

Review

Not Just a Toy: Puppets for Autistic Teenagers

Olivia Karaolis 

School of Education and Social Work, The University of Sydney, Camperdown, NSW 2050, Australia;
olivia.karaolis@sydney.edu.au

Abstract: The benefits of puppetry for children in therapeutic and educational contexts are well established, with puppets shown to have improved children’s learning, their relationships with adults and other children, and their self-confidence and communication. Adding to this research is an emerging body of evidence that shows the many benefits of puppets for autistic children both as a form of early intervention and as a teaching strategy in the early years of schooling. This paper examines the qualitative literature that describes the value of puppets for autistic teenagers and young people to see how the object of puppets may maintain relevance for older students in secondary school and as they transition out of school and how puppets can enhance the already established advantages seen in younger children. An online search was conducted of peer-reviewed journals through the university library, followed by an additional search using the same keywords on Google Scholar. The review highlighted the possibilities of puppetry for many educational purposes and the wellbeing of autistic adolescents and young people. Also found were a significant gap in the research and the need for further studies that apply puppetry to this diverse population.

Keywords: autism; puppets; teenagers; education; therapy; inclusive education

1. What Is a Puppet?

A puppet can be simply described as a children’s toy, like a doll that can be moved by a string or a human hand. Astles and Tsaplina [1] expand on this definition to present puppets as an illusion of life, an object that, through the movement and vocalisations of the puppeteer, invites the audience or observers to join in the creative/imaginative act and regard the puppet as real. The authors define this version of “real” with a puppet as its “liminal; status, between life and non-life” [1] (p. 297), a connection to the inner/imaginative world and reality. Historically, puppets have adopted this position in rituals and ceremonies, including those that involve an important rite of passage and are considered a transitional object [2] one that, like a special blanket or babies’ pacifiers, is able to support and comfort individuals as they approach or undergo periods of uncertainty and change. Applied theatre practitioner Dr Melissa Trimmingham [3] describes such an example in her account of her son and the companionship and security that a puppet called Roland provided him as a child and a young adult. In her research story and later studies, puppets communicate and convey feelings and can act as a bridge or a mediating tool [3] between one person’s experience of the world and the experience of others.

The role of puppets as a mediating tool in education is illustrated in numerous studies, and most frequently in the early years of schooling. Puppets have been used to enhance communication in early education for children with and without disabilities [4,5]; to support inclusion [6]; and as a pedagogical approach to address the communicative, social and behavioural preferences of autistic primary school students [7]. In secondary education, puppets have been used for a variety of learning intentions, including the use of puppets to build student confidence [8,9] when learning English as an additional language. Mayes [10] also found that puppets provided students with confidence and a safer space to share their “voice” as part of an ethnographic research project. As one student said, “You got to express yourself and the previous situations through puppets, so you didn’t really care



Citation: Karaolis, O. Not Just a Toy: Puppets for Autistic Teenagers. *Youth* **2023**, *3*, 1174–1182. <https://doi.org/10.3390/youth3040074>

Academic Editor: Diego Gomez-Baya

Received: 2 September 2023

Revised: 20 October 2023

Accepted: 20 October 2023

Published: 23 October 2023



Copyright: © 2023 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

how you looked or how you sounded, because you couldn't really see your face. [...] It could be coming from the student that never gets in trouble or a student that always gets in trouble. You wouldn't know" (p. 111). The capacity of puppets to provide protection to the speaker contributes to a supportive and collaborative learning environment, reported in other curriculum areas, such as Science, Drama, Design and Technology [11,12].

The protective quality of the puppet, which allows an individual to speak "through" the puppet [4–6], has led to their application in therapeutic contexts as they provide individuals with an alternative way to express their feelings and experiences. Therapists have engaged in puppetry for a wide range of purposes that include supporting patients in medical situations, play therapy, family therapy, survivors of child abuse and domestic violence, and individual art and group therapy [13]. Diane Chiles' [14] work with puppetry in hospitals is the subject of a documentary about Bernard, a puppet patient who helps to take away children's fears by giving them a place to discuss their feelings and ask questions about their health and medical procedures. Puppets have been used to address other uncomfortable or traumatic events in Play Back theatre, with the puppet used as an object to act out stories or personal experiences by both the therapists and the participants [13]. Theatre companies such as Puppets in Transit have used puppets to heal intergenerational trauma brought about by a period of dictatorship in Chile [15]. In these contexts, the puppet, because of its sensory and expressive qualities, enabled people to communicate their feelings safely. Puppeteer Mathew Bernier explains how "protect what is expressed can be denied and blamed on the puppet, so that inner emotional worlds are revealed in non-threatening ways" [13].

The object of the puppet facilitates interactions, communicates, and can represent aspects of life and perspectives, including those whose voices are less confident, such as children or those who have been marginalised because of disability or cultural diversity [2]. Studies speak to the capacity of puppets to cross boundaries between people created by attitudinal barriers and unequal relationships, such as those between student and teacher, doctor and patient, or adult and child. The puppet can remove these barriers and help shape new understandings of people, events and even concepts such as disability [2,6,12]. Included in this research are studies that suggest puppets hold a great deal of promise and effectiveness as a communicative tool for autistic children [5,6,16]. The most recent of these was conducted at the Yale Child Center for Research, in collaboration with the Jim Henson Foundation that found autistic infants preferred to look at the face of a puppet and not the face of a person and recommended further investigations on the effectiveness of puppets as a therapeutic tool for this population [16]. In the following section, I describe the methods used as part of this investigation and examine what is known in research about puppets and autistic teenagers and young people.

2. Materials and Methods

This paper sought to answer the question of "How are puppets used in educational and therapeutic settings with Autistic teenagers?" and to explore the prevalence and effectiveness of puppetry for the learning and wellbeing of this population. It should be noted that the researcher has adopted the use of *identity*-first language in this paper to recognise the preferences of this community that are emerging in the recent literature [3]. The author also acknowledges the variance in the use of appropriate disability language, with some individuals preferring *person*-first language and others *identity*-first language to describe their disability, and both forms were used in the exploration of the literature. A series of searches of digital peer-reviewed articles were conducted and began using a general search on the University of Sydney library catalogue and then Google Scholar. In this initial phase, the researcher used the keywords of "puppetry" or "puppets" and "autistic teenagers", "teenagers with autism", "secondary school students with autism", "puppets and adolescents with autism" and "the benefits of puppets for autistic teenagers in education and therapy". The research period commenced on the first of May 2023, and concluded on the 16th of October 2023. An additional search of the database ERIC-Pro

Quest was conducted using the same set of search words. I contacted the President and members of the Union International De La Marionette (UNIMA) to request any known studies on the topic. Studies were included that involved autistic teenagers between twelve and nineteen years of age.

The search found a total of twelve qualitative studies: seven articles that discussed the use of puppets specifically with autistic students in High School settings and five studies that described the use of puppets specifically with autistic teenagers in a range of different therapeutic contexts. Studies originated from the United Kingdom, the United States, Europe, India and one study from Australia. Studies were selected if they showed evidence of a relationship between puppetry and educational or therapeutic outcomes for teenagers with autism. For example, Trimmingham [3] wrote of the benefits of puppets to enhance the “response-iveness” of educators in their interactions with autistic students. Thesis papers were excluded, as were articles that focused outside of the age group. The inclusion criteria for this review are shown in the Table 1 below:

Table 1. Inclusion criteria for article review.

Criterion Type	Criterion Description
Topic	The research must answer the research question of puppets in education and therapy with autistic teenagers.
Age Range	12–19 year old
Context	Students or teenagers with autism in schools or therapy settings
Peer Reviewed	Articles must be based on peer-reviewed research. (In peer-reviewed journals).
Date Range	1981–2023

3. Listening to the Puppets in Education

Melissa Trimmingham [3] contributes a great deal to our appreciation of the possibilities of puppetry in school settings. The author proposes an alternative approach to education and suggests that schools and teachers consider an “autistic” curriculum (p. 124). This concept is informed by an interdisciplinary project titled *Imagining Autism*, an innovative study that brought together theatre artists, psychologists, educators and students intended to measure the effectiveness of a sensory and theatrical intervention to support the communication and social connectedness of autistic students between the ages of seven and twelve [3,17]. The sensory-rich experience involved the use of a tent or pod, props, materials, digital media, lighting, sound effects, masks and puppets to build five different environments that included an under the sea, arctic, outer space, under the city and a forest theme. These wonder worlds were created to give students an opportunity to have their sensory preferences acknowledged and included in their learning environments [17] and a place to form connections with the adults. Each adult was specifically trained in approaches that recognise the communicative preference associated with autism and was equipped to respond with sensitivity to the verbal and non-verbal expressions of the students involved [17]. Trimmingham [3] aligns the intention of this approach with the concept of “Subjectification” and one of the purposes of education defined by educational philosopher Gert Biesta [18]. Subjectification is concerned with the formation of identity, of the manner and individual ways of being and responding to the world that is authentic, autonomous and uniquely our own. *Imagining Autism* provided autistic students with a place for this type of “being” and to have this acknowledged in the presence of others. As part of the sensory environment, the puppet was part of a rich array of communicative tools that added to each student’s sense of agency and autonomy by giving them a way to make and express meaning.

The appeal of the puppets to autistic students [19] may be explained by their liminal status [1]. A puppet, as a less complicated, less “alive” version of a living thing, is more predictable than a complex human being or other creature and can be controlled

by the puppeteer. The puppet (or puppeteer) can, therefore, provide a gentle or low-risk introduction to a living thing and provide autistic students the practice or rehearsal for future encounters with people or animals. This capacity of the puppet was outlined in one of the case studies of Mary and her physical interaction with a bird puppet that was seen to inspire her latter interest in the family cat and expand to other animals [20]. The opportunity to care for a bird (puppet) appears to be the impetus or the starting place for her to develop meaning about animals and form a concrete understanding.

Puppets can also be used by teachers as part of their professional learning and preparation for inclusive practice [3]. Trimingham [3] describes puppets as an alternative way to bring about “joint attention”, which is the shared focus on an object that is initiated by one person to another. In young children we often see this with young children pointing to an object to indicate their interest and their desire for an adult to share that interest with them. In the classroom, a puppet can bring about joint attention and be a starting point for interactions between students and their teachers/carers. As found in studies with younger children [5], the puppet reduced anxiety and stress in the learning environment and added to the ease of communication between autistic students and their teachers. Trimingham [3] attributes this phenomenon to the “metaphorical distance” (p. 127) created by the puppet that creates a sense of space and possibly a less intense or demanding interaction that is often present in the discussions between students and teachers. Puppets added to students’ willingness to participate in new or creative experiences and to play [20]. The puppet as a teaching tool also gives teachers the distance to observe students respond with a puppet. From this observation, through or with the puppet teachers in the studies [3,17,19], they gained insight into the world of autistic students that led to a shift in their understanding and perspective of autism, the experiences of their students and changes in pedagogy.

One such example is seen in a study by Carr [21], who described the many ways her school used puppets with high school students. The article includes how puppets were utilised by the school counsellor to reduce the stress or confusion her three-month absence may bring about for her autistic students. The school counsellor created a puppet called Lucy to maintain her connection with her students during her time away from school. The puppet accompanied her during her travel overseas, and she sent regular blogs with her students to remain part of their school routine and support their understanding of her and her trip overseas. The puppet was the object that represented the teacher, who was used to share the story of her travels and continue her presence at school. As with young children, puppets were central in forming and sustaining close bonds between autistic teenage students and their educators and contributed to a less stressful and more positive learning environment.

Another example of the benefits of puppets for teenagers was told in the research story of a social skills intervention at a school for specific purposes in the United Kingdom [22]. It is interesting to see how the puppets were used in this context to give two students with autism in a school designed to support students with disabilities, learning difficulties and medical conditions to build a supportive and inclusive environment to foster social skills. Autistic students in schools for specific purposes are not immune from barriers to social interactions and may often find it difficult to share their voices and thoughts with others [22]. This study was designed to give students the confidence and space for their voices to be heard using aspects of process drama and puppetry as an intervention [22]. Process drama sets up a fictional premise or inciting incident that launches into a range of dramatic experiences and encounters [22]. The class of twelve students was presented with an imaginative scenario about how they would prepare a new student to join their class. The goal for the autistic students was to build their confidence and contribute to class learning and group discussions. It is here that a pair of puppets was found to be very valuable, giving students the confidence to speak in front of the class and role-play different scenarios. One student who was described as quite hesitant to share her contributions with the class did so with delight when using a puppet. The protection of the hand puppet enabled her to show her ability to respond to complex and sensitive social situations (that

of a boy inviting a girl on her first date) with spontaneity and humour—both qualities she had not revealed in class before. The study also described the confidence in speaking with others and the overall social skills the two autistic students gained from using puppets. As with the studies above, puppets offered a novel and engaging method of learning that enabled students and teachers to revisit core concepts and expand on, and they learned through an experience that was pleasurable and allowed students an opportunity to reveal their humor and creativity, qualities they had not shown previously in the classroom [22].

A similar phenomenon is reported in the research on the benefits of Artability [23], an arts education program that employed a range of creative approaches, including puppetry for autistic teenagers. This study, using a mixed methods approach, makes a compelling case for the arts as a learning approach for teenagers with autism. Involving over twenty students with autism, the three-week program brought together arts educators, arts organisations, and teenager mentors to introduce rich creative experiences with the intention of supporting social and emotional learning. As with *Imagining Autism*, the intervention weaved together music, dance, drama and visual art. A similar intention was also seen in the aims of the program and the attention paid to providing all students with a platform for expression. The researcher describes how they “created an environment where all voices were given weight and credence” [23] (p. 53). This voice was given expression through the creative art forms and in a way that suited the communication preferences of the participants in the sensory experiences and environments in *Imagining Autism* [17]. Spoken language was not prioritised, and students were able to use gestures, actions, play, responsiveness and communication devices to share their ideas.

Like the outcomes of *Imagining Autism*, the researchers in this study found an increase in autistic student’s participation and willingness to be part of creative learning experiences and to expand on and develop their creative skills [23]. Students with certain preferences for art processes, tools or activities were seen to develop on these and work with spontaneity and flexibility; “other participants, who initially only wanted to engage in familiar and non-performative genres like drawing and painting, were ultimately willing to take creative risks by exploring novel genres like dancing and puppetry” [23] (p. 57). The willingness to engage in creative experiences was also reflected in the participants’ increased motivation and confidence to interact with others. This outcome was central to the program design and its overarching goal to support the social participation of the students. Students used puppets to speak to one another or in drama to give them the confidence to speak to an audience or larger groups of people. Interview data from the participants captured the energy: “Everyone wanted to do everything [by the end]—do puppets, sing, show off art. Their self-confidence, and ‘Look what I can create’ at the end of day was really, really wonderful.” [23] (p. 60).

The positive effects of the program were also seen in the change in attitudes of the teen mentors. Examples of this shift in perception are captured in feedback such as, “The biggest change I noticed was my perception of intelligence as a result of verbal skills. I had preconceived notions about children who could not communicate verbally being less intelligent than individuals who could. . . I quickly learned I was wrong after working with participants.” (p. 60). Many of these outcomes were associated with the combination of the creative arts and social–emotional learning and, in particular, the opportunities to engage socially in the co-creation of arts experiences, such as puppetry [23]. A phenomenon that was also found in therapeutic settings is described in the next section.

4. Listening to the Puppets in Therapy

Perhaps unsurprisingly, autistic teenagers participating in therapy were also found to reveal more of their abilities and views of the world when a puppet was involved in the process. Malhotra [24] describes how the process of puppet creation with a sixteen-year-old autistic girl created a method for her to learn new interpersonal and intrapersonal skills. The case study described the intervention that included twelve thirty-minute sessions over a three-month period. The sessions were intended to support the client named Lisa (not her

real name) to manage her emotions and develop her ability to recognise and respond to her own feelings and the feelings of others. The therapist created puppets that could express these feelings prior to their sessions; for example, as Lisa often experienced anxiety or worry, the therapist constructed three types of puppets to depict that emotion. Lisa would then be invited to choose one of the puppets to create herself and then use it in puppet play. Over the twelve sessions, a range of types of puppets was introduced, including finger puppets, hand puppets, sock puppets and paper bag puppets. Once Lisa made the puppets, she was invited to use them and explore different ways to respond to social situations, to practice recognising the feelings of the puppet, to role-play possible solutions or advise the puppet on how to react. In this puppet play, the therapist could see the strengths of her client, her capacity to identify her feelings and the feelings of others, and build her confidence in managing her reactions and ability to self-regulate. The puppet creation also provided a space to externalise her feelings and emotions and depict her feelings in a way that was concrete, such as drawing tears to communicate her awareness of her stress. In this way, the puppet acted as an object to which she could transfer her feelings or, as Trimingham [10,22] suggests, a safe object to trust and share their experience of the world. The puppet allowed her to voice her feelings and preferences and to find ways herself to best cope with difficult or distressing situations, such as her loneliness or times of stress.

The relationship between therapist and client was also seen to be enhanced through the co-creation of a puppet [6,24]. In Malhortra's study [24], puppet making provided a natural vehicle for her to connect with her client and to encourage interactions. Lisa developed her confidence over time in asking for assistance in puppet making and inviting the therapist to play. This was also seen in Parvarthi's [25] case study of a teenage boy with autism; the therapist found both the process of making art and the object of the puppet beneficial for assisting their client in expressing an understanding of themselves and developing their confidence socially. The researcher also found the making of the puppet object helpful as the process encouraged the teenager to initiate more interactions with the therapist and share their interests and understanding. Over a period of ten months, the client was able to use a range of materials to create a depiction of himself, something that he was unable to do before the therapeutic process. The object of the puppet and later other objects and props gave the client more tools for the discovery and expression of his identity [13,24]. This aspect of the study reminds us how puppets are an "opportunity for a different kind of expression and response". Anything can serve as a puppet [25]. The puppet was both an extension of himself and a bridge to others in that it supported his communication in song and eventually in conversation with another peer, a moment that the therapist described with joy [25]. A larger study of twenty-four autistic males also found that puppetry was a valuable [26] way for participants to develop their ability to initiate interaction with others. This study was able to measure the effectiveness of puppet play as the study design included an experimental group and a control group [26]. The participants who received the puppet therapy showed a significant increase in their ability to interpret the feelings and behaviour of others and a motivation to engage in sustained interactions than those in the control group. It is here that the puppets were used by the therapist to model and perform identified social skills.

5. Listening to the Puppet Findings

The use of puppets in educational and therapeutic settings often shares similar goals and seeks to develop the self-expression and social and emotional wellbeing of participants. In the upper levels of schools, the use of puppets with autistic teenagers (and non-autistic peers) seems rare, and yet its application in therapy suggests it has much to offer in the field of education. It is here that the research illustrates the possibilities of the puppets to change relationships and foster the "socialization" [18] that is so much a part of learning in schools. As in studies with children in the younger years [6], puppets may be used to provide comfort and safety to autistic secondary students in their communication and interactions in class. The process of puppet making may also serve as a process for educators to advance

their understanding of the experience of autistic teenagers and young adults. The joint or collaborative act of puppet making may build trust, as shown in therapeutic settings [24,26] with older students and in work with young children with autism in other studies [22].

Puppeteer Joanne Vizzini [27] invites her audience and readers to imagine the possibilities of puppets for adults. Her question seems relevant for educators working with autistic teenagers as it asks us to look beyond the puppet as something that is only for young children and look at the research that uses puppets as a way of learning or for educational “qualification” [18]. Again, I look to Biesta [18] and his definition of the three purposes of education, with “qualification” being the intention of education to develop skills, knowledge and dispositions. Puppets have been shown to support young children in this aspect in a range of curriculum areas [4,5] and hold promise in settings with older students [9].

For autistic adolescents, puppetry was found to be transformative, to bring about the conditions that made the participants feel safe in expressing their inner self and, in doing so, develop their connection to others and grow their social, communicative and creative self [22–26]. Successful use of puppets with autistic teenagers in therapy has salient points that include the carefully selected choice of puppets, the construction and co-creation of the puppet [4,24,25], and the use of puppets to express thoughts and feelings. Educators can select from a vast array of puppets to make with adolescents and should do so with careful consideration of their sensory preferences and the interests of the participants involved. One example of this was seen in Parvathi’s study [26], which was built on his client’s preference for drawing with paper and Malhorta’s creation of a variety of puppets to interest Lisa’s involvement in art [24]. The process of making puppets seems underused in educational contexts and one that has wide application for inclusive pedagogy.

In all these studies, the teenagers or young people surprised both their teachers and their therapists by acting in ways that were not characteristic or associated with autism. Participants in *Imagining Autism* [17] were quite willing to engage in the novel and stimulating dramatic encounter; this willingness conflicted with many of our assumptions about the adaptability and sensory preferences of this population. The ability to form friendships and adapt quickly to a new learning environment was seen in *Artability* [23], as students from a range of different schools came together in an unknown space and with unfamiliar people with ease and pleasure. The capacity to use imagination and suspend disbelief was illustrated across all the studies, as was the ability to recognise the feelings and emotional states of others [4,13,23,24]. It is this finding that speaks to the very important role puppets play as a tool for creative and inclusive practices and to remove many barriers to expression for all young people. Trimingham [10] (p. 262) explains this is because puppets “are predictable enough to feel safe, they entertain and amuse, they are funny, and they help a child to make ‘sense’ of the world”. This feature of the puppet was seen across all studies and allowed students to make sense of their teacher’s absence [22] of their own feelings and the feelings of others [24] or as a language that was easier to understand than just spoken words [3,17,23,26].

6. Conclusions

The review of the literature suggests that puppetry may be worthy of consideration for autistic teenagers. Studies highlight the benefits of puppetry in both therapeutic and educational contexts with autistic participants. It has also highlighted a gap in the research and one that invites further studies about how puppets can create the environment, relationships and autistic curriculum for students in secondary schools. One area of focus would be on how puppets can be used in a way that allows autistic students to feel a sense of belonging and empowered (as shown in the therapeutic studies) to co-construct meaning by and of themselves. Kempe and Tissot [22] note the underuse of drama and puppetry for students with disabilities in secondary school settings. Kieran Braun, an individual on the autism spectrum who has benefited immensely from the use of puppets in many different modalities of therapies and support services throughout his life, opens a panel

discussion for the Jim Henson Foundation with his puppet Scruffles and his experience as a child in which his “therapist used puppets to help me develop my pragmatic and social skills”. Seeing Kieran speak through a puppet speaks to their power. It is these voices and the perspectives from the research found in this explorative review that highlight both the need and compelling case for further research to inform education and therapy about the impact of puppets on autistic teenagers and young people.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The author declares no conflict of interest.

References

1. Astles, C.; Tsaplina, M. *Puppetry: The Art of Puppetry Practice: Embodiment, Enchantment, Memory, History*; Routledge: Abingdon-on-Thames, UK, 2020.
2. Jurkowski, H. *Aspects of Puppet Theatre*; Puppet Centre Trust: London, UK, 1988.
3. Trimingham, M. Exploring an Autistic Curriculum: Of Pedagogy, Puppets and Perception. In *Knowing from the Inside: Cross-Disciplinary Experiments with Matters of Pedagogy*; Bloomsbury Publishing: London, UK, 2022.
4. Kröger, T.; Nupponen, A.M. Puppet as a pedagogical tool: A literature review. *Int. Electron. J. Elem. Educ.* **2019**, *11*, 393–401. [[CrossRef](#)]
5. Råde, A. Theories Supporting the Use of Puppets as Pedagogical Tool with Young Children. *Univers. J. Educ. Res.* **2021**, *9*, 1359–1368. [[CrossRef](#)]
6. Karaolis, O. Inclusion happens with a puppet: Puppets for inclusive practice in early childhood settings. *NJ* **2020**, *44*, 29–42. [[CrossRef](#)]
7. Remer, R.; Groman, T. The effect of using puppets in elementary communication with kindergarten children on the autistic spectrum. *Mifgash J. Soc. Educ. Work* **2022**, *30*, 54.
8. Maharani, S. The use of puppet: Shifting speaking skill from the perspective of students’ self-esteem. *Regist. J.* **2016**, *9*, 101–126. [[CrossRef](#)]
9. Prasetyaningrum, A. The use of puppets in teaching speaking for junior high school students. *VELES Voices Engl. Lang. Educ. Soc.* **2017**, *1*, 48–57. [[CrossRef](#)]
10. Mayes, E. Shifting research methods with a becoming-child ontology: Co-theorising puppet production with high school students. *Childhood* **2016**, *23*, 105–122. [[CrossRef](#)]
11. Mehrotra, S.; Khunyakari, R.; Natarajan, C.; Chunawala, S. Collaborative learning in technology education: D&T unit on puppetry in different Indian socio-cultural contexts. *Int. J. Technol. Des. Educ.* **2007**, *19*, 1–14.
12. White, P.J.; Raphael, J.; Van Cuylenburg, K. (Eds.) *Science and Drama: Contemporary and Creative Approaches to Teaching and Learning*; Springer: Berlin/Heidelberg, Germany, 2021.
13. Bernier, M. Introduction to puppetry in therapy. In *Puppetry in Education and Therapy: Unlocking Doors to the Mind and Heart*; AuthorHouse: Bloomington, IN, USA, 2005; pp. 109–115.
14. Chiles, D. The therapeutic use of puppetry in a health care setting. In *National Festival Workshop Manual: 2001 A Puppet Odyssey*; Puppeteers of America: Minneapolis, MI, USA, 2001.
15. Markovits, A. Puppet theatre: A way to tell what cannot be told and to face pain. *J. Appl. Arts Health* **2020**, *11*, 149–155. [[CrossRef](#)]
16. Macari, S.; Chen, X.; Brunissen, L.; Yhang, E.; Brennan-Wydra, E.; Verneti, A.; Volkmar, F.; Chang, J.; Chawarska, K. Puppets facilitate attention to social cues in children with ASD. *Autism Res.* **2021**, *14*, 1975–1985. [[CrossRef](#)] [[PubMed](#)]
17. Beadle-Brown, J.; Wilkinson, D.; Richardson, L.; Shaughnessy, N.; Trimingham, M.; Leigh, J.; Whelton, B.; Himmerich, J. Imagining Autism: Feasibility of a drama-based intervention on the social. *Autism* **2018**, *22*, 915–927. [[CrossRef](#)] [[PubMed](#)]
18. Biesta, G.J. *Beautiful Risk of Education*; Routledge: Abingdon-on-Thames, UK, 2015.
19. Trimingham, M.; Shaughnessy, N. Material voices: Intermediality and autism. *Res. Drama Educ. J. Appl. Theatre Perform.* **2016**, *21*, 293–308. [[CrossRef](#)]
20. Trimingham, M. Objects in transition: The puppet and the autistic child. *J. Appl. Arts Health* **2010**, *1*, 251–265. [[CrossRef](#)] [[PubMed](#)]
21. Carr, K. Teach boldly with puppets. *Education* **2016**, *97*, 17.
22. Kempe, A.; Tissot, C. The use of drama to teach social skills in a special school setting for students with autism. *Support Learn.* **2012**, *27*, 97–102. [[CrossRef](#)]
23. Müller, E.; Nutting, D.; Keddell, K. Understanding Art Ability: Using qualitative methods to assess the impact of a multi-genre arts education program on middle-school students with autism and their neurotypical teen mentors. *Youth Theatre J.* **2017**, *31*, 48–74. [[CrossRef](#)]
24. Malhotra, B. Art therapy with puppet making to promote emotional empathy for an adolescent with autism. *Art Ther.* **2019**, *36*, 183–191. [[CrossRef](#)]

25. Parvathi, G. Arts based therapeutic intervention on an adolescent living in autism spectrum. *Indian J. Health Well-Being* **2020**, *11*, 265–267. Available online: http://www.iahrw.com/index.php/home/journal_detail/19#list (accessed on 1 September 2023).
26. Rangani, A.; Alamdarloo, G.H.; Shojaei, S.; Nekah, S.M.A. The Effectiveness of Puppet Play Therapy Intervention on Social Skills of Male Students with Autism Disorder. *Psychol. Except. Individ.* **2015**, *5*, 73–93. [[CrossRef](#)]
27. Vizzini, J.F. The Wonder Continues: Captivating and Engaging Adults through Therapeutic Puppet Play and Puppet Therapy. In *Puppet Play Therapy*, 1st ed.; Routledge: Abingdon-on-Thames, UK, 2018; pp. 174–188. [[CrossRef](#)]

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.