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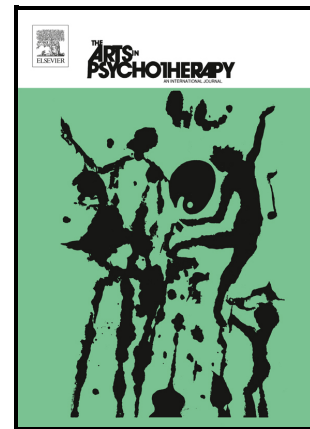
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Dramatherapy for Children and Adolescents with Autism Spectrum Disorder: A Systematic Integrative Review

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Abstract

Dramatherapy is a form of psychotherapy practised by qualified and clinically trained dramatherapists and entails the intentional use of drama and theatre-arts creative processes such as storytelling, role-playing, movement, dramatisation and improvisation to promote therapeutic change, adaptation or self-development. Dramatherapists and researchers have contributed to the development and appreciation of dramatherapy for supporting children and adolescents with an Autism Spectrum Disorder (ASD) diagnosis, who tend to experience mild to severe challenges in interacting and communicating with others as well as processing social-emotional experiences. However, there is limited empirical research in this field. The present study adopted an integrative approach to systematically review the published research on the effects of dramatherapy sessions for children and adolescents with ASD, aged under 19 years; aiming at offering an in-depth and holistic understanding of the impact on emotional, psychological and social domains. Nine research studies utilising different research designs, namely six qualitative studies, two quantitative studies and one mixed methods were identified and integrated in this systematic review. A textual narrative approach was employed to synthesise the findings which suggested that dramatherapy can support children and adolescents with ASD by fostering behavioural, expressive and social skills and promoting emotional well-being through the use of various art forms and techniques. Methodological issues concerning the transparency of the research process were identified. In addition, the need for a formalised approach to exploring and evaluating the impact was recognised.

Keywords:

autism spectrum disorder; ASD; dramatherapy; psychotherapy; Systematic review;

Introduction

Autism Spectrum Disorder

Autism spectrum disorder (ASD) is a lifelong developmental condition with onset typically between one and two years of age, involving mild to severe effects on social-emotional reciprocity, non-verbal communication, developing and understanding relationships (American Psychiatric Association [APA], 2013). More than 50% of individuals with ASD have comorbid symptoms, which may include motor coordination difficulties, language impairments or delay, learning difficulties, anxiety, perception and attention challenges (Damiano et al., 2014; Morton, 2004). Strengths, abilities, characteristics and challenges vary considerably between individuals with an ASD diagnosis and over the lifespan. Some individuals with ASD live self-reliant lives, communicating effectively or being highly intelligent whereas some others may have high support needs.

In the 1970s, ASD was considered uncommon, with a prevalence estimate around 2 per 10,000 (Sun et al., 2014) but the global prevalence of ASD has increased dramatically. A recent systematic review revealed that around the world, approximately 1 per 100 children are diagnosed with ASD (Zeidan et al., 2022). The term 'autism spectrum disorder' or ASD is used throughout the present paper in line with the Diagnostic and Statistical Manual, fifth edition (DSM-5). However, it is acknowledged that there are debates, disagreements and different standpoints regarding the description, understanding and perception of autism. Research among the UK autism community members, demonstrated that there is no universally agreed

terminology; terms used also include 'autism', 'on the autism spectrum', 'autistic', 'autistic person', 'person with autism', 'have autism', suggesting that "the terms vary according to complex multiple factors, including people's beliefs about autism and the context in which they find themselves" (Kenny et al., 2016, p. 460). Some individuals in the autism community adopt the neurodiversity framework, questioning the ASD classification as pathology, moving away from terms such as 'disorder' or 'disability' whilst endorsing the diversity of the human brain and the uniqueness of the nervous system (Baron-Cohen, 2017). Although there is a movement supporting an autism diagnosis as an integral part of self-identity, autism community representatives have been sceptical about the neurodiversity approach claiming that it lacks scientific evidence and mainly considers only high-functioning individuals rather than the broad spectrum as well as may hinder healthcare provision, support and access to the services (Ripamonti, 2016). Nevertheless, it has been commonly agreed that the main goal of different types of support should focus on offering every individual the means to reach their full potential; building on strengths and respecting individuality (Fletcher-Watson & Happé, 2019).

The present study aimed to systematically review the existing published research-based literature on the effects of dramatherapy for children and adolescents with an ASD diagnosis. Effects pertinent to psychosocial well-being and functioning were reviewed, among others, relationships, social and daily life activities, emotions and behaviour.

Dramatherapy

Dramatherapy is a form of psychotherapy, which is facilitated by trained, credentialed dramatherapists and concerns "the intentional use of drama/theatre processes to achieve

psychological growth and change. The tools are derived from theatre; the objectives are rooted in psychotherapy” (Emunah, 2019, p. 26). The Health and Care Professions Council published the Standards of Proficiency for Arts Therapists (2013 p. 14), in which dramatherapy is described as “a unique form of psychotherapy in which creativity, play, movement, voice, storytelling, dramatisation, improvisation and the performance arts have a central position within the therapeutic relationship”. Dramatherapy has roots in theatre, therapeutic drama, psychology and anthropology whilst it is largely influenced by the theory and practice of Group Analytic Psychotherapy, Jungian Archetypal Psychotherapy, Gestalt Therapy and Systems Theory (Jennings et al., 1994; Jones, 2007; see Landy, 1997 for an overview).

Dramatherapists engage different approaches and techniques involving role-play, dramatisation, improvisation, storytelling as vehicles within a therapeutic encounter driving towards building a holding therapeutic relationship and facilitating both thoughts and feelings about difficulties, incidents, beliefs, or assumptions as well as new types of behaviour. Individual and/or group dramatherapy sessions are currently offered across a wide range of client groups, in hospitals, clinics, care settings, social services, prisons, special schools, educational units, rehabilitation centres and the voluntary sector by credentialed dramatherapists, while many dramatherapists also work in private practice (Dokter & Winn, 2010; Jones, 1996; 2021).

Dramatherapy and ASD: Need for empirical research

Although positive outcomes in terms of social abilities, communication and cooperative play have been reported when engaging theatre techniques with people with ASD in a non-

dramatherapy framework (Beadle-Brown et al., 2018; Corbett et al., 2011; 2016; 2019; Lerner et al., 2011), the impact of dramatherapy as a psychotherapeutic approach for children and adolescents with ASD is an under-researched area. Qualified practitioners have contributed to the development and understanding of dramatherapy sessions for supporting children and young people with ASD, through clinical commentaries, reflections and vignettes of their own professional experience, suggesting improvements in interaction, engagement, symbolic play and emotional response (Chasen, 2014; Davidson, 2017; Dyer, 2017; Pimpas, 2013; Ridlington-White, 2017; Tricomi & Gallo-Lopez, 2012).

While still relatively limited, there is a growing body of research which contributes towards understanding how and why dramatherapy is of benefit for children and young people with ASD and gives reason to continue empirical enquiry. However, there is still a paucity of empirical research evidence in this field.

Existing systematic reviews in the field of dramatherapy

Notably, there have been previous, albeit limited, efforts to review the effects of dramatherapy. Specifically, a systematic review investigated the effects of dramatherapy group work for adults 18-65 years old with mental health conditions and suggested improvements in communication, social interaction, self-awareness, self-esteem, and empowerment (Bourne et al., 2018). Moreover, a literature review conducted by Yotis (2006) examined the existing literature regarding the effects of dramatherapy as an adjunct therapeutic approach for individuals with schizophrenia and reported benefits pertinent to the overall biopsychosocial treatment and rehabilitation. Ruddy and Dent-Brown (2007) systematically reviewed the clinical

effects of dramatherapy and related approaches (i.e., psychodrama, social drama group, structured learning therapy through role-playing) as an adjunctive treatment for people with schizophrenia, compared to standard care and other psychosocial interventions. Five RCTs with inpatient populations were included in their review, but only one study focused on dramatherapy. The authors concluded that there can be no conclusive findings as the studies were underpowered with low samples as well as had poor data reporting pertinent to randomisation, blindness and allocation concealment (Ruddy & Dent-Brown, 2007). More recently, Feniger-Schaal and Orkibi (2020) conducted an integrative systematic review on dramatherapy research over the last 10 years, examining the quality of intervention reported in publications, the modalities used, client populations and outcomes, professional background of session facilitators and intervention design and clear protocol.

Overall, four systematic reviews have been published in the field of dramatherapy. It is evident that systematic reviews that explore dramatherapy processes, mechanisms and effects focusing on different client groups would benefit this field. To the author's knowledge, no systematic review to date has focused on the research evidence on the effects of dramatherapy for children and adolescents diagnosed with ASD.

Methods

Research Question of the present systematic review

The research question of this review is the following: What is the research evidence on the effects of dramatherapy to support psychosocial functioning in children and adolescents with an ASD diagnosis?

Search Strategy

A systematic literature search was carried out in December 2016 and updated in June 2019, in psychological, educational and biomedical electronic databases, i.e., CINAHL, EMBASE, Medline, PsychINFO, PubMed, ProQuest Dissertations and Theses Global, ASSIA, ERIC, Web of Science, Social Care Online. For all databases, the following keyword Boolean search was used: (dramatherap* OR drama therap*) AND (autis* OR autis* spectrum OR ASD OR Asperger*). Truncations assured the retrieval of different forms of the chosen keywords. Additional searching was conducted through hand searching, searching reference lists of primary studies and included as well as excluded articles, textbook chapters and grey literature sources and by contacting qualified dramatherapists, researchers and authors in this field.

Inclusion and Exclusion Criteria

Studies were included if they met the following criteria: (i) studies published in the English language, (ii) all available publications (i.e., no specific time frame parameter), (iii) participant(s) (at least one child or adolescent) aged under 19 years, in line with the World Health Organisation (WHO) child and adolescent definition, (iv) participant(s) with a diagnosis of ASD, (v) empirical studies reporting original qualitative, quantitative or mixed methods results on the effects of dramatherapy and (vi) engaging individual or group dramatherapy sessions facilitated by a qualified dramatherapist(s) and/or trainee dramatherapist(s). Of note, due to the plethora of interventions within a non-dramatherapy framework, which involve 'drama' or using 'role-playing' in therapy, a rigorous inclusion criterion concerning dramatherapy intervention was employed. There was no restriction set regarding either the research design or the type of

publication. Given the limited research within this field and the high comorbidity rate among individuals with ASD, studies with participants diagnosed with ASD who had comorbid conditions, were included. Studies that did not comply with the aforementioned criteria were excluded.

Study Selection

The literature search followed the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines, involving identification, screening, eligibility and inclusion (Moher et al., 2009). Initially, records were identified through database searching and other sources. Subsequently, irrelevant articles and duplicates were removed and the remaining records were screened based on the title and abstract. If the title and abstract did not meet the inclusion criteria, the records were excluded. Afterwards, the full text of relevant titles and abstracts was retrieved and assessed for eligibility for inclusion. Of note, if full texts could not be retrieved, authors of studies were contacted, or an interlibrary loan process was followed.

The eligibility process was conducted by the first author. An independent reviewer participated in the screening process to ensure transparency and minimise bias. Specifically, the reviewer independently assessed the records that were excluded based on title and abstract. Afterwards, the reviewer conducted an independent eligibility assessment of the full-text records. Any disagreements were resolved by discussion and an agreement was reached. Figure 1 describes the article identification process. The initial literature search through the databases yielded 257 records in total. Moreover, 11 records were identified through reference lists ($n = 3$), hand searching in the *Dramatherapy* journal ($n = 1$), Google Scholar ($n = 2$) and the

University Library's discovery service (n = 5). Following deduplication, 168 records were screened on title and abstract and 112 were excluded. Thus, 56 full-text records were assessed for eligibility based on the aforementioned inclusion criteria, out of which nine were included in the present review.

[insert Figure 1. Article Identification Process]

Data Extraction and Rating Tools for Quality Appraisal of the Studies

Data from nine studies were extracted in a structured format, including: the author(s) names, publication date, the country in which the study was conducted, intervention details (i.e., description, aims, duration, frequency), participants' characteristics (i.e., sample size, age, gender, diagnosis), study design, measures employed, analysis and reported results. Data extraction from the included studies is presented in Table 1. The included studies were assessed using two different quality rating tools, which involve a checklist designed to assess the overall quality of a research study in terms of the research process, methodology and findings. The quantitative studies (n = 2) had a pretest-posttest design without a control group, hence, a modified version of the 'Quality Assessment Tool for Before-After (Pre-Post) Studies with No Control Group' developed by the National Heart, Lung and Blood Institute (NHLBI, 2014) was employed. The qualitative studies (n = 6) were appraised by using the 'Qualitative Research Checklist' developed by the Critical Appraisal Skills Programme (CASP, 2017). Both quality tools were used for the mixed methods study (n = 1). The research team conducted a

quality assessment of the included articles. An independent reviewer was engaged in peer-reviewing the quality of the studies. Any issues were resolved through discussion and an agreement was reached. The quality assessment findings (i.e., NHLBI and CASP) can be seen in Tables 2 and 3.

Journal Pre-proof

Table 1. Overview of Included Studies

<i>Author(s) /Year/ Country</i>	<i>Intervention</i>	<i>Setting</i>	<i>Participant (s) characteristics</i>	<i>Study design/ Measures/ Analysis</i>	<i>Reported effects</i>	<i>Author's conclusion</i>
Caplan (2006) Canada	Dramatherapy individual sessions Aims: examine the efficacy of dramatherapy as an intervention for children with ASD; express emotions, build a relationship , increase social interaction, enhance self- confidence and self- concept through dramatherapy and non- directive play. Case 1: 30min weekly sessions for	Children treatment centre; School for children with special needs	n = 2 males, 4 and 17 years old, ASD diagnosis Comorbid conditions: Global Developm ental Delay (n = 1)	Case study Qualitative data: therapist's observations and reflections drawing upon the existing literature.	Case 1: Relationship with the therapist was formed; spontaneous initiation of interaction with the therapist; developing a sense of autonomy and ability to change routines. Case 2: Therapeutic relationship was built; increased initiations of conversations, mutual play, symbolic play skills and spontaneous play.	Dramatherapy can be an effective treatment for children with autism. It can help a child learn ways of self- expression and communication while facilitating the development of social interaction skills and conversation skills. Non- directive play principles contributed to the positive effects. Difficulty in generalising findings from two cases over the whole

<i>Author(s))/ Year/ Country</i>	<i>Intervention</i>	<i>Setting</i>	<i>Participant (s) characteris tics</i>	<i>Study design/ Measures/ Analysis</i>	<i>Reported effects</i>	<i>Author's conclusion</i>
	6 months (19 dramathera py sessions) Case 2: 60min sessions twice a week for 6 months (29 dramathera py sessions)					population.
D'Amico et al. (2015) Canada	Dramathera py group sessions Aims: evaluate the efficacy of dramathera py on social skills and problem behaviours of preadolesce nt children with ASD; develop and practice social skills, experience positive social interactions and manage problem	Centre for the Arts in Human Developm ent	n = 6 males, 10 - 12 years old (Mage = 10.5), high- functioning ASD diagnosis	Pretest- Posttest design Quantitative data: Social Skills Improvement System-Rating Scales (SSIS- RS) completed by children and parents. Analysis: SSIS- RS ASSIST program calculation; paired sample t-tests	Significant improvement in engagement with others; significant decrease in externalising issues, hyperactivity, inattention and problem behaviours . .	Dramathera py can impact the lives of individuals with ASD in a positive way, by enhancing social interactions, reducing problem behaviours and empowering imagination. Standardise d outcome measures can be used to demonstrate the effectiveness of creative arts therapies.

<i>Author(s))/ Year/ Country</i>	<i>Intervention</i>	<i>Setting</i>	<i>Participant (s) characteristics</i>	<i>Study design/ Measures/ Analysis</i>	<i>Reported effects</i>	<i>Author's conclusion</i>
	behaviours with other individuals, through dramatherapy activities and processes within a therapeutic setting.					
	1 group; 75min weekly group sessions for 21 weeks					
Dooman (2017) UK	Dramatherapy group sessions Aim: assess the impact of dramatherapy on the early social behaviours of young children (aged 5 - 7 years) with ASD.	Mainstream primary school	n = 7 Gender not reported, 5 - 7 years old, ASD diagnosis	Mixed methods design Quantitative data (pretest - posttest): (i) the Behavioral Assessment of Social Communication of Young Children (BASYC) test conducted by an interviewer; (ii) the McConnell and Ryser pre-ed rating scale	BASYC results demonstrated that children improved their responsiveness and most of their initiation scores. McConnell and Ryser scale results are limited due to high variability, however,	Dramatherapy has a positive impact on the early social behaviours of young children with an ASD diagnosis. BASYC results offer quantifiable evidence on the impact of dramatherapy and it is recommended

<i>Author(s))/ Year/ Country</i>	<i>Intervention</i>	<i>Setting</i>	<i>Participant (s) characteris tics</i>	<i>Study design/ Measures/ Analysis</i>	<i>Reported effects</i>	<i>Author's conclusion</i>
	sessions for 14 weeks (duration included transition time from classroom to therapy and back)			completed by teachers and parents. Analysis: percentage difference between pretest- posttest scores	make- believe play had an impact upon responding and initiating behaviours	ed to be incorporate d into the work of other dramathera pists, with a larger number of children or non-verbal or older aiming at building an evidence- base.
				Qualitative data: Case vignettes/ therapist's observations and reflections drawing upon the existing literature.	Dramather apy can improve social communica tion skills through the play- drama continuum while reducing the daily pressure of sensory processing that children with ASD may experience.	There is a need for a rating scale for social interaction and communicat ion to be used as a reliable and valid assessment tool.
Greene (2012)	Dramathera py group sessions	Primary schools	n = 20	Pretest- Posttest design	Social skills: parents reported a significant improveme nt in	The evaluation of dramathera py indicates potential success.
UK	Aims of interventio n:	Referral for dramathe rapy by	males (n = 17) & females (n = 3), 6 - 10 years old	Quantitative data: SSIS-RS completed by		

<i>Author(s))/ Year/ Country</i>	<i>Intervention</i>	<i>Setting</i>	<i>Participant (s) characteristics</i>	<i>Study design/ Measures/ Analysis</i>	<i>Reported effects</i>	<i>Author's conclusion</i>
	social and emotional skills, self-esteem and well-being development; build trust, cooperation, listening and sharing; development of communication, socialisation and imagination 2 groups; 60min weekly group sessions for 9-10 weeks Aims of research: demonstrate the impact on children's behaviour and skills (focus on social skills, problem behaviour and	Special Education al Needs Coordinators (SENCOs)	(Mage = 7.8), ASD diagnosis; additional needs	children, parents and teachers. Analysis: descriptive statistics for pre- and post-scores; Wilcoxon test	empathy. Problem behaviour: children and parents reported a significant decrease in externalising behaviours and the ability to stay calm. Academic competence: no significant difference reported by teachers.	Continuous evaluation is needed with larger experimental sample sizes with focused controls for primary factors and interventions. There is a need for a more formative, systematic and scientific approach to research and evaluation of dramatherapy as an intervention ; this research is amongst the first in using a quantitative approach.

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	academic competence); provide feedback to parents about the benefit of dramatherapy; provide feedback to dramatherapists to improve service (Project delivered through the National Autistic Society)					
Lewis and Banerjee (2013) UK	Dramatherapy group sessions Aim: evaluate the therapeutic potential of stories in dramatherapy for young people with ASD. 1 group; initial	Co-educational special school	n = 3 female (n = 1), 13 years old, high-functioning autism diagnosis; males (n = 2), 12 and 14 years old, ASD diagnosis Comorbid conditions: moderate	Case study Qualitative data: (i) ToM tests set (Sally Anne and Smarties Test) were administered during the initial individual meeting; (ii) individual meetings/interviews with parents/carers, classroom	The young people in the group successfully completed the ToM tests. They all engaged in imaginative play, used stories and imaginative frameworks during the group sessions.	Dramatherapy using stories offers an opportunity for engaging young people with ASD in a positive therapeutic footprint that may benefit their emotional psychological and social development

<i>Author(s))/ Year/ Country</i>	<i>Intervention</i>	<i>Setting</i>	<i>Participant (s) characteris tics</i>	<i>Study design/ Measures/ Analysis</i>	<i>Reported effects</i>	<i>Author's conclusion</i>
	individual meeting, 60min weekly group sessions for 10 weeks, final individual session		learning difficulties and severe speech and language disorder (n = 1)	teachers and speech and language therapists; (iii) detailed clinical notes; (iv) reports and review records available from the setting	Through stories and storymaking techniques, they explored personal material, made contact or expressed feelings, processed emotional responses.	t. Having the dual role of both researcher and therapist holds inherent complexities.
Miller (2005) New Zealand	Dramatherapy group sessions Aims: improve social skills and particularly in making and maintaining friendships focusing on inclusion, reciprocity, sharing, showing empathy and interest; telephone	Special school	n = 8 males (n = 5), females (n = 3), 10 - 12 years old, ASD, Rett 's disorder, Asperger 's Syndrome diagnosis Comorbid conditions: ADHD (n = 2); some loss of vision (n = 1); dyspraxia (n = 2);	Case Study Qualitative data: (i) questionnaire completed by participants (baseline data) - interpreted by drawing on Attwood's (2003) four stages of development of friendship skills; (ii) questionnaire completed by teachers; (iii)	Children improved friendship skills and had enjoyable interactions. Some of the children learnt how to use a telephone. Six children reported beginning to phone others or an increase in phoning others,	Dramatherapy within a framework utilising behavioural learning principles supported social skills development.

<i>Author(s) /Year/ Country</i>	<i>Intervention</i>	<i>Setting</i>	<i>Participant (s) characteristics</i>	<i>Study design/ Measures/ Analysis</i>	<i>Reported effects</i>	<i>Author's conclusion</i>
	peers to have a conversation or invite them to play. 1 group; 60min weekly group sessions for 10 weeks		Tourette's disorder (n = 1); Goldenhar Syndrome with an associated disorder of expressive speech (n = 1); mild to moderate intellectual delay (n = 8)	participants were asked every two weeks if they had phoned a friend in the last week, or if they had invited a friend over to play or been invited to play with a friend.	holding a conversation or contacting friends outside of school. Teachers indicated an increase in skills that children have learned during group sessions and continued using outside sessions as part of daily life.	
Scott-Danter (2005) Scotland, UK	Dramatherapy group sessions Aims: initiate and implement a trial service (part of the Arts Therapies, Creativity and Mental	Secondary school	n = 4 Gender not reported; Mage = 13 years old; ASD diagnosis	Hermeneutic study Data triangulation: (i) process recording of the sessions exploring group anxiety in first sessions, group participation in last sessions	Compared to the first weeks, role-playing helped reducing anxiety levels. Group storytelling, musical activities and role-	This trial service showed that dramatherapy is a beneficial intervention for the group members by providing a safe space that contained

<i>Author(s))/ Year/ Country</i>	<i>Intervention</i>	<i>Setting</i>	<i>Participant (s) characteristics</i>	<i>Study design/ Measures/ Analysis</i>	<i>Reported effects</i>	<i>Author's conclusion</i>
	Health Initiative) using dramatherapy in the school setting; evaluate the impact of dramatherapy on children's social interaction and perspective-taking. 1 group; 60min weekly sessions for 24 weeks (divided into 3 blocks)			and social interactions throughout the sessions; (ii) inventories (i.e., Kott's semiotic-based assessment, Jones' dramatic involvement scale) completed by the therapists; (iii) journal completed by participants; (iv) focus groups/ semi-structured interviews with the participants; (v) questionnaire completed by parents.	playing greatly encouraged positive social interaction between the children. The aim for social interaction was the common theme occurred in the questionnaire completed by parents. The principal teacher advocated the impact of dramatherapy, namely communication and cooperation skills improvement.	stressful feelings and enhancing interaction through role-playing and storymaking. In comparison to general arts programmes, arts therapies is a registered profession adhering to the Health Professions Board Ethics, hence, clients are protected. Research is needed and dialogue between therapists-teachers to determine how therapeutic interventions can be made safe

<i>Author(s))/ Year/ Country</i>	<i>Intervention</i>	<i>Setting</i>	<i>Participant (s) characteristics</i>	<i>Study design/ Measures/ Analysis</i>	<i>Reported effects</i>	<i>Author's conclusion</i>
						in a school setting.
Tytherleigh and Karkou (2010) UK	Dramatherapy group sessions Aim: offer opportunities for building relationships. 1 group; Weekly sessions for 6 weeks (a first 30min session; five 40min sessions)	School for children with learning difficulties	n = 2 male and female, 11 years old, ASD diagnosis	Case study Qualitative data: (i) participant observation; (ii) observation of video recordings of sessions; (iii) observation of clients outside sessions; (iv) reflections with the co-worker and clients; (v) discussion with the class teacher and parents Group process described and analysed focusing on <i>significant events</i> , a method adapted from Elliot and Shapiro (1992, p. 164)	Changes during the sessions: one-to-one and group relationships were formed. Changes outside sessions: Male participant: began to play chasing games with classmates, join group discussions and physical education lessons, start conversation with family members, became more group-oriented. Female participant: became	Dramatherapy can offer opportunities to children with autism to explore relationships through embodiment activities (sensory-based work, movement work, teasing games-letting go and regaining control); projective techniques; group interactions, role-playing and symbolic work.

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					more outgoing, namely spontaneously talk to family about 'drama', invited a staff member to play tennis.	
Ward (1999) Canada	Dramatherapy individual sessions Aim: exploring the development of a relationship between a child diagnosed with autism and a dramatherapist within a therapeutic environment and through the use of dramatic play as primary	Psychiatric hospital	n = 1 male, 5 years old, ASD diagnosis	Case Study Qualitative data: (i) initial assessment using a developmental checklist (Courtney, 1981) and a diagram (Way, 1967); (ii) detailed records of session events; (iii) reflective journaling; (iv) reflection processing through drawing-artworks created by the therapist; (v) tape	The child got the opportunity for self-expression and gained the power to choose the way how to express himself; made connection, communicated and interacted with another person developing a sense of reciprocity. Also, he made	Dramatic play is beneficial in the development of the connection with the child while creating common ground. It has the potential to affect positive change in a child with ASD. Processing the client/therapist interactions through art,

<i>Author(s))/ Year/ Country</i>	<i>Intervention</i>	<i>Setting</i>	<i>Participant (s) characteris tics</i>	<i>Study design/ Measures/ Analysis</i>	<i>Reported effects</i>	<i>Author's conclusion</i>
	<p>intervention.</p> <p>35 sessions, 30min, twice per week.</p>			<p>recording of observations; (vi) feedback from other therapists</p>	<p>progress in behaviour, socialisatio n and pre- academic skills. He was actively involved in the playground , initiate game and interaction</p> <p>The therapist learned more about herself, enhanced her experience and overall developme nt as a therapist.</p>	<p>helped to expand the scope of this relationship.</p> <p>Exploring and acknowledgi ng the client's cultural influences is of paramount importance.</p> <p>It is difficult to generalise in single-case research.</p>

Table 2. CASP Assessment Findings

<i>Study</i>	<i>Aims & rationale</i>	<i>Suitability of qualitative methodology</i>	<i>Link between aims and study design</i>	<i>Participant selection</i>	<i>Data collection</i>	<i>Role of the researcher/ Reflexivity</i>	<i>Ethical issues</i>	<i>Data analysis</i>	<i>Findings</i>	<i>Value of research discussed</i>
Caplan (2006)	++	NR	++	+	+	++	++	+	++	++
Dooman (2017)	++	-	++	+	++	+	++	-	+	++
Lewis and Banerjee (2013)	++	++	++	++	++	++	++	+	++	++
Miller (2005)	++	NR	++	++	+	NR	NR	+	+	+
Scott-Danter (2005)	++	++	++	+	++	NR	++	+	++	++
Tytherleigh and Karkou (2010)	++	++	++	+	++	+	NR	++	++	++
Ward (1999)	++	++	++	++	++	++	++	+	++	++

Note. ++ good; + fair; - poor; NR not reported

Table 3. NHLBI Assessment Findings

<i>Study</i>	<i>Research Question/Objective</i>	<i>Eligibility/selection criteria</i>	<i>Participants characteristics</i>	<i>Sample size</i>	<i>Intervention</i>	<i>Outcome measures</i>	<i>Statistical analysis</i>	<i>Multiple outcome measurements</i>	<i>Follow-up</i>	<i>Ethical issues</i>	<i>Interpretation</i>
D'A mic o et al. (201 5)	++	++	++	++	++	++	++	NC	NC	++	++
Doo man (201 7)	++	++	+	++	++	++	+	NC	NC	++	++
Gre ene (201 2)	++	++	+	++	-	++	++	NC	NC	NR	++

Note. ++ good; + fair; - poor; NC not conducted; NR not reported

Narrative Synthesis Approach

The data extracted from the included quantitative, qualitative and mixed methods studies were synthesised by using a textual narrative approach (Popay et al., 2006). According to Barnett-Page and Tomas (2009), textual narrative synthesis is suitable when synthesising evidence of different types (i.e., qualitative, quantitative, economic etc). Moreover, Lucas et al. (2007) argued that this approach is appropriate when a systematic review aims to describe the existing literature, identify the strengths of the reported evidence and gaps that need further research. Gilroy (2006) endorsed narrative synthesis when it comes to Arts therapies by outlining the research purpose, the methods, the findings and implications.

Results

Participants

A total of 53 participants with an ASD diagnosis participated in dramatherapy sessions across the nine included studies. Four studies reported comorbid conditions involving global developmental delay (Caplan, 2006), learning difficulties and speech disorder (Lewis & Banerjee, 2013), ADHD, partial loss of vision, dyspraxia, Tourette's disorder, speech disorder, intellectual delay (Miller, 2005) and additional needs (Greene, 2012). The sample size per study ranged from 1 to 20 participants, aged from 4 to 17 years, but with the majority being children or early adolescents (i.e., 10-13 years of age). In total, 34 male and 8 female participants were reported (two studies did not report the gender of participants, i.e., Dooman, 2017; Scott-Danter, 2005).

Study Characteristics and Research Designs

The included studies were conducted in the UK (Dooman, 2017; Greene, 2012; Lewis & Banerjee, 2013; Scott-Danter, 2005; Tytherleigh & Karkou, 2010), Canada (Caplan, 2006; D'Amico et al., 2015; Ward, 1999) and New Zealand (Miller, 2005), between 1999 and 2017. Of the nine studies identified, two were quantitative, six were qualitative and one mixed-method. Both the quantitative studies adopted a pretest-posttest uncontrolled design (D'Amico et al., 2015; Greene, 2012). Similarly, in the mixed methods study, measures were administered before and after the dramatherapy sessions, coupled with case vignettes and therapist's observations and reflections (Dooman, 2017). All six qualitative studies employed case study designs (Caplan, 2006; Lewis & Banerjee, 2013; Miller, 2005; Scott-Danter, 2005; Tytherleigh & Karkou, 2010; Ward, 1999).

Dramatherapy Setting, Frequency and Duration

The settings of the dramatherapy sessions were mainly mainstream schools (i.e., general education system but can also support students with special education needs) (Dooman, 2017; Greene, 2012; Scott-Danter, 2005) and special schools (i.e., specially organised to make special educational provision for students) (Caplan, 2006; Lewis & Banerjee, 2013; Miller, 2005; Tytherleigh & Karkou, 2010). Moreover, Caplan (2006) and D'Amico et al. (2015) reported the implementation of sessions at a care and an arts centre, respectively. Ward's (1999) sessions were carried out at a psychiatric hospital. All the included studies involved dramatherapy group sessions facilitated by qualified dramatherapists, apart from the ones conducted by Caplan (2006) and Ward (1999), who were trainee dramatherapists when conducting their research

within the frame of a postgraduate training programme and engaged individual dramatherapy sessions. As described in Table 1, there was a considerable variety in terms of session number, duration and frequency of the dramatherapy sessions (i.e., from 6 and 35 sessions; from 6 weeks to 6 months; 30min to 75min session; once or twice per week).

Dramatherapy Methods and Techniques

Different dramatherapy frameworks and approaches along with a plethora of drama tools and techniques were employed in the included research studies. For instance, D'Amico et al. (2015) reported a projective approach during the 21 group sessions, involving improvisation, vocal and non-verbal activities, role-playing, storytelling and dramatisation to increase social competence and manage externalising behaviours. On the other hand, Greene (2012) did not provide a detailed description of the 9-10 group sessions but reported that an indirect approach through the use of art forms was engaged, aiming at developing socio-emotional skills, communication and imagination.

Dooman (2017) facilitated 14 group sessions and adopted a play-drama continuum framework involving sensory-motor play, imitative play, pretend play, dramatic play, drama-roles (see Jones, 1996, 2007) as well as a developmental approach including embodiment, projective activities and role-taking (see Jennings, 1999) to project ideas and promote relationship building, initiating and responding. A developmental approach was also engaged by Tytherleigh and Karkou (2010) along with developmental movement (Sherborne, 2001) and a dramatherapy model developed for individuals with learning disabilities, integrating multiple modalities, namely dance, music, games, performance, role-playing (see Chesner, 1995). According to the authors, six group sessions were facilitated offering opportunities for

relationship building. Lewis and Banerjee (2013) had a specified focus on the therapeutic use of stories in 10 group sessions. The authors noted that the main story-based activities of group sessions were the following: creating characters with clay and narrating their stories, creating both individual stories and one group story through cards, spontaneous creation of group story and developing a group timeline.

Miller's (2005) case study involved 10 group sessions focusing on social skills, communication and friendship skills and particularly, inclusion, reciprocity, sharing, empathy and interest. The author provided an account of the 10 sessions involving storytelling and spontaneity development as the main frameworks engaged, along with a social skills model employing behavioural learning principles. Scott-Danter (2005) facilitated 24 group sessions targeting social interaction and perspective-taking. Following contact with the author, a detailed report of the dramatherapy trial service was provided along with session summaries. The author used role-playing, storytelling and storymaking, ball games, musical activities, imaging techniques and journaling.

Caplan (2006) reported individual dramatherapy sessions in detail (i.e., 19 sessions with a young child; 29 sessions with an adolescent). The sessions adopted dramatic play, scenework, role-playing, enactment and dramatic ritual (see Emunah, 1994) as well as working through roles (see Landy, 2009). In addition, principles of non-directive play were incorporated (i.e., use of objects, toys, musical instruments), singing, imitation, puppet play and storytelling (see Axline, 1969) to promote emotional expression and social interaction. Non-directive play was also engaged by Ward (1999) during 35 individual sessions aiming at exploring the relationship development between dramatherapist-client. Ward (1999) engaged plasticene, dolls, balloons,

sounds and movement and reported that the sessions were also informed by a developmental approach and the play-drama continuum as well as Way's (1967) work 'development through drama'.

Data Collection and Effects of Dramatherapy Sessions

Quantitative Studies

Two studies (i.e., D'Amico et al., 2015; Greene, 2012) incorporated pre- and post-test measures without a control group and reported statistically significant results. Specifically, D'Amico et al. (2015) employed the Social Skills Improvement System-Rating Scales (SSIS-RS) (Gresham & Elliott, 2008) completed by six children (10 - 12 years old) and their parents. This study involved a small number of participants and found a significant improvement in overall social skills and problem behaviour reported by parents ($p = .05$). As regards certain subscales, parents reported significant improvement in engagement ($p = .01$), decrease in externalising behaviour ($p = .02$) and autism spectrum behaviour ($p = .01$) as well as hyperactivity/inattention ($p = .01$). Children reported significant reduction in hyperactivity/inattention ($p = .03$).

Similarly, Greene (2012) used the same rating scales as the evaluation tool (i.e., SSIS-RS) before and after the group sessions. In this study, the scales were administered not only to 20 children (6 - 10 years old) and their parents but also, to their teachers. However, the author noted that in total, 27 pre- and post-questionnaires were returned and analysed (i.e., nine student forms, eight parent forms and ten teachers forms). Post-intervention statistically significant improvements were found for specific subscales of the SSIS-RS, such as children's view on their ability to stay calm in difficult situations ($p = .038$), reduction in problem

behaviour reported by parents ($p = .005$) and particularly in externalising behaviour ($p = .033$) as well as an increase in empathy reported by parents ($p = .033$). There were no significant changes in the academic competence area reported by teachers. It is noteworthy that Greene (2012) noted statistically significant adverse effects reported by the children, namely the participants' viewpoint on their ability to take turns ($p = .034$) and make friends ($p = .034$), both of which decreased following group participation. As regards methodological limitations, Greene's (2012) study provided poor reporting in relation to the intervention methods and techniques and also, ethical procedures or considerations were not reported. Notably, in both quantitative studies, effect sizes were not reported and also, multiple outcome measurements or a follow-up data collection process were not conducted.

Mixed Methods Study

In the mixed methods study, Dooman (2017) reported that the pre- and post-intervention assessments were conducted by using the Behavioral Assessment of Social Communication of Young Children (BASYC) (Gillis et al., 2011) with seven young children, 5 - 7 years old. Moreover, the McConnell and Ryser (2007) pro-ed rating scale (i.e., assessing social interactions and communication) was completed by parents and teachers. Changes between pre- and post-intervention scores were calculated as a percentage difference, but without yielding information about statistical significance and effect sizes. This small-scale study suggested that post-intervention, the children with ASD had a higher score in their responsiveness and their ability to initiate. The important role of make-believe play was also endorsed. Dooman (2017) also advocated the qualitative perspectives, reflections and therapist's observations when evaluating an intervention; hence, provided case vignettes illustrating the effects of

dramatherapy sessions on early social skills, including initiating lines of communication through different roles and playfulness, processed thoughts and feelings whilst making connection with others.

Qualitative Studies

Findings from the qualitative studies when taken together mostly agreed that dramatherapy can support children and early adolescents develop social interaction skills and conversation skills. The case study by Tytherleigh and Karkou (2010) involved a group comprising two children (11 years old) and data was collected through participant observation (in sessions and outside sessions), observation of session video recordings, reflections and discussion with parents and class teacher. The analysis focused on the significant event method (Elliot & Shapiro, 1992); significant events or moments during sessions constitute a fundamental component of the therapy and these were identified by the dramatherapist and an independent music therapist. The authors reported that both one-to-one and group relationships were built.

Lewis and Banerjee (2013) collected data from Theory of Mind (ToM) tests such as the Sally Anne test (Baron-Cohen et al., 1985) and the Smarties task (Perner et al., 1985) as well as projective exercises (i.e., three-word description of an object, arrangement of objects to create a story) administered to three adolescents (12 - 13 years old). It was highlighted that all participants successfully completed the ToM tasks and successfully participated in projective exercises (i.e., imaginative tasks). In addition, data was gathered from individual interviews with parents/carers, group participants, class teachers and speech and language therapists; detailed

clinical notes from group sessions; reports and review records available from the setting. The authors offered detailed vignettes from the sessions and reported that the use of stories and storymaking techniques within sessions facilitated exploring personal material, making contact or expressing feelings and processing emotional responses. It was initially suggested that the multiple views from different data collection sources would enable data triangulation in the analysis, however, the study did not provide a thorough description of data triangulation and analysis. Interestingly, this is the only study included in the present review that took into account and offered a discussion about the potential complexities in relation to the dual role of therapist-researcher and the subjectivity-objectivity tension when conducting research in arts therapies.

Miller's (2005) study involved eight participants (10 - 12 years old) who took part in group sessions. Baseline data was collected from a questionnaire completed by the group members with assistance from a teacher. Baseline data facilitated monitoring subsequent progress, drawing on the "four stages of development of the concept and expression of friendship" (Miller, 2005, p. 11). Furthermore, two teachers rated the participants' skills through a questionnaire both in session two and after the completion of the programme. However, the study does not include information about these questionnaires. In addition, every 15 days, the group members were asked about their social skills (i.e., phone a friend, invite a friend to play being invited by a friend). According to the author, teachers' awareness of a certain skillset was increased, hence, praised individuals using these skills. Teachers reported an increase in participants' social skills and also, six participants started phoning others or maintaining conversations and learned how to use a telephone. However, based on the quality assessment

findings, the data analysis process was insufficiently reported. Moreover, considerations pertinent to both reflexivity and ethical issues were not reported.

The hermeneutic study conducted by Scott-Danter was included in the Mental Health Foundation report of arts therapies trial services published in 2005. However, following contact with the author, a detailed study report along with the dramatherapy curriculum were retrieved. Scott-Danter (2005) facilitated a dramatherapy group comprised of four participants (mean age = 13 years old). Data were collected through various sources such as observation of session recordings to explore group anxiety, participation and social interactions. Inventories, namely Kott's semiotic-based assessment (1969) but also, Jones' Dramatic Involvement Scale (2007) which is an adaptation from the Sutton Smith-Lazier Scale of Dramatic Involvement (1981), were completed three times across the intervention period to monitor progress but also, inform the dramatherapy curriculum and focus on enhancing certain skills. Moreover, participants kept journal records of their thoughts and took part in two focus groups, exploring people's perceptions of ASD, participants' challenges as well as the individual aims for every group member. Lastly, parents/carers completed a questionnaire related to their children's difficulties. The study could have elaborated on the process of triangulation of data sources during analysis. Interpretations revealed that through roles and stories, the group achieved positive changes in social interaction and perspective-taking. The value of the safe space that contains stressful feelings was also indicated. However, the reflexive role of the researcher was not adequately discussed.

Caplan (2006) presented two case studies involving a 4-year-old child (case one) and a 17-year old adolescent (case two). The study did not offer a clear description of both the data

collection process and data analysis. A detailed account of the therapist's observations and reflections of every session were presented. Moreover, Caplan's (2006) reflective stance was clearly demonstrated in the study. According to the author's conclusions, a therapeutic relationship was established in both cases. Furthermore, Caplan (2006) indicated positive changes, namely a spontaneous initiation of interaction, developing autonomy and ability to change routines (case one) as well as increased initiations of conversation, mutual and spontaneous play and symbolic play skills (case two).

Finally, Ward (1999) facilitated individual dramatherapy sessions with a young child (5 years old). The data collection process involved an initial assessment using a developmental checklist (Courtney & Schattner, 1981), a diagram of a circular presentation of development (Way, 1967, p. 13), detailed records of session events, reflective journaling, reflection processing through drawing-artworks created from the therapist after each session, tape recording of observations and feedback from other therapists. However, the study did not provide clear information pertinent to the data analysis process. Reported findings suggested that dramatherapy offered opportunities and choices of ways of self-expression while promoted progress in communication, social interaction and reciprocity as well as pre-academic skills. Ward (1999) also highlighted the value of the therapeutic alliance and reflective stance.

Discussion

This systematic review examined published research on the effects of dramatherapy to support psychosocial well-being and functioning in children and adolescents with an ASD diagnosis. The nine research studies that were included, explored the efficacy and impact of

dramatherapy sessions by employing quantitative, qualitative and mixed-method research designs. Through the integration of qualitative, quantitative and mixed methods studies, the synthesis did not just aim at providing an aggregate of findings but also attempted to foster an in-depth and holistic understanding (Booth et al., 2016).

Seven out of nine included studies engaged group dramatherapy sessions. The sessions reported in all studies were characterised by significant variation in number, frequency and duration. The studies adopted different frameworks (i.e., projective approach, developmental approach, play-drama continuum, role-method, non-directive play etc.) and a plethora of art processes, techniques and drama tools, mainly aiming at supporting social-emotional and communicative skills, relationship building, perspective-taking and managing challenging behaviours.

Given the great diversity of ASD difficulties both in terms of severity, manifestation, occurrence along the developmental trajectory and comorbidity, the diversity and flexibility in dramatherapy creative media and practice are considered strengths of this type of psychotherapy. Sessions are adjusted to the abilities and needs of children and adolescents with an ASD diagnosis, in order to support self-expression, imagination, communication and social skills development whilst enabling therapists to meet every child with ASD where they are at. However, this heterogeneity is simultaneously one of the main considerations in dramatherapy research as the absence of a unified protocol may hinder evaluation research, replication studies and implementation fidelity (Feniger-Schaal & Orkibi, 2020). Interestingly, in the research literature regarding the replication of psychotherapeutic interventions, there is a debate between the manual-based treatments and the more flexible ones (e.g., Addis, et. al.,

2006; Addis & Krasnow, 2000; Westen, et al., 2004). Comer and Kendall (2013, p. 29) argued that manual-based treatments tend to become somewhat less rigid due to “manuals limit therapist creativity and place restrictions on the individualisation that the clinicians use”.

According to the findings of this review, dramatherapy sessions benefit the emotional, psychological and social development of children and adolescents with ASD. More specifically, across the included research studies, common themes emerged involving enhancement of social competence, interaction and conversation skills, emotional development as well as decrease in maladaptive behaviour. Notably, these findings agree with benefits reported in clinical commentaries and reflective pieces published by dramatherapists (e.g., Chasen, 2014; Davidson, 2017; Dyer, 2017; Pimpas, 2013; Ridlington-White, 2017; Tricomi & Gallo-Lopez, 2012).

Overall, based on the quality assessment findings, some methodological limitations were identified in all included studies. Specifically, two quantitative and one mixed methods study, employed standardised assessment tools to explore changes. Their methodological limitations concerned small number of participants, uncontrolled research designs, statistical analysis issues or lack of a follow-up data collection process. On the other hand, most included studies employed single-case study designs. Methodological limitations that were identified concerned a fair or insufficient reporting in relation either to research methodology presentation or participant selection or data collection and analysis. Also, most authors of the included case studies acknowledged that single-case designs have limitations related to replication and generalisation of outcomes while encouraging the use of assessment tools and standardised measures in order to explore significant changes and evaluate the effectiveness of sessions.

However, it is worth noting that methodologically sound case studies that follow an in-depth, multi-sided approach can enhance understanding of human perspectives, feelings and behaviour. This is highly relevant in the field of dramatherapy where practitioners endorse a trusting relationship and a 'dialogue' with children and adolescents with ASD but at the same time, practitioners engage in research and contribute evidence to the field by producing new knowledge or reframing the existing one. It is noteworthy that bridging research and practice may result in enhanced research offering deep, contextual insight and transferable findings in real-life application of practice; although in many cases, the participant number might be small due to practitioners' working patterns and/or settings.

At the same time, the dual role of practitioner-researcher may provoke conflicting priorities or generate hardship, thus, care needs to be taken to ensure good practice (Ansdell & Pavlicevic, 2001; Bond, 2004). Interestingly, only one out of the nine studies (i.e., Lewis & Banerjee, 2013) raised awareness of the dual role of the therapist-researcher and the complexities that may exist. The therapeutic relationship but also therapists'-researchers' reflections are vital, integral parts of the process, hence, should be included in research texts. The transparency of the research process, i.e., clear stated aim/question, methods, data collection, analysis, conclusions along with the critical reflexivity should "extend to the researcher's motivations, interactions and role with the participants" (Gilroy, 2006, p. 53). Further on this, Scott-Danter (2005) noted the importance of Arts therapies professional registration and monitoring by a statutory regulator, which protects clients and particularly individuals with different conditions and needs, in comparison to general arts workshops and programmes.

Conclusion

This systematic review is a novel contribution to the literature and the findings may be meaningful for practice and subsequent research. Through different research designs, the included studies offered valuable insight into the therapeutic process of dramatherapy and demonstrated promising changes in emotional, psychological and social development in children and adolescents with ASD. Overall, the variation in dramatherapy practice, as well as the scarcity of published research in this field was evident in this study whilst the quality of research could be enhanced through accurate reporting and rigorous study designs. To this end, a quality assessment tool (e.g., CASP) can be very useful to researchers in the field when planning, conducting and reporting a research study, aiming at promoting the transparency of the research process.

One of the limitations of this systematic review is that the inclusion criteria involved studies published in English. Also, the participants were children and adolescents aged under 19 years, hence, the findings cannot be generalised to other age groups. Furthermore, although Greene (2012) reported two adverse effects, studies with negative findings were not available, probably for reasons related to publication. As suggested by practitioners and researchers in the field, there is a need for further evidence support for dramatherapy following both accurate reporting and a formalised process of assessing and evaluating (D'Amico et al., 2015; Dokter & Winn, 2010; Greene, 2012; Haythorne et al., 2012; Landy, 2006).

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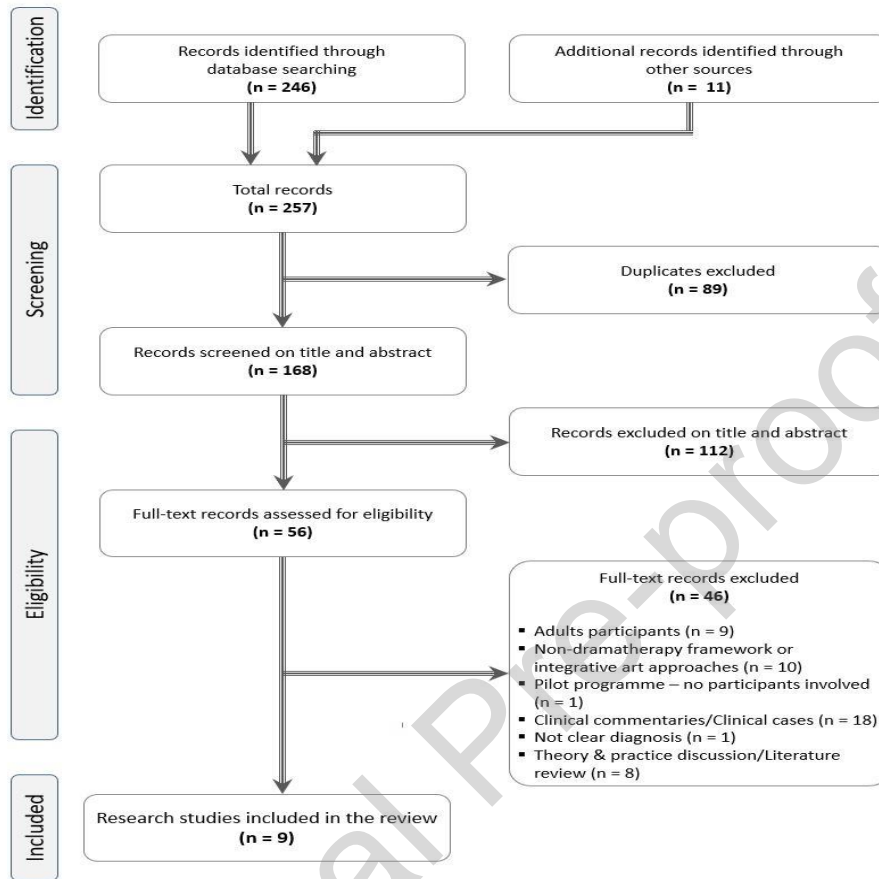
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Journal Pre-proof

Figure 1. Article Identification Process



Highlights

- Scarcity of research on the efficacy of dramatherapy for children with autism
- Systematic review of published research in this field identified nine studies
- Findings indicated benefits on emotional, psychological and social development
- Methodological limitations of the nine included research studies were discussed
- Need for formalised approach to assessing and evaluating efficacy was acknowledged