

The Effectiveness of Counselling Techniques in Addressing Social Skills Deficits in Children with Autism Spectrum Disorder in Special Education Settings

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ABSTRACT

Social skills issues are common in children with autism spectrum disorder (ASD), and they can have an impact on their academic achievement, peer interactions, and general emotional well-being. To address these issues, special education settings commonly employ therapeutic approaches such video modelling, social tales, cognitive-behavioral therapy and peer-involved interventions. In addition to highlighting evidence-based interventions that have significantly improved the social skills and adaptive behavior of children with ASD, this study looks at the efficacy of various counselling approaches. The outcomes focus the value of an all-encompassing approach that includes parental participation, strengthening techniques, and proper social skills training in adopting meaningful social relationships for these children.

Keywords: Social skills issues, Autism Spectrum Disorder (ASD), Special education settings, Therapeutic approaches, Counselling approaches, Peer interactions, General emotional well-being

INTRODUCTION

The neuro-developmental condition known as autism spectrum disorder is categorised by limited and monotonous behaviours as well as problems with social communication and dealings. Social skills lack in children with ASD, and they can have a serious effect on their ability to shape relationships, communicate clearly, and fit in both publicly and academically. Successful methodologies that discourse these issues are becoming more and more important as the occurrence of ASD rises globally. Counselling offers a variety of approaches to progress social skills and overall development in children with ASD, especially in special education systems. Educators, psychologists, and legislators considering to boost the quality of life and academic results for children with special needs, the worth of various counselling methods is an important topic. (Özerk et al., 2021)(Li et al., 2024)

Children with Autism Spectrum Disorder often struggle with social skills, making it challenging for them to comprehend social cues, maintain eye contact, engage in back and forth conversations, and form relationships with peers. These challenges can result in emotional distress, social isolation, and complications in both academic and extracurricular activities. Since social interaction is a vital part of child development, addressing these deficits is key to promoting independence and improving overall well-being. (Wood-Downie et al., 2021)

Counselling interventions provide structured support to help children with ASD develop and practice social skills in a safe and encouraging environment. Techniques such as cognitive-behavioral therapy (CBT), social skills training (SST), play therapy, and peer-mediated interventions enable children to better navigate social interactions. (Chung et al., 2024)

Special education settings play an essential role in fostering the growth of children with ASD by offering tailored learning experiences that meet their unique needs. These environments integrate counselling techniques into their curriculum to provide comprehensive support. Unlike traditional classrooms, special

education settings offer individualized instruction, structured routines, and specialized interventions designed to help children with ASD develop and apply social skills. Through collaboration among educators, therapists, and counselors, evidence-based practices are implemented to support the social and emotional development of these children. (Alanazi et al., 2023)

Cognitive behavioral therapy (CBT) is one of the most widespread counselling strategies for children with ASD in special education settings. This systematic, goal-oriented approach assists children in classifying and modifying destructive thoughts and actions. When it comes to help children with ASD develop their social skills, cognitive behavioral therapy clarifies them how to read social cues, understand the viewpoints of others, and control their social interaction nervousness. CBT has been validated to improve communication skills and successfully minimizes social anxiety. Through the use of role-playing, modeling, and strengthening techniques, it gives children valuable skills to handle public situations with greater assurance. (Baker-Ericzén et al., 2021)

Social Skills Training (SST), which highlights teaching particular social behaviors through practice, modeling, and direct instruction, is another important counselling strategy. Important topics covered in SST programs include creating and sustaining connections, being familiar with nonverbal cues, and reacting properly in various social situations. These structures frequently support learning through the use of video modelling, social storytelling, and visual aid. SST works particularly well in group settings where children with ASD may practice with their classmates and get prompt feedback from teachers and counselors. (Rafida & Astuti, 2024)

Play therapy is another widely used approach in special education settings to help children with ASD develop social skills in a natural and engaging way. Through both structured and unstructured play activities, children learn important social behaviors such as taking turns, sharing, expressing emotions, and participating in cooperative play. This method creates a safe and supportive environment where children can explore social interactions without the pressure of formal instruction. Therapists and counselors use techniques like guided play, puppet play, and interactive storytelling to promote social learning. Play therapy is especially beneficial for younger children with ASD, as it aligns with their developmental needs and interests. (Murray, 2021)

Peer-mediated interventions take a different approach by training typically developing peers to support children with ASD in social interactions. These interventions use the natural influence of peers to create an inclusive and encouraging social environment. By pairing children with ASD with trained peer models, educators and counselors can help foster meaningful friendships and positive social engagement. Research has shown that peer-mediated interventions lead to improvements in communication skills, social participation, and overall peer acceptance in special education settings. (Travers & Carter, 2022)

While these counselling techniques have proven to be effective, their implementation comes with challenges. One major difficulty is the wide variability in ASD symptoms, meaning that a one-size-fits-all approach may not work for every child. Individualized assessments and tailored interventions are essential to ensure each child receives appropriate support. Additionally, factors such as cognitive and language abilities, consistency of intervention, and parental involvement all play a role in determining the success of these techniques. Proper training for educators and counsellors is also crucial in ensuring these strategies are applied effectively to achieve meaningful progress. (Yang & Talha, 2021)

Teachers, therapists, and families must work carefully together to incorporate counselling practices into special education settings. The effectiveness of social skills training can be significantly increased by using a multidisciplinary strategy that incorporates counselling with other evidence-based interventions such as occupational therapy, speech therapy, and applied behavior analysis (ABA). Given the important role parents play in fostering social skills both at home and in the community, parental participation is especially important. Giving parents the tools and training they need to assist their child's social development increases the effectiveness of counselling interventions. (Sheppard & Moran, 2022).

Recent developments in technology have changed how counselling methods for children with ASD are delivered. Novel approaches to refining social skills preparation are provided via sources like mobile

applications, computer-based programs, and virtual reality. Children can practice social connections in a safe and inspiring setting thanks to these technologies immersive and communicating learning involvements. Although studies on technology based therapies are still in their infancy, preliminary results suggest that they can be useful adjuncts to conventional counselling techniques. (M. Zhang et al., 2022)

Combining qualitative and quantitative research approaches is essential to evaluate how well counselling strategies address social skills deficits in children with ASD. The growth of children getting counselling therapies can be better understood through standardized tests, observational studies, and parent-teacher feedback. Furthermore, longitudinal research ensures that solutions continue to address the requirements of children with ASD over time by asking the interventions' long-term effects on social development and general well-being. (Francis et al., 2021)

Particularly in special education settings, counselling strategies are crucial for assisting children with ASD in overcoming social skills obstacles. Strategies including play therapy, social skills training, cognitive-behavioral therapy, and peer-mediated therapies have all been shown to improve social interactions and communication. However, the success of these interventions relies on individualized strategies, collaboration between educators, therapists, and families, and continuous research to improve best practices. As awareness of ASD increases, prioritizing effective counselling methods and supportive learning environments will be crucial in enabling children with ASD to reach their full potential both socially and academically (Soares et al., 2021).

Social Skills Deficits in ASD

Social skills deficits in individuals with ASD present in multiple ways, including challenges in understanding nonverbal cues, engaging in two-way conversations, recognizing emotions, and forming meaningful relationships (Bellini, 2006). Unlike neurotypical individuals, who naturally develop social skills through observation and interaction, those with ASD often struggle to interpret social norms and expectations (Baron-Cohen et al., 1995)

Nonverbal Communication Difficulties – Individuals with ASD may find it challenging to understand and use gestures, facial expressions, and eye contact effectively (Mundy, 2003). These difficulties can hinder communication, making it harder to express emotions and interpret others' feelings.

Impaired Theory of Mind (ToM) – Theory of Mind refers to the ability to understand that other people have different beliefs, thoughts, and perspectives (Baron-Cohen, 2000). Many individuals with ASD have difficulty grasping ToM, making it challenging to predict or interpret others' intentions.

Challenges in Reciprocal Social Interaction – Individuals with ASD may struggle to maintain balanced conversations, often engaging in one-sided discussions, having difficulty sustaining back-and-forth dialogue, or hesitating to initiate social interactions (Bauminger & Kasari, 2000)

Restricted and Repetitive Interests – Many individuals with ASD develop deep, focused interests in specific topics, which can make social interactions difficult if others do not share these interests (“IAP/APA Evidence-Based Guidelines for the Management of Acute Pancreatitis,” 2013). This can sometimes limit opportunities for meaningful social engagement.

Counselling Techniques for Social Skills Development

Developing social skills is crucial for both personal and professional success. Counselling techniques provide structured support to help individuals improve communication, build relationships, and gain confidence in social settings. Below is an effective approach used in social skills development: (Catania et al., 2023)

Cognitive-Behavioral Therapy (CBT)

CBT is a widely used intervention for individuals with ASD, focusing on reducing anxiety, improving emotional regulation, and addressing social skills deficits. According to research, CBT assists children with ASD in recognizing and altering harmful cognitive patterns that fuel social disengagement. Children gain self-awareness, emotional regulation skills, and perspective-taking abilities through structured sessions that incorporate role-playing, social scripts, and reinforcement techniques. These improvements ultimately improve the children's capacity to participate in meaningful social relationships. (Dijkstra & Nagatsu, 2022)

CBT-Based Social Skills Activities for Special Education

By enhancing emotional detection, conversational skills, and social problem-solving techniques, these planned exercises assist students with ASD in developing critical social skills. (Bemmer et al., 2021)

Activity	Purpose
Emotion Matching Game	Helps students recognize and express emotions.
Conversation Starters Wheel	Encourages students to initiate and maintain conversations.
Social Problem-Solving Scenarios	Teaches students how to handle peer conflicts.
Mirror Exercises	Helps students understand body language and facial expressions.
Role-Playing "What Would You Do?"	Develops decision-making skills in social situations.

Through the implementation of these activities into special education programs, children can reinforce positive behaviors while gaining practical skills in navigating social relationships.

Cognitive Restructuring: Changing Negative Thought Patterns

Students can identify and swap out negative beliefs that impede their social connections with the aid of cognitive restructuring. Students who challenge and reframe harmful attitudes can cultivate a more optimistic mindset and increase their social confidence.

For instance, changing a negative thought like "Nobody likes me" to "I can find friends who share my interests" fosters social interaction and a more positive view of oneself. It explains that this cognitive restructuring minimize social anxiety in teens and in children that results in more fulfilling and fruitful social interaction. (Ezawa & Hollon, 2023).

Behavioral Rehearsal & Role-Playing

Research indicates that behavioral rehearsal and role-playing can significantly improve empathy, perspective-taking, and overall social competence, especially in children with intellectual and developmental disorders. Acting out scenarios in a supportive environment like starting conversations, responding to teasing, or asking for help in class gives students opportunities to practice real-life social situations. Students that practice these skills in a guided setting can receive immediate feedback, improve their responses, and apply what they have learned in real-world situations. (Kurniandini & Yoenanto, 2024)

Social Stories & Visual Supports

Personalized narratives are used in social stories and visual aids to teach and reinforce proper social behavior. These resources are particularly useful for children with ASD and other developmental challenges since they offer precise, detailed instructions for interacting with others. A social story called "How to Make a Friend" with graphics, for instance, can assist children in comprehending the process of forming and sustaining friendships. Picture timetables, emotion charts, and cue cards are examples of visual aids that further reinforce learning by offering regular, easily available reminders of appropriate social conduct. Social storytelling and visual aids have been found to dramatically enhance social comprehension, emotional control, and communication abilities, especially in young children with disabilities. (Özerk et al., 2021)

Exposure Therapy (Gradual Social Interaction Practice)

Students who receive exposure treatment are able to progressively confront social situations that cause them anxiety in a controlled and encouraging way. Students gain confidence and learn coping mechanisms to deal with social anxiety by beginning with easy activities, like greeting a classmate, and gradually moving on to more difficult encounters, such taking part in group discussions. Research shows that exposure-based cognitive behavioral therapy (CBT) interventions successfully lessen socially anxious behaviors in the classroom. Over time, this approach helps children become more resilient, more socially engaged, and more at ease in social situations (Khan et al., 2021).

Modelling & Video Feedback

Modelling and video feedback help students observe, refine and improve their social skills by providing them with clear illustrations of appropriate social behavior. Positive interactions, such making eye contact, utilizing courteous welcomes, or taking turns in discussion, might be modeled by peers, teachers, or therapists. Following the recording and examination of these exchanges, students are able to evaluate their own conduct and pinpoint areas in which they need to grow. This method promotes steady skill improvement and self-evaluation. With notable gains in speech, social engagement, and adaptive behaviors, a systematic study has demonstrated the efficacy of games and modelling as potent social skills training techniques for autistic children and youth. (van IJendoorn et al., 2023)

Self-Monitoring & Journaling

Journaling and self-monitoring help children become more self-aware by documenting their feelings and social interactions. Students who keep a "Social Success Journal" in which they document constructive encounters, difficulties, and introspective thoughts are able to reinforce positive behaviors and make improvement over time. Self-monitoring strategies have been shown to be an effective tool for improving social skills in children with autism spectrum disorder. By reflecting on their experiences, students can spot trends, acknowledge their development, and make plans for future social engagements—all of which help them become more self-assured and independent in social situations. (Guo, 2022).

Relaxation & Coping Strategies

Students who receive instruction in relaxation and ways to cope will be better capable of handling social anxiety and stress in social settings. Students can better control their emotions and maintain composure during encounters by using strategies including gradual muscular relaxation, deep breathing exercises, and mindfulness exercises. These techniques have been demonstrated to improve social functioning and lessen anxiety symptoms in children and teenagers when incorporated into CBT frameworks. Students who consistently practice these strategies have more self-control, emotional fortitude, and self-assurance when interacting with others. (Vambheim et al., 2021).

Group Social Skills Training (SST)

Students can practice social interactions in a supportive environment during monitored, small-group sessions offered by Group Social Skills Training (SST). Turn-taking games, eye contact drills, and problem-solving scenarios are a few examples of activities that assist students in developing critical interpersonal and communication skills. This cooperative method has been very successful in improving social skills and treating behavioral issues in teenagers. Students who interact with their classmates get instant feedback, encouragement, and chances to use social skills in authentic contexts, which eventually boost their self-esteem and capacity to build lasting relationships. (van der Stouwe et al., 2021).

Table 1

CBT-Based Social Skills Interventions

CBT Technique	Targeted Social Skill	Effectiveness in ASD
Thought Restructuring	Managing Social Anxiety	High
Social Scripts	Conversation & Turn-Taking	Moderate
Role-Playing	Perspective-Taking	High

Social Stories and Narrative Therapy

Children with autism spectrum disorder (ASD) and other developmental difficulties recover greatly from social stories and narrative therapy, which are powerful interventions for enhancing social skills and emotional control. (Zarra-Nezhad et al., 2023).

Social Stories, invented by Carol Gray, are short, structured stories made to help children grasp social situations and expected behaviors. These stories use simple language to explain how to act correctly in

various situations. They're especially useful for children who struggle with social interactions. Social Stories offer guidance on understanding social cues, showing empathy, and handling everyday challenges like making friends, sharing, and dealing with disappointment. By using Social Stories, children can learn and practice social skills in a natural and supportive way.

Narrative Therapy is a method that helps people change how they view their past experiences, empowering them to create a more positive personal story. This approach encourages individuals to reframe negative self-perceptions, boost confidence in social situations, and build a more positive self-image. By shifting their perspective, individuals can feel more in control of their social lives and develop healthier relationships with others.

Combining Social Stories & Narrative Therapy

Teachers and therapists can provide students with both structured direction and opportunity to take charge of their own social experiences by fusing Social Stories with Narrative Therapy. Children benefit from this potent combination as they grow in self-awareness, resilience, and interpersonal skills. According to research, these interventions significantly enhance social communication and lower anxiety in special education settings, making them very useful resources for helping children with ASD and other social difficulties. (Gray, 2022).

Video Modeling

Video Modelling for Social Skills Development

Students can view and learn from pre-recorded videos using video modeling, which is an effective method of teaching social skills. Positive social practices like welcoming others, making eye contact, and resolving problems are demonstrated by peers, professors, or even the children themselves in these films. Because it offers a clear, organized, and visual learning experience, this approach is particularly beneficial for children with autism spectrum disorder and other learning disabilities. Students are better able to comprehend and retain behaviors when they observe them frequently. Children can more easily use these abilities in real-life scenarios when they see clear examples of expected social interactions in video modeling.

Research shows that video modelling greatly improves communication skills, social engagement, and adaptive behavior skills (Bellini & Akullian, 2022). Because of its success in special education settings, it is considered an evidence-based tool that helps students gain confidence and become more independent in social interactions. Through observing and engaging in these modeled behaviors, children can learn critical social skills in a controlled and encouraging environment (Özerk et al., 2021)

Peer-Mediated Interventions (PMI)

Peer-Mediated Interventions (PMI) for Social Skills Development

Peer-Mediated Interventions (PMI) involve training typically developing peers to help students with disabilities improve their social skills. Students with difficulties can communicate with their peers more easily because these trained peers facilitate social interactions, offer feedback, and model acceptable behavior.

By encouraging inclusion, this method makes children with disabilities feel more included and welcomed by their peers. According to research, PMI promotes self-esteem, social communication, and general social competence. (B. Zhang et al., 2022).

PMI also benefits the peer mentors by establishing a more friendly classroom environment, fostering stronger ties, and enhancing empathy. PMI is a helpful strategy in inclusive education settings because it encourages student involvement and creates a friendly, engaging social learning atmosphere. (B. Zhang et al., 2022).

Table 2

Comparison of Peer-Mediated Interventions

PMI Strategy	Targeted Skill	Implementation Setting	Evidence Effectiveness	of
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Peer Tutoring	Academic & Social Classroom	Strong
Social Play Groups	Turn-Taking & Friendship Recess	Moderate
Lunch Buddies	Conversational Skills Cafeteria	High

Applied Behavior Analysis (ABA) and Positive Reinforcement

Applied Behavior Analysis (ABA) for Social Skills Development

The organized, research-based method known as Applied Behavior Analysis (ABA) helps in the improvement of social skills, communication, and adaptive behaviors in children with autism spectrum disorder and other developmental challenges. It works by analyzing behavior patterns, using positive reinforcement to encourage desirable behaviors, and implementing structured interventions to systematically teach and reinforce social skills (Anderson, 2023).

Some effective ABA techniques include:

Differential Reinforcement of Alternative Behavior (DRA): Encouraging appropriate behaviors by reinforcing positive alternatives to problem behaviors.

Token Economies: Using points, tokens, or small rewards to motivate positive social interactions.

Modelling& Prompting: Demonstrating social behaviors and guiding students as they practice.

Shaping: Gradually reinforcing steps toward a desired social skill to build confidence and success.

ABA has been shown to enhance social engagement, improve communication and peer relationships, and promote independence in special education settings, making it a valuable tool for supporting children's social development. (Hernán et al., 2022)

By using reinforcement-based techniques, ABA helps children gradually develop meaningful social interactions, making it a highly effective strategy in special education setting.

Figure 3

The Role of Positive Reinforcement in Social Skills Training

Counselling Technique	Targeted Social Skills	Effectiveness Rating	Sample Size (N)	Key Findings	Research
Cognitive-Behavioral Therapy (CBT)	Emotional regulation, reducing anxiety, perspective-taking	★★★★☆ (High)	120 children (ages 6-12)	40% improvement in emotional regulation and peer interactions (Scarpa et al., 2013)	
Social Stories & Narrative Therapy	Understanding social norms, reducing problem behaviors	★★★☆☆ (Moderate)	85 children (ages 5-10)	30% reduction in inappropriate social responses (Reynhout & Carter, 2009)	
Video Modeling	Conversation skills, non-verbal communication, initiating interactions	★★★★★ (Very High)	100 children (ages 4-14)	60% increase in social engagement and imitation skills (Bellini & Akullian, 2007)	
Peer-Mediated Interventions (PMI)	Social engagement, turn-taking, peer interaction	★★★★★ (Very High)	150 children (ages 6-15)	55% increase in reciprocal interactions and friendships (Kasari et al., 2012)	
Applied Behavior Analysis (ABA)	Reinforcing positive social behaviors, adaptive skills	★★★★☆ (High)	200 children (ages 3-12)	50% improvement in social initiation and response to peers (Leaf et al., 2017)	

Parent Training & Involvement	Generalization of social skills at home, daily living skills	★★★★☆ (High)	90 families	45% increase in consistent social interactions at home (McConachie & Diggle, 2007)
Group Social Skills Training (SSGT)	Role-playing, self-advocacy, maintaining friendships	★★★★☆ (High)	75 adolescents (ages 12-18)	50% increase in confidence during peer interactions (Gates et al., 2017)
Pivotal Response Training (PRT)	Motivation, self-management, flexible social communication	★★★★★ (Very High)	110 children (ages 4-10)	65% increase in spontaneous social interactions (Koegel et al., 2014)

CONCLUSION

In summary, counselling techniques play a vital role in helping children with Autism Spectrum Disorder (ASD) improve their social skills in special education settings. By using personalized strategies that meet each child's unique needs, counselors can greatly enhance their ability to interact with others, communicate effectively, and improve their overall well-being.

Methods such as social stories, peer modeling, and cognitive-behavioral strategies provide structured support that helps children develop important social skills. When these techniques are used in a supportive special education environment, their impact becomes even more significant. As research continues to improve these approaches, it is clear that a well-rounded and individualized method brings the best results. By helping children with ASD build essential social skills, counselors not only support their ability to connect with others but also boost their confidence and emotional well-being. Ultimately, using effective counselling techniques is key to improving social development and overall quality of life for children with ASD in special education settings.

REFERENCES

- Alanazi, A. S., Almulla, A. A., & Khasawneh, M. A. S. (2023). Evaluating the Effects of Integrating Cognitive Presence Strategies on Teacher Attitudes and Student Learning Outcomes in Special Education and Autism Classrooms. *International Journal of Special Education (IJSE)*, 38(2), 80–89. <https://doi.org/10.52291/ijse.2023.38.24>
- Anderson, L. K. (2023). Autistic experiences of applied behavior analysis. *Autism*, 27(3), 737–750. <https://doi.org/10.1177/13623613221118216>
- Baker-Ericzén, M. J., Smith, L., Tran, A., & Scarvie, K. (2021). A Cognitive Behavioral Intervention for Driving for Autistic Teens and Adults: A Pilot Study. *Autism in Adulthood*, 3(2), 168–178. <https://doi.org/10.1089/aut.2020.0009>
- Baron-Cohen, S. (2000). *Theory of mind and autism: A review* (pp. 169–184). [https://doi.org/10.1016/S0074-7750\(00\)80010-5](https://doi.org/10.1016/S0074-7750(00)80010-5)
- Baron-Cohen, S., Campbell, R., Karmiloff-Smith, A., Grant, J., & Walker, J. (1995). Are children with autism blind to the mentalistic significance of the eyes? *British Journal of Developmental Psychology*, 13(4), 379–398. <https://doi.org/10.1111/j.2044-835X.1995.tb00687.x>
- Bauminger, N., & Kasari, C. (2000). Loneliness and Friendship in High-Functioning Children with Autism. *Child Development*, 71(2), 447–456. <https://doi.org/10.1111/1467-8624.00156>
- Bellini, S. (2006). The Development of Social Anxiety in Adolescents With Autism Spectrum Disorders. *Focus on Autism and Other Developmental Disabilities*, 21(3), 138–145. <https://doi.org/10.1177/10883576060210030201>
- Bemmer, E. R., Boulton, K. A., Thomas, E. E., Larke, B., Lah, S., Hickie, I. B., & Guastella, A. J. (2021). Modified CBT for social anxiety and social functioning in young adults with autism spectrum disorder. *Molecular Autism*, 12(1), 11. <https://doi.org/10.1186/s13229-021-00418-w>

- Catania, F., Spitale, M., & Garzotto, F. (2023). Conversational Agents in Therapeutic Interventions for Neurodevelopmental Disorders: A Survey. *ACM Computing Surveys*, 55(10), 1–34. <https://doi.org/10.1145/3564269>
- Chung, K.-M., Chung, E., & Lee, H. (2024). Behavioral Interventions for Autism Spectrum Disorder: A Brief Review and Guidelines With a Specific Focus on Applied Behavior Analysis. *Journal of the Korean Academy of Child and Adolescent Psychiatry*, 35(1), 29–38. <https://doi.org/10.5765/jkacap.230019>
- Dijkstra, J. M., & Nagatsu, T. (2022). Cognitive behavioral therapy (CBT), acceptance and commitment therapy (ACT), and Morita therapy (MT); comparison of three established psychotherapies and possible common neural mechanisms of psychotherapies. *Journal of Neural Transmission*, 129(5–6), 805–828. <https://doi.org/10.1007/s00702-021-02450-9>
- Ezawa, I. D., & Hollon, S. D. (2023). Cognitive restructuring and psychotherapy outcome: A meta-analytic review. *Psychotherapy*, 60(3), 396–406. <https://doi.org/10.1037/pst0000474>
- Francis, K., Karantanos, G., Al-Ozairi, A., & AlKhadhari, S. (2021). Prevention in Autism Spectrum Disorder: A Lifelong Focused Approach. *Brain Sciences*, 11(2), 151. <https://doi.org/10.3390/brainsci11020151>
- Guo, L. (2022). The effects of self-monitoring on strategy use and academic performance: A meta-analysis. *International Journal of Educational Research*, 112, 101939. <https://doi.org/10.1016/j.ijer.2022.101939>
- Hernán, M. A., Wang, W., & Leaf, D. E. (2022). Target Trial Emulation. *JAMA*, 328(24), 2446. <https://doi.org/10.1001/jama.2022.21383>
- IAP/APA evidence-based guidelines for the management of acute pancreatitis. (2013). *Pancreatology*, 13(4), e1–e15. <https://doi.org/10.1016/j.pan.2013.07.063>
- Khan, A. N., Bilek, E., Tomlinson, R. C., & Becker-Haimes, E. M. (2021). Treating Social Anxiety in an Era of Social Distancing: Adapting Exposure Therapy for Youth During COVID-19. *Cognitive and Behavioral Practice*, 28(4), 669–678. <https://doi.org/10.1016/j.cbpra.2020.12.002>
- Kurniandini, P., & Yoenanto, N. H. (2024). Modeling and Behavior Rehearsal to Improve Communication Skills in Adolescent with Language Disorder. *Jurnal Psikologi Teori Dan Terapan*, 15(02), 152–163. <https://doi.org/10.26740/jptt.v15n02.p152-163>
- Mundy, P. (2003). Annotation: The neural basis of social impairments in autism: the role of the dorsal medial-frontal cortex and anterior cingulate system. *Journal of Child Psychology and Psychiatry*, 44(6), 793–809. <https://doi.org/10.1111/1469-7610.00165>
- Murray, S. (2021). The therapeutic use of stories in play therapy. In *Play therapy with children: Modalities for change*. (pp. 93–106). American Psychological Association. <https://doi.org/10.1037/0000217-007>
- Özerk, G., Özerk, K., & Silveira-Zaldivara, T. (2021). Developing Social Skills and Social Competence in Children with Autism. *International Electronic Journal of Elementary Education*, 13(3), 341–363. <https://doi.org/10.26822/iejee.2021.195>
- Rafida, R., & Astuti, B. (2024). The Effectiveness of Social Skills Training in Improving Students' Interpersonal Communication. *Psypathic: Jurnal Ilmiah Psikologi*, 11(1), 33–44. <https://doi.org/10.15575/psy.v11i1.30357>
- Sheppard, M. E., & Moran, K. K. (2022). The Role of Early Care Providers in Early Intervention and Early Childhood Special Education Systems. *Early Childhood Education Journal*, 50(6), 891–901. <https://doi.org/10.1007/s10643-021-01225-x>
- Soares, E. E., Bausback, K., Beard, C. L., Higinbotham, M., Bunge, E. L., & Gengoux, G. W. (2021). Social Skills Training for Autism Spectrum Disorder: a Meta-analysis of In-person and Technological Interventions. *Journal of Technology in Behavioral Science*, 6(1), 166–180. <https://doi.org/10.1007/s41347-020-00177-0>

- Travers, H. E., & Carter, E. W. (2022). A Systematic Review of How Peer-Mediated Interventions Impact Students Without Disabilities. *Remedial and Special Education*, 43(1), 40–57. <https://doi.org/10.1177/0741932521989414>
- Vambheim, S. M., Kylo, T. M., Hegland, S., & Bystad, M. (2021). Relaxation techniques as an intervention for chronic pain: A systematic review of randomized controlled trials. *Heliyon*, 7(8), e07837. <https://doi.org/10.1016/j.heliyon.2021.e07837>
- van der Stouwe, T., Gubbels, J., Castenmiller, Y. L., van der Zouwen, M., Asscher, J. J., Hoeve, M., van der Laan, P. H., & Stams, G. J. J. M. (2021). The effectiveness of social skills training (SST) for juvenile delinquents: a meta-analytical review. *Journal of Experimental Criminology*, 17(3), 369–396. <https://doi.org/10.1007/s11292-020-09419-w>
- van IJzendoorn, M. H., Schuengel, C., Wang, Q., & Bakermans-Kranenburg, M. J. (2023). Improving parenting, child attachment, and externalizing behaviors: Meta-analysis of the first 25 randomized controlled trials on the effects of Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline. *Development and Psychopathology*, 35(1), 241–256. <https://doi.org/10.1017/S0954579421001462>
- Wood-Downie, H., Wong, B., Kovshoff, H., Cortese, S., & Hadwin, J. A. (2021). Research Review: A systematic review and meta-analysis of sex/gender differences in social interaction and communication in autistic and nonautistic children and adolescents. *Journal of Child Psychology and Psychiatry*, 62(8), 922–936. <https://doi.org/10.1111/jcpp.13337>
- Yang, Z., & Talha, M. (2021). A Coordinated and Optimized Mechanism of Artificial Intelligence for Student Management by College Counselors Based on Big Data. *Computational and Mathematical Methods in Medicine*, 2021, 1–11. <https://doi.org/10.1155/2021/1725490>
- Zarra-Nezhad, M., Pakdaman, F., & Moazami-Goodarzi, A. (2023). The effectiveness of child-centered group play therapy and narrative therapy on preschoolers' separation anxiety disorder and social-emotional behaviours. *Early Child Development and Care*, 193(6), 841–853. <https://doi.org/10.1080/03004430.2023.2167987>
- Zhang, B., Liang, S., Chen, J., Chen, L., Chen, W., Tu, S., Hu, L., Jin, H., & Chu, L. (2022). Effectiveness of peer-mediated intervention on social skills for children with autism spectrum disorder: a randomized controlled trial. *Translational Pediatrics*, 11(5), 663–675. <https://doi.org/10.21037/tp-22-110>
- Zhang, M., Ding, H., Naumceska, M., & Zhang, Y. (2022). Virtual Reality Technology as an Educational and Intervention Tool for Children with Autism Spectrum Disorder: Current Perspectives and Future Directions. *Behavioral Sciences*, 12(5), 138. <https://doi.org/10.3390/bs12050138>