g., dance party, chase). She also likes spinning on the swings at the park. Jade has always had inconsistent sleep patterns and limits her diet to a few foods. She has maintained a stable growth pattern, although Betsy is concerned about her health and nutrition because of her limited variety of foods and inconsistent sleep.

Betsy and Jade received early intervention services from an occupational therapist and speech pathologist to support social—communication development and additional play and adaptive concerns. Betsy reports that she often adjusts activities and routines to support Jade's participation. She explains that most often she has to break things down or get rid of outside distractions to support Jade's attention to a particular activity. At the time of transition to preschool services, Betsy and the pediatrician discussed Jade's continued speech delays and daily challenges. At that time, the pediatrician mentioned that Jade may have a diagnosis of autism spectrum disorder. Preschool services were initiated on the basis of her developmental delay. Consultative speech and occupational therapy services were added to Jade's Individualized Education Program (IEP). An interdisciplinary evaluation conducted more than 1 yr later at a university-affiliated tertiary diagnostic center confirmed the autism diagnosis.

Jade is transitioning from preschool to elementary school. Betsy is both excited and apprehensive that Jade will be in the building in which she works during the school day. Given the challenges Jade has experienced in preschool, Betsy is thankful she will be there to support her when needed but is concerned about the impact of Jade's school performance on her own interactions with the school staff. Jade's IEP continues to include both occupational therapy and speech pathology consultations. Betsy is familiar with the school-based occupational therapist and knows that occupational therapy in schools is focused on academic performance. Occupational therapy consultations in the school, according to the IEP's specially designed instruction and statement of related services, will focus on classroom engagement and social participation at recess. Betsy wants direct support with Jade's sleep and eating difficulties as well as outpatient services to address Jade's occupational performance at home and in the community. Betsy attends a local outpatient clinic with Jade to supplement the schoolbased occupational therapy services. She wants to set Jade up for success when she starts kindergarten in the fall, and she feels getting Jade's sleep and mealtime routines to a better place would lay the foundation for successful participation in school. With a lens for supported decision-making, Jade was asked about her priorities to guide the initial evaluation and goal planning. She was asked open-ended questions, and brainstorming supported the interaction. She quickly indicated she wanted to have more friends to chase or dance with on playdates.

Table 4. Clinical Recommendations for Clients Age >18 Yr: Participation in ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management

Grade/Evidence Level	Citation	Intervention Details
		Work
Project SEARCH		
B: Moderate	Recommendation: Practitioners could consider providing Project SEARCH, a multicomponent, manualized intervention delivered in the context of the work site to improve acquisition of competitive employment for autistic adults (9 mo, involving 3 10–12-wk internship rotations, for 35 hr/wk).	
1b	Wehman et al. (2020)	Population: $N=156$ autistic students age 18–21 yr ($M=19.7$; 26% female)
		Setting: Job sites, Germany, United States
		Intervention: Project SEARCH plus ASD support, a multicomponent manualized intervention delivered in the work environment that includes direct instruction for work skills and indirect time spent in internships and working with on-site supervisors and internship mentors. In addition, work sites received business supports, training, and marketing for interns with ASD. ASD adaptations included additional applied behavioral approaches for structure in employment tasks and social-communication skills training.
		Delivery method: Individual and group components delivered in different large community businesses
		Dose: 9-mo intervention involving 3 10–12-wk internship rotations; 35 hr/wk of community-based employment training
		Improvement: The intervention group had significantly higher rates of employment, number of hours worked, and hourly wages at graduation and follow-up.
2b	Wehman et al. (2017)	Population: $N = 49$ autistic adults age 18–21 yr ($M = 19.8$; 28.6% female)
		Setting: Job site, United States
		Intervention: Project SEARCH plus ASD support
		Delivery method: Individual and group components delivered in different large community businesses
		Dose: 9-mo intervention involving 3 10–12-wk internship rotations. No further details were provided.
		Improvement: The intervention group had decreased employment support needs and significantly higher employment rates at graduation and at 3- and 12-mo follow-up.
2b	Whittenburg et al. (2020)	Population: $N = 14$ autistic adults age 18–21 yr ($M = NR$; 22% female)
		Setting: Job site, United States
		Intervention: Project SEARCH plus ASD support. This study included modifications for military businesses.
		Delivery method: Individual and group components delivered in different large community businesses
		Dose: 9-mo intervention involving 3 10–12-wk internship rotations. No further details were provided.
		Improvement: The intervention group had significantly higher employment rates.

Table 4. Clinical Recommendations for Clients Age >18 Yr: Participation in ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details		
Assistive Technology				
B: Moderate	Recommendation: Practitioners could consider providing a workplace intervention that includes strategies to support the individual needs of the individual combined with assistive technology (Apple iPod Touch applications) to improve employment skills and decrease job coaching support for autistic adults (individually tailored, 1-hr sessions over 12 wk, ranging from 7–16 hr total).			
1b	Gentry et al. (2015)	Population: $N = 55$ autistic adults age >18 yr ($M = 24$; 16% female)		
		Setting: Workplace, United States		
		Intervention: Workplace occupational therapy assistive-technology assessment followed by training and support in the use of a suite of Apple iPod Touch applications and strategies to support the individual needs of the person in the workplace.		
		Delivery method: Individual intervention in the workplace, technology intervention; wait-list control group		
		Dose: 1-hr sessions over 12 wk, varied coaching time per individual (average 7–16 hr depending on group)		
		Improvement: The technology intervention with job coaching resulted in significantly fewer job coaching support hours during participants' first 12 wk on the job.		
		Social Participation		
Peers				
B: Moderate	Recommendation: Practitioners could consider providing the PEERS for Young Adults intervention, in a community-based setting, to improve social skills for autistic young adults (90-min sessions, 1×/wk for 16 wk).			
1b	McVey et al. (2016)	Population: $N = 47$ autistic adults age 18–28 yr ($M = 20$; 19% female)		
		Setting: Community, Germany and United States		
		Intervention: The PEERS program is a 14-wk social skills intervention for adolescents with ASD that targets making and keeping friends. The intervention focuses on small-group instruction of didactic material, role plays, behavioral rehearsal, coaching, and weekly homework assignments for social skills practice. Caregivers receive complementary information delivered simultaneously with, but separate from, the adolescents.		
		Delivery method: Group young adult sessions with concurrent caregiver sessions		
		Dose: 90-min sessions 1×/wk for 16 wk		
		Improvement: The intervention group showed significant improvement in caregiver-rated social skills and youth self-reported social participation.		
2b	Laugeson et al. (2015)	Population: $N = 17$ autistic adults age 18–24 yr ($M = 21$; 24% female)		
2b	Laugeson et al. (2015)	Population: $N = 17$ autistic adults age 18–24 yr ($M = 21$; 24% female) Setting: Community, United States		
2b	Laugeson et al. (2015)			
2b	Laugeson et al. (2015)	Setting: Community, United States		

Table 4. Clinical Recommendations for Clients Age >18 Yr: Participation in ADLs, IADLs, Rest and Sleep, Work, Education, Play, Leisure, Social Participation, and Health Management (*Cont.*)

Grade/Evidence Level	Citation	Intervention Details
		Improvement: The intervention group showed significant improvement in youth- and caregiver-rated social engagement and knowledge of specific social skills.
Manualized Social	Skill and Participation-Base	d Interventions
B: Moderate	Recommendation: Practitioners could consider using manualized interventions to improve social communication and engagement within the context of social group activities for autistic adults (1.5–2-h sessions, 1–2×/wk for 12–19 wk)	
1b	Akabogu et al. (2020)	Population: $N=86$ autistic adults age 18–25 yr (M intervention group = 23.4, M control group = 24; 62.8% female)
		Setting: Community, Nigeria
		Intervention: An intervention that included language education intervention techniques, cognitive-behavioral techniques, rational-emotive techniques, and social coping techniques
		Delivery method: Small group
		Dose: 28 sessions (2 hr each) implemented over 14 wk (56 hr total).
		Improvement: Significant improvements in social participation at posttest and a 4 mo follow-up were observed.
2b	Morgan et al. (2014)	Population: $N=28$ autistic adults age 18–36 yr ($M=24.5$; 3.6% female)
		Setting: Clinic, United States
		Intervention: The Interview Skills Curriculum, a 12-wk manualized group intervention to increase the social pragmatics skills necessary for job interviews.
		Delivery method: Group
		Dose: 90-min sessions 1×/wk for 12 wk
		Improvement: Significant improvements in social-pragmatic skills were observed during a mock job interview in the intervention group compared with the control group.
2b	Oswald et al. (2018)	Population: $N = 44$ autistic adults age 18–38 yr ($M = 25.1$; 31.7% female
		Setting: Clinic, United States
		Intervention: ACCESS program with a Social Coach caregiver or close relative). Key components included three CBT and psychoeducation-based modules: (1) Stress and Anxiety Coping; (2) Self-Determination; and (3) Adaptive and Social Skills. Concurrent Social Coach groups covered these topics and provided psychoeducation on how to facilitate the use and generalization of skills and concepts learned by individuals in a group.
		Delivery method: Group
		Dose: Nineteen 1.5-hr weekly lessons
		Improvement: Significant improvements in participants' global adaptive functioning as reported by social coaches were noted.

Note. ACCESS = Acquiring Career, Coping, Executive-Control, and Social Skills; ADLs = activities of daily living; ASD = autism spectrum disorder; CBT = cognitive—behavioral therapy; NR = not reported; IADLs = instrumental activities of daily living; PEERS = Program for the Education and Enrichment of Relational Skills.

Areas the client would like to address (may be one or more) Evidence-based intervention options Self-advocacy interventions involving mentorship, education, Self-Advocacy: and strategies; inclusion of autistic Advocating for participants in the program development and dissemination Accommodations (Gillespie-Lynch et al., 2017; Hotez et al., 2018) Interest-based group interventions Self-Determination/ possibly involving nonautistic peers (Gordon et al., 2015; Martin Self-Efficacy et al., 2020) Cognitive behavioral therapy intervention (Frank et al., 2022; Hesselmark et al., 2014; Wood et al., 2015) Self-advocacy and social skills interventions via mentorship Mental Health: program with one-on-one and Anxiety/Social Anxiety group collaborations with autistic students (Gillespie-Lynch et al., 2017) PEERS® for Young Adults (Program for the Education and Enrichment of Relational Skills) (Schohl et al., 2014) Mental Health: Mindfulness-based stress

Figure 1. Interventions to improve self-advocacy, self-determination and self-efficacy, and mental health.

Note. See Table 1 for additional recommendations and details on each study. Occupational therapy practitioners should always consider the evidence, as well as the client's safety, personal factors, preferences, access to resources, and interests when developing the plan of care and selecting interventions.

Occupational Therapy Initial Evaluation and Findings

Depression

To ensure consistency of services across school and the clinic, the occupational therapist reviewed Jade's school records, evaluation findings, and planned interventions. She also set up a phone call with the schoolbased occupational therapist to brainstorm about how to build on Jade's strengths and interests across therapy settings. During a classroom-based observation in the preschool setting, the occupational therapist reported that Jade most often explored the classroom on her own and demonstrated minimal social initiation with peers. When peers attempted to engage with Jade by sharing a toy or pulling her into an activity, she joined in only when situations involved dancing or movement. While in centers, Jade was content to engage in an activity on her own in the corner of the area. Classroom observations and teacher reports noted that her most frequently selected centers were the sand and water, computer, and music and

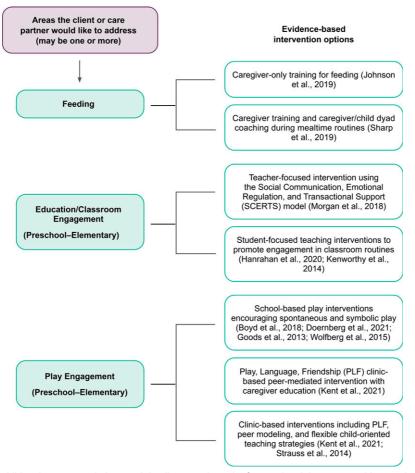
movement ones. At recess and during free play, she tended to stay to herself on the periphery of the area. She needed redirection and support from an instructional assistant to manage her school materials (e.g., organize her desk) and complete school tasks. The school report stated that the School Function Assessment (Coster et al., 1998) will be administered at the start of the school year to validate classroom observations highlighting cognitive—behavior task assistance and adaptations that would support Jade's activity participation in the classroom during playground and recess and in snack and mealtime settings. Relevant occupational therapy—supported goals on the IEP included the following:

reduction (Pagni et al., 2020; Spek

et al., 2013)

 Jade will engage in a collaborative activity she chooses with a peer for a 10-min period in a preferred center (i.e., sand and water, computer, or music and movement) given graded adult support from teacher or instructional assistant

Figure 2. Interventions to improve activities of daily living, instrumental activities of daily living, rest and sleep, work, education, play, leisure, social participation, and health management for children and youth.



Note. See Table 2 for additional recommendations and details on each study. Occupational therapy practitioners should always consider the evidence, as well as the client's safety, personal factors, preferences, access to resources, and interests when developing the plan of care and selecting interventions.

- Jade's attention will be congruent with the circle time activity (e.g., weather, story) during a 10-min period with environmental and sensory supports.
- Jade will engage in turn-taking activity or cooperative play activity with peers at recess 50% of the period when on the playground daily after receiving peer education and with graded adult support.

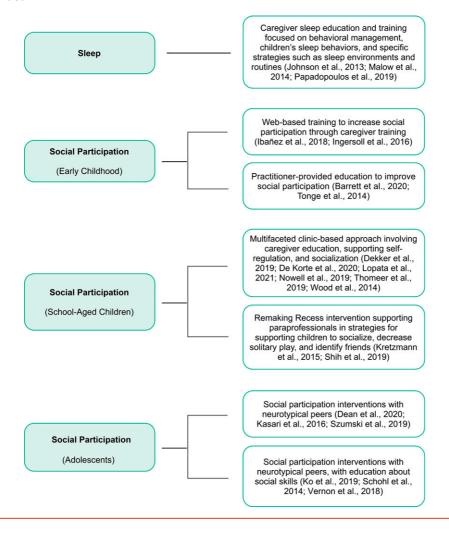
Jade was initially cautious when entering the open clinic, staying close to Betsy's side and holding her hand. She acknowledged the occupational therapist, who responded by giving her a fist bump. Jade quickly warmed to the setting when she saw a reading corner and plopped herself down in a soft beanbag. As Betsy and the occupational therapist chatted, Jade checked in visually for reassurance as she slowly started exploring the sand table.

On the basis of Betsy's requested focus of intervention on feeding and mealtime routines and sleep, coupled with Jade's goals of developing a circle of friends, the analysis of occupational performance (AOTA, 2020) relied on the Short Sensory Profile 2 (SSP–2; Dunn, 2014), the Adaptive Behavior

Assessment System: Third Edition (ABAS–3; Harrison & Oakland, 2015), and the Brief Autism Mealtime Behaviors Inventory (BAMBI; Lukens & Linscheid, 2008), to supplement clinical observation and inform collaborative goal planning. The assessment findings are summarized in Table 5.

The results of the ABAS-3 highlighted Betsy's social (leisure and social participation) and practical (home living, health and safety, self-care) concerns for Jade. Betsy's report on the SSP-2 indicated that Jade's primary sensory patterns relate to sensory seeking and sensitivity. Jade was reported to struggle to complete tasks and to maintain focused attention, especially during nonpreferred tasks. She is distracted when there is background noise and was noted to be observant of her surroundings and to look away from tasks to notice actions in a room. These habits, like her sensory seeking, affect Jade's ability to successfully engage in activities. Jade was noted to pursue movement and will frequently bounce her foot or rock in her chair when in an activity. She also often jumps from one activity to another, and she shows strong preferences for particular tastes and will refuse unfamiliar

Figure 2. Continued



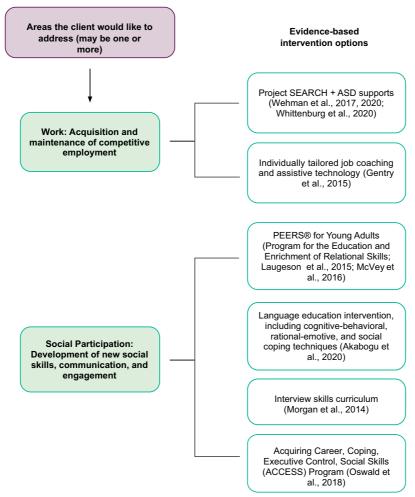
tastes or food textures. The sensory and behavioral sections of the ABAS–3 highlighted considerations for intervention planning.

Clinical observations during the evaluation validated Betsy's report. Jade was easily engaged in playbased routines that evaluated self-regulation, executive functioning, and motor control when choices for activities were provided. Jade's activity choices were used to create a schedule of activities. These activities were conducted in a private, enclosed room because she required additional prompts for task completion when activities were initially attempted in the open clinic gym. Periodic breaks in the open clinic gym during desirable activities (e.g., swing, scooter board) and snacks were embedded into the schedule. Activity progression and self-monitoring strategies supported Jade's transition back to the private room. Taking into consideration sensory-seeking and sensitivity pattern influences on Jade's observable behavior will be important to highlight when collaborating with Betsy and Jade during interventions. Specific to reported sleep difficulties, Jade often has difficulty "calming down" to fall asleep. Betsy reports Jade will rock in her bed and

sing for extended periods before she falls asleep. Once asleep, Jade has difficulty maintaining her sleep. When she wakes up, it is difficult to get her to lie back down; she instead tries to engage with her toys in her bedroom. Betsy reports that she must be extremely quiet and limit her movement and activity in the apartment for fear that she will wake Jade up.

Additional information was gathered about ongoing mealtime routines by report and clinical observation during simulated snack breaks. Betsy noted that Jade has always been "finicky" and "selective" in the foods she will eat. A list of foods in Jade's current diet was obtained. When the BAMBI was used to gather structured information, Betsy reported that Jade often, or almost always, is inflexible about mealtimes, does not accept a variety of foods, prefers the same foods with each meal, and dislikes certain foods and will not eat them. Jade prefers crunchy foods at home. She selected only crunchy snacks (i.e., chips, pretzels, BelVita bars) during the evaluation. When asked about her preferred foods, Jade said she likes to "chew food and really feel the food in [her] mouth." She also noted she does not like to "have to use a spoon." She

Figure 3. Interventions to improve activities of daily living, instrumental activities of daily living, rest and sleep, work, education, play, leisure, social participation, and health management for adults.



Note. See Table 4 for additional recommendations and details on each study. Occupational therapy practitioners should always consider the evidence, as well as the client's safety, personal factors, preferences, access to resources, and interests when developing the plan of care and selecting interventions.

typically walks around during mealtimes rather than sitting for a meal at the table. Jade also prefers to have food prepared and served in a particular way. In

Table 5. Jade's Initial Evaluation Results

Table of Gues of Hillar Evaluation Research			
Assessment	Initial Results		
Short Sensory Profile 2	Quadrants Seeking: Much more than others Avoiding: Just like the majority of others Sensitivity: More than others Registration: Just like the majority		
	of others Sensory and Behavioral Sections Sensory: More than others Behavioral: More than others		
Adaptive Behavior Assessment System–3	General Adaptive Composite: 72 ^a • Conceptual: 76 • Social: 70 • Practical: 71		

 $^{{}^{}a}M = 100$, SD = 10.

general, Jade was reported to have food selectivity, food refusal, and mealtime rigidity.

On the basis of Jade's assessment results, the occupational therapist, Betsy, and Jade talked about priority goal areas and potential goals. They clarified what success will look like. Betsy and Jade collaborated with the occupational therapist to establish the following goals for treatment:

- Jade will add at least five new foods to the established list of foods she will eat that are typically served at school in the lunchroom or are easy to bring to school from home before the start of school in fall.
- Jade will be in bed by 9:00 p.m. for her bedtime routine of reading and rocking with Betsy. By 10:00 p.m., lights will be out and Jade quiet.
- Jade will respond to her cousin's attempts to engage her in play at family gatherings for cooperative play.
- Jade will have a monthly playdate with a friend from school on the school playground.

Occupational Therapy Interventions at School

Attention to Classroom Activities

On the basis of the evidence, the occupational therapist collaborated with Jade's classroom teacher to improve Jade's attention to tasks using principles from the Social Communication, Emotional Regulation and Transactional Support (SCERTS) model (Morgan et al., 2018), which integrates the child's goals into classroom activities and targets antecedent-based positive behavior supports. For example, Jade's goal of attending for 10 min during circle time was integrated into all group-based classroom activities. Jade's teacher would use a timer so Jade could see the passage of time and understand how much time was left. The teacher and the occupational therapist collaborated on ways to grade the activity; they planned that Jade would attend group-based activities for 3 min at the beginning of the school year with the goal of slowly increasing the amount of time. In addition, the occupational therapist developed social narratives to prepare Jade for classroom tasks and engagement (e.g., Hanrahan et al., 2020). When Jade had a social narrative about what was going to happen in circle time (e.g., "First you sit on your circle spot, then the teacher reads a story"), she knew what to expect and was better able to attend.

Socialization With Peers

The occupational therapist worked with Jade's classroom teacher to provide an integrated playgroup in the classroom with peers to promote Jade's social communication and social reciprocity (Wolfberg et al., 2015). Because the teacher had concerns about the social communication of many students in her class, she was receptive when the occupational therapist offered to hold a small group in the classroom every Wednesday afternoon. During this small group, the occupational therapist paired Jade with one peer who shared her interest in music and dance, and they engaged with two other dyads. The small group focused on social reciprocity (e.g., responding to gestures or words, recognizing nonverbal cues, turn-taking) and symbolic play. Given Jade's interest in water play and sand (driven by her sensory-seeking nature), the occupational therapist paired Jade with a student who also enjoyed messy activities, so they could engage in activities that fulfilled both of their sensory needs.

In addition, the occupational therapist worked with the classroom teacher and school paraprofessionals to implement the Remaking Recess intervention (Kretzmann et al., 2015), in which the occupational therapist shared information with the paraprofessionals and spent 1 day/wk coaching on the playground to help them support unengaged children on the playground. Although this was an investment of time at the beginning of the school year, the occupational therapist saw that the paraprofessionals were increasingly engaged with children on the playground and had the knowledge and strategies to support Jade and other unengaged children throughout the school year.

Occupational Therapy Interventions at Home and in the Community

Mealtimes

The occupational therapist used parent coaching on behavioral strategies to promote structure and consistency during mealtimes (see Johnson et al., 2019; Sharp et al., 2019); specifically, the occupational therapist visited Jade and Betsy during a meal to observe the authentic routine and problem-solve together strategies to more effectively structure mealtimes. The occupational therapist suggested that Betsy offer Jade a nonpreferred food followed by a preferred food and limit screen time during meals. Because Jade prefers crunchy foods, the occupational therapist and Betsy brainstormed about healthy foods that could be introduced during mealtimes that meet Jade's sensory preferences.

Sleep

On the basis of the assessment data, the occupational therapist noted that Jade shows sensory-seeking and sensory sensitivity. Her sensory seeking means that she is always "on the move," so it takes her a little longer to calm her body and get ready for sleep. In addition, her sensory sensitivity means that noises wake her easily. The combination of these sensory patterns makes it difficult for Jade to fall asleep and stay asleep. The occupational therapist used parent coaching and education about children's sleep behaviors, including prevention techniques for bedtime routines, and reinforcement to address Jade's sleep (see Johnson et al., 2013; Malow et al., 2014; Papadopoulos et al., 2019). The occupational therapist coached Betsy on ways to promote relaxation, routine, and sleep hygiene at bedtime as well as how to not positively reinforce Jade's nighttime waking (e.g., no television or playing during the night).

Plav

The outpatient occupational therapist chose to support Jade's play by meeting Betsy, Jade, and Jade's cousin at the playground. The occupational therapist knew that incorporating a peer would support Jade's play and social interaction development (Dean et al., 2020; Kasari et al., 2016; Szumski et al., 2019), so the occupational therapist and Betsy instructed Jade's cousin on how to initiate interactions with Jade. When Jade's cousin initiated a game, the occupational therapist coached Betsy on how to support Jade's response. Betsy joined in the game, modeled a response, and then offered Jade a reward (e.g., a sticker) when Jade would follow her cousin's lead for a game of tag or a race around the playground.

Outcomes

Goal attainment was the primary consideration for discharge. By the end of the school year, Jade had reached all her IEP goals (Table 6). She attended during circle time with visual and sensory supports and was engaging in cooperative play at the sand and water centers in

Table 6. Jade's Discharge Evaluation Results

Assessment	Discharge Results		
Short Sensory Profile 2	Not readministered: Sensory patterns and preferences would not be anticipated to change; instead, Jade found new self-management and coping strategies that supported improved participation (conceptual) and social and adaptive behavior (practical).		
Adaptive Behavior Assessment System–3	General Adaptive Composite: 88 ^a - Conceptual: 87 - Social: 81 - Practical: 85		

 $^{^{}a}M = 100, SD = 10.$

the classroom. Betsy reported that Jade would fall asleep more quickly but continued to sometimes have night wakings. With regard to eating and mealtimes, Betsy no longer offered screen time during mealtimes, and Jade had incorporated new crunchy foods into her diet, including snap peas, veggie straws, and granola bars. Jade also was responsive to her cousin's bids for social interaction and followed along in active games.

Case Study 2: KJ

Occupational Profile

KJ (they/them/their) is a 13-yr-old autistic student entering eighth grade at an inclusive community public school. KJ migrated to the United States from Central America with their family when they were age 4 yr. Although 9 yr have passed since then, KJ and their family still experience stress related to cultural differences and leaving their close extended family. KJ has an IEP and receives support from a reading specialist; team consultations with English-language-learning staff; and direct and indirect school-based services, including counseling, speech-language therapy, and occupational therapy. KJ has been immersed in a transitional bilingual education program since they were age 4 and has acquired language proficiency over 9 years. Although KJ's parents have acquired some English language skills over time, effective communication between home and school personnel requires the assistance of an interpreter. The current occupational therapy evaluation is in preparation for KJ's upcoming IEP meeting, which will be their last IEP meeting before beginning to plan for the transition to eighth grade.

Occupational Therapy Initial Evaluation and Findings

Using AOTA's (2021) Occupational Profile Template as a guide, KJ's occupational therapist conducted the evaluation, which revealed the following:

- KJ has a strong bond with their math teacher and basketball coach. These two have become important social connections and provide guidance, support, and encouragement, contributing to KJ's academic and personal growth and development.
- KJ's homeroom teacher describes them as a compassionate, diligent student who is motivated to learn and succeed.
- KJ displays a keen interest in math and basketball, deriving joy from engaging in both activities and participating in Mathematical Olympiads for Elementary and Middle School (https://moems.org/) and the school's basketball team.
- KJ experiences social anxiety, which results in heightened self-consciousness, a tendency to withdraw from new situations, a reluctance to engage with others, and an aversion to attending school. At times, they have difficulty using spoken language in these situations, but they have adapted to using a text-to-speech app on their phone.
- KJ expresses fondness for basketball, finding joy in playing it and engaging in mental math games. Although they occasionally prefer solitude, they express openness to being in the company of others with similar interests, such as their math teacher and basketball coach.

KJ's team would like to focus on promoting KJ's self-advocacy and participation in school-related occupations. Their school uses strengths-based approaches (Koenig & Kinnealey, 2010; Kotler & Koenig, 2012; Lanou et al., 2012) in which all students are provided with the opportunity to create an aspirational goal, which facilitates their growth and development in skills they find fulfilling and in which they feel competent. KJ was evaluated with goal attainment scaling (GAS; Mailloux et al., 2007), an individualized assessment that focuses on goal selection and scaling that takes a standardized approach. GAS promotes client involvement in the assessment and intervention process and promotes multidisciplinary team collaboration (Cardillo & Choate, 1994). Additional findings from the evaluation are provided in Table 7, an explanation of GAS is provided in Table 8, and resultant goals and benchmarks are listed in Table 9.

After coordinating with the reading specialist, English-language—learning staff, counselors, a speech-language therapist, and KJ's parents, the occupational therapist and KJ developed the following goals. KJ provided their input using the text-to-speech software on their phone.

- KJ will improve their ability to set three goals for themself.
- KJ will improve their ability to cope with anxiety using the Behavioral Interventions for Anxiety

Table 7. Assessments and Findings: KJ

Assessment	Findings				
AIR Self-Determination Scale (Wolman et al., 1994)	Description: The Capacity section of this assessment evaluates the student's knowledge, abilities, and strengths that play a role in fostering their self-determination and well-being. Conversely, the Opportunity section centers on the student's opportunities to effectively apply their knowledge and abilities. Speaking up for their needs is challenging, and they often revert to staying silent.				
	 Self-report: KJ completed a self-report, revealing a total percentage score of 58%. Percentage scores suggest the person's level of self-determination and can range up to 100%. The higher the percentage, the better the score. KJ acknowledged their strengths and abilities but mentioned facing obstacles in setting and achieving goals. KJ struggles with adapting and finding alternative solutions when their plans do not go as expected. 				
	 Teacher report: KJ's teacher's report shows a total percentage score of 64%. Percentage scores suggest the person's level of determination and can range up to 100%. The higher the percentage, the better the score. KJ's teachers have observed that they exhibit an understanding of their personal strengths and talents, in particular in math and basketball. They noted KJ's active engagement in discussions related to these subjects. However, KJ also encountered challenges when effectively communicating their difficulties and seeking support. KJ faces difficulties setting goals, and they tend to feel overwhelmed when asked to break down a larger goal into smaller, manageable steps, as reported by their teachers. The teachers said they hoped KJ's persistence in activities and tasks will improve and encouraged them to explore different problem-solving approaches rather than giving up so easily. 				
Participation and Environment Measure for Children and Youth (PEM–CY; Coster et al., 2010)	The School Participation section includes five categories of activities, which are rated on a scale of 0–7 for frequency (how often an activity is done: 0 = never to 7 = daily) and 1–5 for involvement (how involved a child is in an activity: 1 = not involved to 5 = very involved), as well as whether the parent/caregiver would like to see a change in their child's participation. KJ's average frequency of participation in school was 3.8, with an average				
	involvement of 3 (somewhat involved). KJ's parents would like them to be more involved in classroom activities. They would also like KJ to participate more frequently and develop more involvement in school-sponsored teams, clubs, and organizations; get together with peers outside of class; and engage in special roles at school.				
	KJ's participation in school activities is facilitated by the school's physical layout, favorable weather conditions, manageable physical demands, a sense of safety, and positive relationships with peers and staff members.				
	Sensory, cognitive, and social demands pose barriers to KJ's successful participation in school activities.				

Note. AIR = American Institutes for Research; NA = not applicable.

- in Children with Autism (BIACA) program (Frank et al., 2022; Wood et al., 2015).
- KJ will use the KICK (Knowing I'm Nervous, Icky Thoughts, Calm Thoughts, and Keep Practicing) plan, which is part of the BIACA program (Wood et al., 2008, 2009), independently over the course of 3 wk to report the use of
- positive coping skills to deal with anxiety-inducing situations and will use coping skills when exposed to situations that increase their anxiety.
- When needed, KJ will develop confidence in understanding the importance of self-advocacy and effectively advocating for their needs, rights, and accommodations when seeking help.

Table 8. Goal Attainment Scaling: Levels of Expected Outcome

Rating	Interpretation
-2	Much less than expected outcome: This level represents performance that can be expected to happen roughly 7% of the time, encompassing outcomes that vary from regression to minimal or negligible changes.
-1	Less than expected outcome: This level indicates performance expected to occur around 21% of the time and is somewhat below the anticipated outcomes for the intervention period.
0	Projected performance expected by the end of the measurement period: This performance level signifies the achievement of results as initially anticipated at the beginning of treatment of the specific measurement period, and it is projected to occur approximately 43% of the time.
+1	Exceeding anticipated outcome: This performance level denotes the achievement of expected results approximately 21% of the time, showing slightly more progress than initially anticipated during the intervention period.
+2	Significantly exceeding anticipated outcome: This level signifies performance expected to occur approximately 7% of the time and is remarkable because it significantly surpasses the progress initially expected during the measurement period.

They also set an aspirational goal: KJ will show and teach a math problem-solving game that they designed to a chosen peer during lunchtime. An example of how KJ's goals were determined using GAS is presented in Table 8.

Occupational Therapy Interventions

At the IEP meeting, the decision was made that KJ would receive weekly group-based occupational therapy sessions in school with up to four other students over the next academic year, as well as indirect consultation with the occupational therapy practitioner about KJ's leisure and productivity, use of effective coping strategies and assistance with problem-solving, and use of coping skills as needed. The sections that follow describe evidence-based interventions that could be implemented with KJ by an occupational therapist or occupational therapy assistant.

KJ's occupational therapist and occupational therapy assistant comprehensively reviewed existing interventions and found that social skills training by Dekker et al. (2019) had strong levels of evidence (2b and 1b). However, KJ's therapy team consciously decided to avoid these interventions because they focused on normalizing KJ's social skills by using reinforcers to promote nonautistic patterns of social communication. Instead, KJ's occupational therapist and the other team members agreed that the reinforcement would be intrinsic when their strengths and interests are authentically incorporated into an interest-based club. Moreover, evidence from a recent scoping review by Murthi et al. (2023) highlighted that incorporating strengths and interests into interventions alleviated negative mental health symptoms, increased skill acquisition around interests, and facilitated the development of a sense of belonging and community. Hence, KJ's therapy team decided they would enjoy participating in a meaningful activity (Ryan & Deci, 2000), so they created a strengths- and interest-based club to promote KJ's competence and mastery.

Competence and Mastery

Half of the group-based intervention sessions focused on competence- and mastery-related interventions using KJ's strengths in an after-school program. Interventions recognized the importance of autonomy, relatedness, and competence, which are core components of self-determination theory (Ryan & Deci, 2000). Students in the program worked on gaining competence in areas of interest, which in KJ's case is math. KJ's occupational therapists adapted an inclusive, informal after-school engineering club model that was based on Martin et al.'s (2020) study to help develop self-determination skills. In the program, students could choose math problems from a 14-wk curriculum that focused on a new topic every week. They could solve problems, choose a theorem, and dissect it during the 45-min weekly session. They could work together or independently to find solutions. The students were encouraged to invite teachers, peers, and parents to a final showcase event. This program was intended to enhance students' mastery of mathematics by providing multiple opportunities to solve challenging problems in a safe club environment. At the end of the school year, KJ and their friends participated in a mock Olympiad organized by the club teachers and presented their experiences in a showcase. KJ demonstrated notably greater ease and engagement when allowed to make choices and have a say in their experiences. This prepared KJ to lead a show and teach a math game they had designed during lunchtime that their peers enjoyed. KJ's math teacher was impressed and wanted KJ to take over one math class/wk next year.

Mental Health

The remaining half of the sessions over the school year focused on promoting positive coping strategies in school situations using the BIACA program, a cognitive—behavioral therapy (CBT) intervention. Through this program, KJ and their peers learned about coping skills and developed individual KICK plans. Throughout the sessions, the occupational

Table 9. KJ's Goal Attainment Scaling Scores	Scaling Scores				
Goal	+2 (Significantly Exceeding Anticipated Outcome)	+1 (Exceeding Anticipated Outcome)	O (Projected Performance Expected by the End of the Measurement Period)	-1 (Less Than Expected Outcome)	-2 (Much Less Than Expected Outcome)
Self-advocacy/participation goal: When needed, KJ will develop confidence in understanding the importance of self-advocacy and effectively advocating for their needs, rights, and accommodations when seeking help.	KJ consistently speaks up for themself and makes their needs known at home and school. They use their text-to-speech device to advocate throughout the day, including when they are anxious or in overwhelming environments.	KJ consistently makes their needs known in classroom and school settings but cannot communicate their needs when anxious or in overwhelming environments.	KJ indicates their needs in school and home settings when asked or prompted.	When asked or prompted, KJ inconsistently indicates their needs in school and home settings.	KJ does not understand that they can advocate for their needs in school and home settings and does not seek help.
Aspirational goal: KJ will show and teach a math-solving game that they designed to a chosen peer during lunchtime.	All students enjoy KJ's math problems. The teacher has asked KJ to teach a daily math problem to the class, which they enjoy doing.	K.J starts designing and teaching math problems to students interested in solving them at lunchtime.	K.J successfully designs and teaches a math problem to a fellow student at lunch who enjoys solving it.	KJ designs a math problem but cannot teach it to the chosen peer because of their anxiety.	KJ is unable to design a math problem that would be able to be taught to another student.

therapy practitioner and the occupational therapy assistant emphasized that Icky Thoughts are not necessarily bad but simply are thoughts that may be causing discomfort or affecting their participation in a desired activity. In Knowing I'm Nervous, KJ indicated that they "felt nervous about eating in the cafeteria because there are a lot of people." They identified an Icky Thought: "Everyone will have somewhere to sit, and I won't." They also identified a Calm Thought: "The cafeteria is busy, but I can walk with a friend, and we can sit together." By the end of the school year, KJ would often come to the group with a list of situations they had encountered over the past week when they had felt nervous, including their initial thoughts and their thoughts after reflection. KJ also recognized that many of their peers had the same concerns and that some strategies that they used to cope might be helpful to their peers, too, such as choosing a seat that would allow for an easy exit if distressed, setting a goal for how long to participate in a new activity, or choosing to go to a new activity with a group.

Outcomes

By the end of the school year, KJ had achieved all the IEP goals (Table 10). Through repeated practice at school and home, they learned how to cope with social anxiety and use the KICK plan independently by identifying the stressor, writing down nervous (Icky) thoughts, and thinking calming thoughts. They also would reach out to their support network at school, which included two peers, their basketball coach, and their math teacher, when they needed to brainstorm a solution. KJ understood the value of advocating for themself and would do so through writing or using text-to-speech software. By participating in the math club, they mastered three crucial topics in the math Olympiad: sequences, divisibility, and logic. Moreover, they undertook the role of "math club expert" four times during the school year to help a peer, and they enjoyed designing math problems and teaching them to their fellow students.

Strengths and Limitations of the Current Body of Evidence

There are strengths and limitations related to the current body of evidence in the systematic reviews that inform these Practice Guidelines. Systematic reviews address specific clinical questions guided by an a priori protocol for the question development and review process. No systematic review can address all aspects of a topic; authors make many decisions before conducting the review. In addition, no review is perfect, and even the most careful searches sometimes miss articles. The way to reduce these potential sources of bias is to conduct the review using best-practice methodology.

Table 10. KJ's Discharge Results

Assessment	Postintervention Findings
AIR Self-Determination Scale	 Overall, KJ's self-report total percentage score increased to 70%. Percentage scores suggest the person's level of self-determination and can range up to 100%. The higher the percentage, the better the score. KJ's total percentage score on the educator report (completed by both their homeroom teacher and their math teacher) also improved, to 71%. Percentage scores suggest the person's level of self-determination and can range up to 100%. The higher the percentage, the better the score. Although KJ's parents did not fill out the parent form, they did mention that KJ has become more adept at articulating their desires and needs. They also noted KJ's improved ability to effectively manage their tasks, in particular when it comes to their commitment to tackling homework assignments that extend over multiple days.
Participation and Environment Measure for Children and Youth	• KJ's average frequency of participation in classroom activities increased to 5, with increased average involvement of 4.4 (range = 0 [never] to 7 [daily]). They increased their frequency of involvement in peer-involved activities and in classroom activities. Their parents did not have areas where they desired change in KJ's school performance but reported that they would like to see KJ maintain increased participation as they transition to high school. Their parents felt satisfied with the level of improvement, as did KJ.
Goal attainment scaling	 KJ went from a -2 (much less than expected outcome) to a +1 (exceeding expected outcome) in goal achievement for the self-advocacy goal. They can consistently and independently advocate for their needs, which are still impacted by their anxiety level or when in extremely overwhelming environments. For the aspirational goal, KJ went from a -2 (much less than expected outcome) to a +2 (significantly exceeding expected outcome) because they excelled at designing math problems and incorporating them into the math class. KJ also demonstrated the ability to teach others the problems and how to solve them.

Strengths

The review authors followed best-practice methodology to the best of their ability at every step of the process—for example, by getting input at all stages from practitioners, researchers, consumers, and experts in the areas included in the reviews. The questions for the systematic reviews were developed with an intentional focus on occupation-based outcomes. The goal of occupational therapy is improvement in these outcomes, so the systematic reviews targeted studies that reported occupation-based interventions and outcomes.

Limitations: Gaps in the Evidence

Gaps in knowledge exist when there is insufficient, imprecise, inconsistent, or biased information in the literature about an intervention (Robinson et al., 2011). Gaps also exist when the literature is insufficient to answer a clinical question.

A lack of research supporting particular interventions does not mean practitioners should not use those interventions. In working with clients, practitioners considering specific interventions when there is not enough evidence to support EBP should use expert knowledge and their own training and experience to guide practice. In this section, we pinpoint important gaps in evidence for interventions and approaches practitioners may consider using as appropriate.

Occupational therapy practitioners need to consider the elements of EBP as they evaluate these guidelines in light of gaps in the literature related to their clinical practice. Practitioners should consider the following questions when identifying these gaps (Gutenbrunner & Nugraha, 2020):

- 1. What evidence exists?
 - What are the best practices associated with providing services to this client population?
 - What interventions are contraindicated for this population?
 - What outcomes am I hoping to achieve with this client?
 - Does evidence exist in another field or discipline related to interventions and desired outcomes that are within the scope of occupational therapy practice?
- 2. What are my client's preferences and values?
 - Does my client prefer one intervention over another?
 - Are available resources, cost, or time influencing my client's preference?
 - How might the intervention I am considering affect my client's performance patterns and roles?
 - Does my client find the intervention I am considering meaningful?
- 3. What experience and expertise do I have that can help guide my decisions?
 - What types of interventions have I used previously that were effective with similar clients or populations?
 - What types of interventions have I used previously that were ineffective with similar clients or populations?

- What potential risks does the intervention
 I'm considering pose to my client or this client population?
- 4. Will the health care system or organization be supportive of this intervention?
 - How will I document this intervention?
 - How will I document the outcomes associated with this intervention?
 - Is it likely that this intervention will be reimbursed?

These Practice Guidelines report the literature available at the time of publication of each of the systematic reviews. Although Practice Guidelines authors are required to use the literature available when forming recommendations and case studies, occupational therapy researchers should integrate communityengaged research to prioritize the intervention needs of autistic people and their caregivers. Indeed, many of the reviewed interventions do not support the priorities identified by autistic persons (Benevides et al., 2020; Sterman et al., 2023). There are gaps in the occupational therapy research with autistic people across the lifespan, including the promotion of ADLs and IADLs, a focus on self-efficacy of caregivers of young autistic children, assistive technology, experiences of autistic adults, trauma-informed care, and sexuality and sexual identity among autistic people; all of these need to be researched.

Additional Implications for Occupational Therapy

The following list presents additional information and common occupational therapy interventions for autistic persons that are not addressed in these Practice Guidelines because of a lack of relevant evidence. These list items are based on existing or emerging evidence, expert opinion, or both.

- These Practice Guidelines were developed using only studies written in English. We encourage researchers to consider research conducted in other countries and presented in languages other than English. Although we understand that accessing and interpreting research studies presented in other languages is a challenge, this is an important area to focus on and build new research.
- It is important to emphasize that these Practice Guidelines were prepared using existing Level 1 through 3b evidence published between 2013 and 2021. Although this enabled us to use the highest levels of evidence to develop these guidelines, we understand that we might not have been able to incorporate more recent evidence from inclusive interventions that might have a potential to promote well-being in the autistic community.
- There is a need to include and increase autistic people's involvement in all aspects of

- assessment, planning, and intervention, along with the involvement of care partners and caregivers as appropriate.
- There is a need to include autistic people's perspectives and partner with them in collaborative endeavors that represent their lived experiences in research and educational initiatives.
- Systemic barriers to accessing and participating
 in occupational therapy services persist for historically marginalized population groups. Reporting on race and ethnicity reveals the socially
 constructed pathways to health disparities, aids
 in addressing inequalities, and guides targeted
 interventions for marginalized communities.
 Reporting on race and ethnicity illuminates the
 role of societal and systemic factors that cause
 health disparities. It is a vital step toward health
 equity, ensuring equal access to quality health
 care for all racial and ethnic groups through evidence-based strategies.
- For young autistic children, occupational therapy practitioners must integrate interventions into families' everyday lives and authentic contexts to ensure the sustainability of routines.
- For autistic children and youths, occupational therapy practitioners must facilitate social participation with nonautistic peers to foster a broader understanding and acceptability of autistic people.
- Occupational therapy practitioners must recognize and integrate their training, expertise, and skills into improving mental health outcomes using strengths-based approaches (Murthi et al., 2023) and community-informed interventions. The autistic community has pointed out that strengths-based mental health interventions are urgently needed.
- These Practice Guidelines do not include a comprehensive overview of the use of assistive technology. Occupational therapy practitioners and researchers may consider how assistive technology can be used and studied in the context of occupational therapy practice. Despite evidence surrounding the use of assistive technology with autistic people, especially children (e.g., social robots and other communication technology; Kouroupa et al., 2022), in these Practice Guidelines we refrained from incorporating studies that used assistive technologies to normalize or remediate the behaviors and social skills of autistic people. Assistive technologies developed for such practices have been criticized for being ableist and reductionist given that they emphasize pathology in autistic people that require services that focus on the normalization of social and communication skills (Williams, 2021). Moreover, assistive technologies, such as organizers, planners, and mobile-based applications to develop executive functions, are

- gaining traction with promising applications to circumvent executive function challenges through environment-based adaptations (Desideri et al., 2020).
- We support the recommendations of two selfadvocates, Zisk and Dalton (2019), who emphasized that practitioners and researchers should support the use of a variety of communication technologies instead of focusing only on verbal and spoken communication strategies. They also underscored the importance of broadening communication strategies as a whole, using a varied collection of strategies, including lowcost resources, rather than focusing on oral speech and fluency of communication. Moreover, they recommended evaluating the effectiveness of communication devices rather than focusing only on autistic people's skill levels. Practitioners also need to respect the individual choices and autonomy of autistic people as they choose augmentative and alternative communication methods and devices (e.g., some autistic people prefer to type and then use spoken language to read what they have typed; Zisk & Dalton, 2019).
- Despite opportunities to collaborate with other professionals, such as applied behavior analysts, cognitive-behavioral therapists, speech-language pathologists, and physical therapists, among others, we advocate for occupational therapy practitioners to engage in critical analysis and reflexive judgment to acknowledge, recognize, listen to, and respect autistic voices that highlight the negative impacts and trauma inflicted by certain interventions (e.g., trauma inflicted by interventions that deny an individual's personal agency and preferences for their own actions and behaviors). There is evidence supporting the use of CBT throughout these guidelines, which is distinct from applied behavior analysis (ABA; Patten et al., 2023a); however, it is crucial to include the perspectives of autistic people in both the use and evaluation of CBT intervention approaches. Leaf et al. (2022) recommended carefully listening to autistic community members and their lived experiences and perspectives to explore the possible negative impact of behavioral interventions. Moreover, the successful petition by the student section of the American Medical Association House of Delegates (2023) to broaden the inclusion of other evidence-based services apart from ABA can be considered a successful step toward developing authentic and inclusive neurodiversity-affirming care. Mathur et al. (2024) underscored the importance of recognizing autistic people's strengths, bringing their perspectives to the forefront, and augmenting the implementation of functional assessments by ABA

- specialists to embrace a future neurodiversity-affirming approach in their services.
- Occupational therapy practitioners need to recognize and integrate their training and skills, including using models such as coaching, the Cognitive Orientation to daily Occupational Performance (Polatajko & Mandich, 2004), and the Engineering Design Process (Murthi & Patten, 2023) to support autistic people in developing independent cognitive strategies (e.g., problem-solving, self-advocacy skills, productive failing, fail-forward) along with functional skills that enhance occupational performance.
- Occupational therapy practitioners must understand the importance of using interest-driven and strengths-based activities to teach functional skills, because such activities have the potential to become meaningful occupations.

Conclusion

These Practice Guidelines highlight the current evidence that supports occupational therapy's unique contribution to autistic people and their caregivers or partners. Clinical recommendations based on the current evidence are provided, and application to practice has been exemplified through case studies and decision-making algorithms. We have highlighted gaps in the evidence for interventions for this population by incorporating feedback from the autistic community. Priorities included the need to shift from deficit-based approaches that may negatively affect health and wellbeing to adopting neurodiversity-affirming approaches that holistically value autistic people and their strengths with support for their limitations. Occupational therapy practitioners should consider these gaps when supporting autistic persons and their caregivers or partners, and researchers should further investigate these gaps to advance the authentic involvement of autistic people in research that is meaningful to the community and affects their mental health, well-being, inclusion, engagement, access, and participation in occupations.

Practitioners can use these Practice Guidelines to integrate their own professional experience and reasoning, their clients' individual and family preferences, and the best available research evidence to provide the highest quality of care for autistic people and their caregivers or partners. They can also use these guidelines to challenge their understanding of racial and ethnic inequities and ableism that persist in everyday practice. As the profession and the care of autistic people continue to evolve, occupational therapy can lead in providing neurodiversity-affirming practices based on the profession's long-standing commitment to holistic health care and a deep understanding of what is meaningful to those we serve. As a profession, we know the tools and insight; we just need commitment. We must ask ourselves: What would happen if

we were the members of the care team to promote what is most meaningful to this autistic person? What if we promote this individual's strengths? We must remain steadfast in our core values as occupational therapy practitioners: We provide distinct values; we are the team members to promote function and participation; and we provide best-practice services grounded in evidence, theory, and occupation. To prepare future practitioners to best advance participatory research methods and create co-constructed research questions that matter the most to autistic people and their caregivers or partners, we must maintain innovative in-service delivery models and increase educational opportunities in which those with lived experiences are centered. It is then that we will succeed.

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Appendix: Overview of the Systematic Review Methods and Findings

The systematic reviews completed for these Practice Guidelines were conducted according to the Cochrane Collaboration methodology (Higgins et al., 2019) and are reported in a manner consistent with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher et al., 2009).

Review Questions

- 1. What are the interventions in the scope of occupational therapy to support (or improve) self-determination and positive mental health for people on the autism spectrum (Patten et al., 2023a, 2023b)?
- 2. What are the interventions within the scope of occupational therapy to address participation in activities of daily living (ADLs), instrumental activities of daily living (IADLs), rest and sleep, work, education, play, leisure, social participation, and health management among autistic people birth—≤18 yr (Baker et al., 2023; Little et al., 2023a, 2030b, 2023c, 2023d; Tomchek, Baker, et al., 2023; Tomchek, Dean, et al., 2023)?
- 3. What are the person-, student-, or family-centered planning approaches within the scope of occupational therapy that foster achievement of participation goals for autistic people and their families (Benevides et al., 2023a, 2023b; Watling et al., 2023)?
- 4. Within the scope of occupational therapy, what interventions are effective for autistic people >18 yr that address participation in ADLs, IADLs, rest and sleep, work, education, play, leisure, social participation, and health management (Jirikowic et al., 2023a, 2023b)?

Search Terms, Inclusion and Exclusion Criteria, and Databases Searched

The search strategies for the systematic reviews are summarized in Table A.1 and A.2. Inclusion criteria were as follows:

- Peer-reviewed journal articles
- Publication in English (unless review authors were able to translate)
- Publication dates from June 2013 through January 2021
- Evidence at Level 1b, 2b, 3b, or 4 if no higher level studies are available (see "Levels of Evidence" section) as well as qualitative studies.
- Interventions within the scope of occupational therapy practice
- Participants who were all ages (adults >18 yr or children ≤18 yr)
- Autistic participants and family members, if appropriate

Exclusion criteria were as follows:

- Dissertation, theses, presentations, and proceedings
- Published outside the date range of the reviews
- Evidence at Level 4 or 5
- Interventions outside the scope of occupational therapy practice

The following databases were searched:

- MEDLINE
- PsvcINFO
- CÍNAHL
- OTseeker
- Cochrane databases
- Web of Science
- ERIC
- · Hand search as needed

Levels of Evidence

Each article evaluated in the reviews was assigned a level of evidence using the Oxford Centre for Evidence-Based Medicine (2009) framework:

- Level 1a: Systematic review of homogeneous randomized controlled trials (RCTs; e.g., similar population, intervention) with or without meta-analysis
- Level 1b: Well-designed individual RCT (not a pilot or feasibility study with a small sample size)
- Level 2a: Systematic review of cohort studies
- Level 2b: Individual prospective cohort study, low-quality RCT (e.g., <80% follow-up or low number of participants, pilot or feasibility study), ecological study, or two-group nonrandomized study
- Level 3a: Systematic review of case—control studies
- Level 3b: Individual retrospective case—control study, one-group nonrandomized pretest posttest study, or cohort study
- Level 4: Case series (or low-quality cohort or case—control study)
- Level 5: Expert opinion without explicit critical appraisal

Article Screening and Data Extraction

The medical librarian conducted the searches and removed duplicates; review teams (of at least two authors) independently screened titles and abstracts on the basis of the inclusion criteria. Reviewers resolved any differences by discussion and, if necessary, consultation with a third party (a team member on the American Occupational Therapy Association's Evidence-Based Project) until a consensus was reached. The review teams then obtained and reviewed the full-text articles to determine inclusion or exclusion. They extracted data from the included studies in an evidence table, which summarized each study's methods, risk-of-bias evaluation, participants, intervention

Table A.1. Search Strategy for Systematic Review Questions

Category	Key Search Terms				
	Population, Q1–4: All Ages				
Study and Trial Designs, Q1-4	case control, case report, case series, clinical trial, cohort, comparative study, controlled clinical trial, cross over, cross-sectional, double-blind, evaluation study, evidence-based, evidence synthesis, feasibility study, follow-up, intervention, longitudinal, multicenter study, observational study, outcome and process assessment, prospective, random allocation, randomized controlled trials, single subject design, treatment outcome, validation study				
Diagnosis and conditions, Q1–4	autism, autism spectrum disorder/condition, Asperger syndrome, ASD, autistic disorder, autistic, pervasive developmental disorder/condition				
Diagnosis and Conditions, Q1: Child, Preschool, Adolescent, Adult, Youth					
Interventions, Q1	accommodation, adaptation, anxiety, autonomy, camouflaging, choice-making, curriculum/curricula/ curricular, decision-making, depress, disclosure, distress, emotional health, empowerment, gift, identity, identity formation, interest-based intervention, interest-driven education, loneliness, masking, meltdown, mental health, nervous breakdown, occupational therapy, panic, participation initiative, personal autonomy, parent—child relations, positive youth development, prevention of bullying, protective factors, rehabilitation, resilience, self-esteem, superpowers, support, self-care, self-care strategies, self-advocacy, self-awareness, self-concept, self-determination, self-efficacy, self-evaluation, self-harm, self-perception, self-identity, self-reflection, self-realization, self-sufficiency, self-support, social isolation, special interest areas, stress, stigma, talent, treatment				
Diagnosis and Conditions, Q2: Child, Preschool, Preschool, Youth, Younger Than Age 18					
Interventions, Q2	activities of daily living (ADLs), activity groups, activity participation, adaptive behaviors, assistive technology, attention, bathing, caregiver/carer, centers, school performance, classroom participation, coaching, communication, community, community, continence, circle time, dressing, driving, eating, education, employment, engagement, family, feeding, health management, health maintenance, instrumental activities of daily living (IADLs), joint play, maintenance, mealtime, nap, occupational therapy, parents, participation, personal hygiene, pretend play, rehabilitation, rest, safety and emergency, school, self-management, self-care, showering, siblings, sleep, snack time, social play, social competence, social narratives, social skill groups, social skills training, socialization, speech generated devices, task analysis, telehealth, toileting, transportation, video modeling, work				
ı	Diagnosis and Conditions, Q3: Adolescent, Adult, Child, Preschool, Student, Youth				
Interventions, Q3	CO-OP, circles of support, family centered assessment, family centered evaluation, Goal–Plan–Do-Check, life centered education, Lifestyle Redesign, MAPS, partnering for change, PATH, person centered, person-centered planning, person centered assessment, personal planning, self-determination theory, self-directed, shared decision-making, student centered assessment, student centered IEP, student directed IEP, strengths-based, strengths based, supported decision-making, supporter				
Diagnosis and Conditions, Q4: Adolescent, Adult, Transition Age, Age 18 and Older					
Interventions, Q4	accessibility, accommodations, action capabilities, activities of daily living, adaptive behaviors, alternative augmentative communication, assistive technology, autistic-friendly spaces, barriers, bathing, belonging, caregiver/carer, community inclusion, community integration, community mobility, dining, dressing, driving, eating, ecology/ecological, employment, family, feeding, financial management, friendships, health management, health maintenance, higher education, home management, inclusive environment, independent living, instrumental activities of daily living, job, learning supports, meal preparation, occupational therapy, parenting, peer environment, peer group, peer mediated, peer relationships, personal hygiene, postsecondary education, rehabilitation, relationships, rest, safety and emergency maintenance, school, self-care, self-management, sensory preferences (to change environment), sexuality, shopping, showering, sleep, social competence, social narratives, social skills groups, social skills training, supportive environments, transition to community, transition to work, transportation, vocation/vocational, volunteerism, volunteer exploration, volunteer participation, work				

Note. ASD = autism spectrum disorder; CO-OP = Cognitive Orientation to daily Occupational Performance; IEP = individualized education program; MAPS = Miller Assessment for Preschoolers; PATH = Preparation and Achievement in the Transition to Hire; Q = question.

setting, intervention and control conditions, outcome measures, and results (Higgins et al., 2023). Figure A.1 depicts a detailed description of the process.

Quality of the Evidence and Risk of Bias
Two members of the review teams independently assigned quality ratings to each study and collaborated to reach a consensus. The review teams evaluated risk

Table A.2. Strength-of-Evidence (Level-of-Certainty) Designations

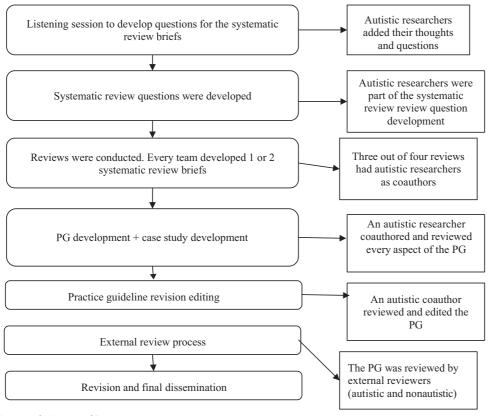
Level	Descriptions
Strong	 Two or more Level 1a or 1b studies The available evidence usually includes consistent results from well-designed, well-conducted studies. The findings are strong, and they are unlikely to be called into question by the results of future studies.
Moderate	 At least 1 Level 1a or 1b high-quality study or multiple moderate-quality studies (e.g., Level 2a or 2b, Level 3a or 3b) The available evidence is sufficient to determine the effects on health outcomes, but confidence in the estimate is constrained by factors such as number, size, or quality of individual studies and inconsistency of findings across individual studies. As more information (other research findings) becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion related to the usefulness of the intervention.
Low	 Small number of low-level studies, flaws in the studies, and so on The available evidence is insufficient to assess effects on health and other outcomes of relevance to occupational therapy. Evidence is insufficient because of a limited number or size of studies, important flaws in study design or methods, inconsistency of findings across individual studies, and lack of information on important health outcomes. More information may allow estimation of effects on health and other outcomes of relevance to occupational therapy.

of bias on the basis of study design (controlled or noncontrolled trial). For studies that included a control group (randomized or nonrandomized) they used the Cochrane tool (Higgins et al., 2023); for noncontrolled trials they used a tool developed by the National Heart, Lung, and Blood Institute (2014).

Strength of Evidence

Each systematic review team grouped the evidence into themes and determined the strength of the evidence for each theme. The strength-of-evidence designations are outlined in Table A.2 and are based on the guidelines of the U.S. Preventive Services

Figure A.1. Development process for these Practice Guidelines.



Note. PG = Practice Guidelines; SR = systematic review.

Table A.3. Number of Articles Included in the Systematic Reviews, by Topic (Including Overlap of Studies Among Questions)

	Level of Evidence					
Review Question Topic	1b	2b	3b	4	Qualitative	Total
Self-determination and positive mental health	6	6	4	0	0	16
ADLs, IADLs, sleep, work, education, play, leisure, social participation, health management for persons ≤18 yr	7	33	6	0	0	46
Person-, student-, or family-centered planning for achieving participation goals	0	11	2	0	2	15
ADLs, IADLs, sleep, work, education, play, leisure, social participation, health management for persons >18 yr	4	5	1	11	0	21
Total	17	55	13	11	2	98

Note. All studies included in this table had statistically significant positive outcomes related to the interventions discussed. ADLs = activities of daily living; IADLs = instrumental activities of daily living.

Task Force (2018). Strength-of-evidence designations are a synthesis of number of studies, level of evidence, quality of evidence (risk of bias), and findings of the studies (e.g., significance). Synthesizing these four elements of the evidence enabled the review authors to determine the level of certainty that the interventions discussed in the articles resulted in the outcomes shown.

Overview of Search Results

The searches located 63,279 citations and abstracts for Questions 1 through 4. The research methodologist completed the first step of eliminating references on the basis of the titles, removing duplicates and studies clearly not within the parameters of the review (e.g., date of publication, population, intervention). This step reduced the number of citations to 128 (Question 1), 1,040 (Question 2), 92 from an initial search and secondary search (Question 3), and 236 (Question 4), which were given to the review teams for evaluation.

Teams of two or more reviewers with expertise in the content areas carried out the systematic reviews. The review teams completed the next step of eliminating references on the basis of the abstracts, retrieved the full-text versions of potential articles, and determined final inclusion in the reviews on the basis of the inclusion and exclusion criteria.

A total of 98 studies were included in the systematic reviews, including 17 Level 1b, 55 Level 2b, 13 Level 3b, 11 Level 4, and 2 qualitative studies. Table A.3 lists the number of articles included in each review and their levels of evidence. (Note that some articles addressed multiple outcomes of interest and are discussed in more than one section of these guidelines.) References for the systematic review briefs are below:

Baker, A., Tomchek, S. D., Little, L. M., Wallisch, A., & Dean, E. (2023). Systematic Review Brief—Interventions to support participation in basic and instrumental activities of daily living for autistic children and adolescents (2013–2021). American Journal of Occupational Therapy, 77(Suppl. 1), 7710393140. https://doi.org/10.5014/ajot.2023.77S10014

Benevides, T., Watling, R., & Robertson, S. M. (2023a). Systematic Review Brief—Person-centered interventions for autistic adolescents ages 13–19 years (2013–2021). American Journal of Occupational Therapy, 77(Suppl. 1), 7710393220. https://doi.org/10.5014/ajot.2023.77S10022

Benevides, T., Watling, R., & Robertson, S. M. (2023b). Systematic Review Brief—Person-centered interventions for autistic adults ages 18+ (2013–2021). *American Journal of Occupational Therapy*, 77(Suppl. 1), 7710393230. https://doi.org/10.5014/ajot.2023.77810023

Higgins, J. P. T., Savović, J., Page, M. J., Elbers, R. G., & Sterne, J. A. C. (2023). Chapter 8: Assessing risk of bias in a randomized trial. In J. P. T. Higgins, J. Thomas, J. Chandler, M. Cumpston, T. Li, M. J. Page, & V. A. Welch (Eds.), Cochrane handbook for systematic reviews of Interventions (Version 6.4; updated August 2023). Cochrane. https://doi.org/10.1002/14651858.

Jirikowic, T., Ideishi, R., Bendixen, R., Pfeiffer, B., Smythe, R., & Benevides, T. (2023a). Systematic Review Brief—Interventions for social participation for autistic adults (2013–2020). American Journal of Occupational Therapy, 77(Suppl. 1), 7710393110. https://doi.org/ 10.5014/ajot.2023.77S10011

Jirikowic, T., Ideishi, R., Bendixen, R., Pfeiffer, B., Smythe, R., & Benevides, T. (2023b). Systematic Review Brief—Interventions for work/employment participation for autistic adults (2013–2020). American Journal of Occupational Therapy, 77(Suppl. 1), 7710393100. https://doi.org/10.5014/ajot.2023.77S10010

Little, L. M., Cohen, S. R., Tomchek, S. D., Baker, A., Wallisch, A., & Dean, E. (2023a). Systematic Review Brief—Interventions to support social participation for autistic children and adolescents in homes and communities (2013–2021). American Journal of Occupational Therapy, 77(Suppl 1.), 7710393200. https://doi.org/10.5014/ajot.2023.77S10020

Little, L. M., Cohen, S. R., Tomchek, S., Baker, A., Wallisch, A., & Dean, E. (2023b). Systematic Review Brief—Interventions to support participation in play for autistic children and youth (Dates of review: 2013–2021). American Journal of Occupational Therapy, 77(Suppl. 1), 7710393170. https://doi.org/10.5014/ajot.2023.77S10017

Patten, K., Murthi, K., Chen, Y.-L., Onwumere, D., & Shore, S. (2023a). Systematic Review Brief—Interventions for developing positive mental health in autistic individuals (2013–2021). American Journal of Occupational Therapy, 77(Suppl. 1), 7710393130. https://doi.org/ 10.5014/ajot.2023.77S10013

Patten, K., Murthi, K., Chen, Y.-L., Onwumere, D., & Shore, S. (2023b).
Systematic Review Brief—Interventions that foster self-determination in autistic individuals (2013–2021). American Journal of Occupational

- Therapy, 77(Suppl. 1), 7710393120. https://doi.org/10.5014/ajot.2023.77S10012
- Tomchek, S. D., Baker, A., Little, L. M., Wallisch, A., & Dean, E. (2023). Systematic Review Brief—Interventions to support participation in sleep for autistic children and adolescents (2013–2021). *American Journal of Occupational Therapy*, 77(Suppl. 1), 7710393160. https://doi.org/10.5014/ajot.2023.77S10016
- Tomchek, S. D., Dean, E., Baker, A., Little, L. M., & Wallisch, A. (2023). Systematic Review Brief—Interventions to support participation in
- education for autistic students (2013–2021). American Journal of Occupational Therapy, 77(Suppl. 1), 7710393150. https://doi.org/10.5014/ajot.2023.77S10015
- Watling, R., Benevides, T., & Robertson, S. M. (2023). Systematic Review Brief—Family-centered interventions for children on the autism spectrum (2013–2021). *American Journal of Occupational Therapy*, 77(Suppl. 1), 7710393210. https://doi.org/10.5014/ajot.2023.77S10021