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Assessing drama therapy as an intervention for recovering substance users: A systematic review

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Abstract

The aim of this systematic review was to evaluate the quality and efficacy of drama therapy interventions used to support and promote the recovery process in substance users. Seven databases plus two journals were searched; three studies met the inclusion criteria. It was found that drama therapy interventions commonly consist of expressive activities such as role-play and improvisation, along with group reflection to improve communication skills, emotional awareness, and metacognition. Findings were encouraging with two studies reporting that participants maintained or improved abstinence goals; quality of life was reported to be significantly higher post-intervention compared to the control group (one study); and social and occupational engagement significantly improved post-intervention and was maintained at a six-week follow up (one study). These results however, should be interpreted with caution. Methodological inadequacies and the small number of published studies available, make it difficult to determine with confidence the efficacy of these interventions.

Keywords

Drama therapy; Recovery; Addiction; Substance use; Systematic review.

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Introduction

Problematic substance use across the UK is a serious public health concern; it affects individuals, their families, the communities, and wider society. Substance misuse is often associated with other issues including psychiatric illness (Lai, Cleary, Sitharthan & Hunt, 2015); trauma (Head et al., 2016); criminality or antisocial behaviour (Walters, 2014); and homelessness (Fazel, Geddes & Kushel, 2014). Alcohol misuse is known to be the key risk factor related to premature death, illness, and disability, and although hospital admissions for drug-related mental and behavioural disorders in

England are falling, deaths related to drug misuse are at their highest since records began in 1993 (Burkinshaw et al., 2017).

An estimated 280,000 people contacted drug and alcohol services in 2016/17, 21% accessed while living in a secure setting, while the large majority accessed help through community services (Public Health England, 2017). However, only half of clients referred to treatment completed (Public Health England, 2017); it is likely the comorbid nature of substance misuse makes access and engagement with treatment a real challenge (Van Emmerik-van Oortmerssen et al., 2014); indeed, low retention rates may be an indication of other problems such as treatment provision or the suitability or readiness of clients being referred (Appel, Ellison, Jansky & Oldak, 2004; Notely, Blyth, Maskrey, Pinto & Holland, 2015).

Treatment for problematic substance use has historically focussed on individual abstinence models (Coomber, McElrath, Measham & Moore, 2013), substitute prescribing (Heidebrecht, MacLeod, & Dawkins, 2018), and harm reduction interventions (McCann & Temenos, 2015). While there has been some progress with these approaches, the use of criminal justice strategies or medicalised therapies to combat substance misuse arguably decreases the ability of clients to live substance free (Perfas & Spross, 2007). A more effective method may be to support people's psychological and social needs (Best, Hall & Musgrove, 2018; Davies, 2006) through the use of the arts. Creative and arts-based therapies offer holistic and psychosocial approaches to those engaged in or attempting to enter into a process of recovery. They provide unique, but structured, processes that allow gradual exploration of people's emotions, feelings, and life experiences (Megranahan & Lynskey, 2018).

Drama therapy is just one form of art therapy, which utilises methods and techniques from the performing arts with principles of psychotherapy, that promote transformation and evolution (Jones, 2013). Drama therapists employ a range of artistic techniques (Jones, 1996) through methods such as storytelling, Greek myths, play scripts, puppetry, masks, and improvisation (Landy, 1990; Johnson, Forrester, Dintino, Janes & Schnee, 1996). The use of drama techniques support clients to explore difficult and painful life experiences through an indirect approach (Linden, 1997), providing them an opportunity to both spectate and appraise their roles in society more generally or by examining

specific experiences in greater depth (Landy, Luck, Conner & McMullian, 2003). Moreover, drama therapy is explicitly expressive in nature, helping develop client's awareness of their body as a medium for their emotions and identity (McLachlan & Laletin, 2015).

In the context of recovery from substance use, drama therapy appears to support the process of recovery by first helping clients develop new skills that subsequently support a process of identity transformation. New skills are learned, whereby facilitators help clients express internal issues through the process of enactment (Bruun, 2012). Clients enact a range of situations based on real life experiences and future scenarios. In one such intervention, Somov (2008) proposed that by focussing on practicing relapse prevention skills, where group members act as protagonists and the audience, lapse and relapse can be prepared for. The group is cast into a series of role plays involving potential relapse scenarios and are taught to react in real time so they can successfully resolve challenges and practice skills such as craving control; thus, people not only explore emotions, but learn new skills associated with being substance free (Megranahan & Lynskey, 2018).

Barriers to treatment, such as stigma, fear, isolation, are an issue; however, drama therapy helps reduce these. Leeder and Wimmer (2007) and Stahler (2007) found that in a prison setting, by using writing exercises, storytelling, and performance, incarcerated women were empowered to build relationships with each other and discard old roles or identities to claim new ones. Takis (2018) agrees, suggesting that to enter into recovery, clients must first identify aspects of their personality that have prevented recovery so far; for Newman (2017) such barriers include the role of stigma. Clients, he argues, must replace unhelpful labels with a new and valued identity. Barriers to identity transformation can be reduced through adaptations of classical scripts acting as allegories of addiction and recovery; (Zontou, 2013); or through the use of theatrical characters, such as the clown (Gordon, Shenar & Pendzik, 2018).

While the arts-based literature that explores the experiences of people in recovery from substance use is encouraging, it is, however, scant and often methodologically weak. The British Association for Dramatherapists notes that poor quality drama therapy research limits the application of evidence-based practice (Dokter & Winn, 2010). Indeed, a recent systematic review of creative arts therapies

and substance use failed to find any randomised controlled trials that employed a drama therapy intervention (Megranahan & Lynskey, 2018). Thus, this present review aims to synthesise other types of drama therapy research, in an effort to provide a broader overview of available evidence. The purpose of this review is therefore, to assess the outcomes of drama therapy when working with people with a history of substance use. In addition, this review aims to evaluate the efficacy of drama therapy interventions when assisting, changing and promoting the recovery process.

Method

Protocol

The International Prospective Register of Systematic Reviews (PROSPERO; CRDUY, 2016) was searched for on-going or completed systematic reviews in this area. In the absence of reviews specifically examining drama therapy and substance use recovery, the protocol for this present review was written and registered (Kewley & Leather, 2018).

Inclusion Criteria

Population

Adults (aged 18 years or over) who reported problematic substance use, and were now in a process of recovery.

Interventions

Any intervention based on the principles of drama therapy that aimed to facilitate recovery from substance use.

Comparators

A control group receiving rehabilitation treatment as part of their therapeutic community or participants pre-intervention.

Outcomes

Primary outcomes were any measures of abstinence, engagement with recovery, or substance use disorder symptoms. Secondary measures of quality of life and health outcomes were also sought.

Study Type

All relevant observational and experimental studies were eligible.

Exclusion Criteria

Literature reporting only case study or anecdotal evidence as part of a drama therapy approach protocol was excluded. Results were restricted to English language only, due to translation constraints. Any literature published prior to 1988 was also excluded in an attempt to eliminate research based on Moreno's psychodrama that was popular from the 1940s onwards (Foulkes, 1983; Kedem-Tahar & Felix-Kellermann, 1996; Jones, 2013).

Information Sources

The databases used for the review were Web of Science (1970-2018), Scopus (1970-2018), EBSCO MEDLINE (1949-2018), CINAHL (1937-2018), PubMed (1966-2018), OVID MEDLINE (1946-2018) and PsycINFO (1987-2018). This was supplemented by searching the content lists of two relevant journals: Dramatherapy, and The Arts in Psychotherapy. Final database searches were conducted on 31 August 2018.

Search Strategy

Electronic Searches

The following search terms were used in all searches: (("drama therapy" OR dramatherapy OR psychodrama OR "community therapy" OR "community drama*" OR "applied drama*") AND (substance* OR "substance use disorder" OR "drug use disorder" OR "substance dependence" OR "drug dependence" OR drug* OR addict* OR alcohol* OR narcotic OR prescription OR opiate OR psychoactive OR psychotropic) AND (recover* OR overcome OR rehab* OR treatment)). Medical subject headings (MeSH terms) or database-specific subject headings related to the keywords were added to the base search syntax for each database. The exact search terms and limits used for each database are included in the Appendix.

Hand Searches

The reference lists of the articles selected for inclusion were hand-searched by screening titles referring to either drama therapy or substance use. Where results were unpublished research, the authors were contacted via email and a copy of manuscripts or articles was requested.

Selection Process

Search results from each database were exported into EndNote X7. The list of references was checked for duplicates with the software and double-checked by hand. Titles and abstracts were then screened for words and phrases relating to drama therapy and substance use recovery. Subsequently, the full texts of selected papers were downloaded and screened according to the inclusion criteria.

Data Extraction and Synthesis

Papers were reviewed in succession by the first author (JL), then by the second author (SK). A data extraction table was created to capture study design, setting, participant details, intervention specifics, measures used and outcomes reported. Data entry and quality assessment was conducted independently by both authors and discrepancies were resolved through discussion.

Study information and findings were tabulated to enable comparison, the results of which were written as a narrative synthesis. Considering the heterogeneity of drama therapy interventions and outcome measures, meta-analysis was considered inappropriate for this review. .

Quality Assessment

Each article was assessed with tools from the National Heart, Lung and Blood Institute (NHLBI, 2014) appropriate for the study design. The suggested ratings from these tools are GOOD, FAIR and POOR. Two checklists were selected to account for the heterogeneity of study designs anticipated from drama therapy interventions; one for controlled intervention studies and another for pre-post designs with no control group.

Results

Study Selection

The results of the literature search are represented in Figure A. The first search took place between 25-26^{tth} April 2018, and the results were last updated on 31st August 2018. Five thousand two hundred and eighty hits were identified for title and abstract screening, twenty-four articles were selected for full-text assessment, but only three were deemed eligible for review.

Six of the excluded shortlist papers were approach proposals or descriptions of drama therapy interventions; while some included observational case study sections, they all lacked objective outcomes. Five articles lacked a drama therapy intervention, three did not have a substance use sample, two were book chapters, and one a commentary article. Two articles were not available in full online: one journal's archive only covered from 1999-present so held no copy of the article from 1989, and the other journal ceased publication in 1992 and was never archived. One article included results of four case studies reported as individual participant data, which was excluded because it would not have been comparable with group data. Additionally, it did not report numerical data from the questionnaire surveys, instead amalgamated three distinct measures and presented the data in line charts. This blurring of outcomes was another reason the article was not fit for review.

After hand searching the reference lists of the included papers, three articles were identified for possible inclusion in the review. However, one article did not have a substance use recovery sample, and the other two were unpublished manuscripts. In one case, the author was unwilling to send a copy of the manuscript, and the other author could not be identified from the information in the reference.

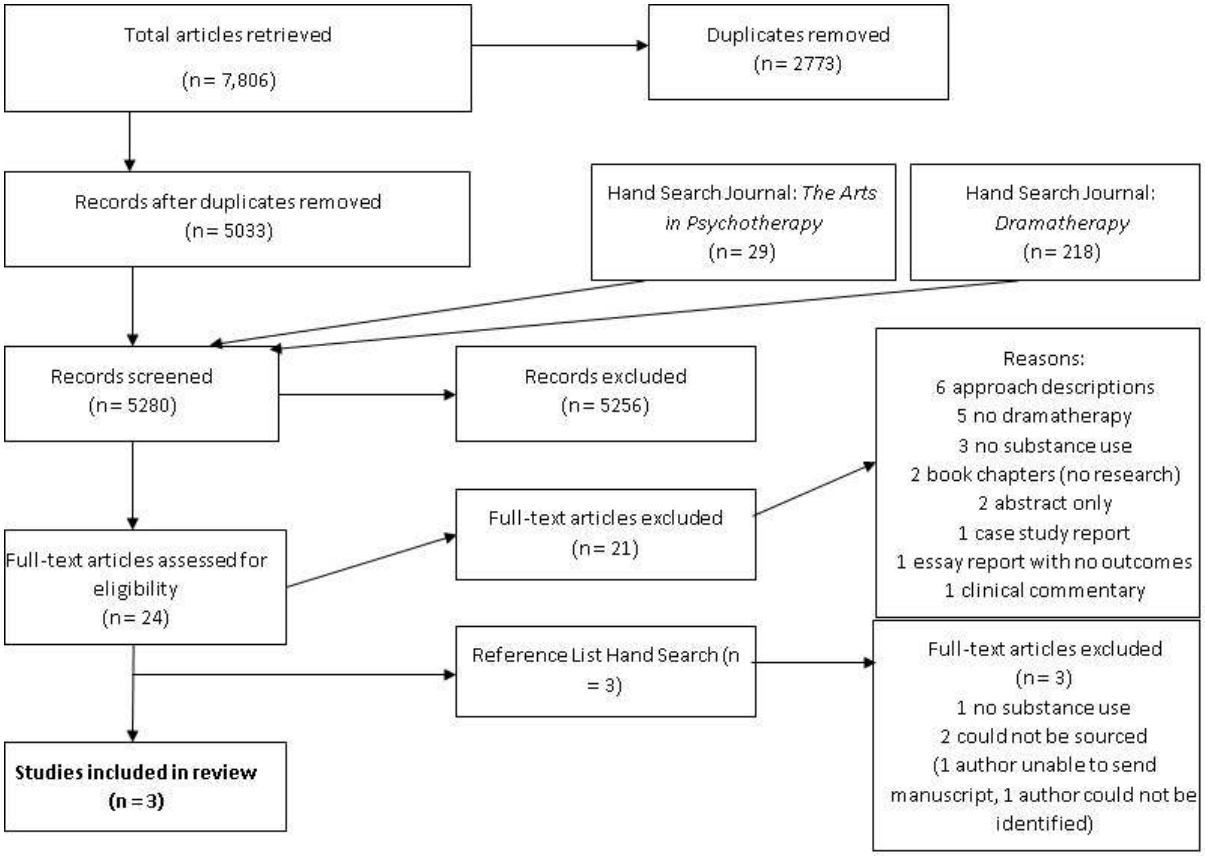

Figure A. Flow diagram of study selection process.

Study Characteristics

The characteristics of the three studies are presented in Table 1. Two articles reported the results of single-group pre-test post-test quasi-experiments (Jaaniste, 2008; Wasmuth & Pritchard, 2016), while one reported the results from a pre-test post-test experiment with random assignment to conditions (Dehnavi, Bajelan, Pardeh, Khodaviren & Dehnavi, 2016). Cohen's d could not be calculated for one article, because standard deviations were not reported for the corresponding means.

While the included studies had varied intervention specifics and outcome measures, there were many similarities between the samples (N= 42 male participants). In two studies participants explicitly demonstrated motivation for recovery by enrolling on a recovery or detoxification programme prior to joining the drama therapy intervention group (Dehnavi et al., 2016; Wasmuth & Pritchard, 2016). In the remaining study participants were already receiving support for substance use issues, but had to express a desire for abstinence in the screening session to be eligible to take part (Jaaniste, 2008).

[Table 1 Here]

Intervention Components

Problem Solving through Enactment (Dehnavi et al., 2016)

This intervention first addressed communication skills through a speech and confidence building exercise consisting of monologing to the group. Reflexive meditation was then used to teach participants to become more aware of their emotions and confront their struggles. In order to provide a sense of control over these newly-identified feelings, participants were encouraged to express themselves both verbally and non-verbally to group members. Finally, participants cast each other to take part in role-plays that re-enacted negative life events (such as relapse) to help make positive choices in their new empowered role. The actions in the role-play were used to construct a plan for how participants could tackle future problems and confront emotional difficulties.

Rehearsal, Performance and Discussion (Wasmuth & Pritchard, 2016)

The performance of a play was the goal of this intervention, each week revolving around rehearsal and discussion. Acting exercises increased in difficulty over the sessions, which were designed to improve participants' communication. During 'table work' discussions after rehearsal, the therapist prompted participants to examine how the characters relationships and issues in the play related to their own lives and experiences, facilitating metacognition. This led to participants confronting how addictions had manifest in their own lives from occupations they no longer enjoy. As such, the therapist signposted each participant towards community-based occupations that could provide a more fulfilling social context and ameliorate issues such as isolation.

Biographical Model (Jaaniste, 2008)

To encourage disclosure within the group, participants were asked to select a concrete object that reminded them of how their substance use began. Improvisation was used as a tool to distinguish between participants' fantasies and reality (Jennings & Gersie, 1987). By comparing fantasy and reality they were able to plan short term group and individual aims. Lievegoed's (1988) biographical model of seven-year periods was used as the framework for this intervention; participants could move through memories from each period by embodying roles of imagined objects in these scenarios. By

re-living these experiences participants identified positive qualities that helped them through difficult periods; this garnered a deeper understanding of themselves and a reduction in shame which can hinder recovery.

Intervention Delivery

All interventions were delivered through face-to-face group sessions. Dehnavi and colleagues (2016) and Wasmuth and Pritchard (2016) held sessions two and three times per week respectively over six weeks, while Jaaniste (2008) held one session a week over eleven weeks.

A playwright directed Wasmuth and Pritchard's (2016) rehearsals, but a professional actor led the warm-up and warm-down components. Discussions surrounding the script were guided by both an occupational therapist and the playwright. An art therapist met each participant one-on-one to discuss any emotional difficulties they were having because of the intervention, and an occupational therapy student suggested cognitive techniques for line rehearsal. Additionally, the playwright wrote the script for the play, which adapted characters from Greek mythology to have problems with addiction.

Jaaniste (2008) is an arts therapist, so delivered the sessions and collected data herself. However, one session concerning psychiatric medication was co-facilitated with a psychiatrist. Dehnavi and colleagues (2016) did not specify who directed their intervention sessions, stating that the person was an "analyst, producer, therapist and group leader" (p. 244).

Outcomes

Primary Outcomes

Wasmuth and Pritchard (2016) explicitly recorded substance use abstinence; four of the seven participants tested positive for either cocaine or benzodiazepine use pre-intervention, and post-intervention only one participant was still using drugs. Jaaniste (2008) used three scales for alcohol and substance use intake: The Substance Abuse Treatment Scale, the Clinician Rating of Alcohol Use Disorder and the Clinician rating of Drug Use Disorder (Drake, 1995). One participant maintained a 'remission/recovery' rating (indicating no use for the past year), and one maintained 'early persuasion' (stable or slightly decreased use). The remaining three decreased use by moving from

‘engagement’/‘early persuasion’ to ‘late persuasion’/‘early active treatment'. Three participants maintained abstinence from alcohol pre- and post-intervention, and two reduced their use slightly from alcohol dependence. Finally, only one participant had a different drug use rating, by increasing from ‘abstinence’ to ‘abuse’ following a cannabis binge. While abstinence was not reported, participants in Dehnavi and colleagues’ (2016) study had completed a detoxification programme in-clinic; it is unclear whether participants were abstinent for the duration of the intervention.

Further, Wasmuth and Pritchard (2016) kept detailed engagement information; over six weeks one participant attended every session, three missed one session and the remaining participants missed two or more. All participants attended the final performances, suggesting participants were motivated to keep attending. Additionally, all participants completed the eleven group sessions in Jaaniste’s (2008) study. No engagement records were reported by Dehnavi and colleagues (2016), but an exclusion criterion for this research was missing more than three meetings, suggesting individuals with poor attendance would not have taken part.

Secondary Outcomes

Quality of life was measured by Dehnavi and colleagues (2016) with the 36-Item Short Form Survey (Ware & Sherbourne, 1992). According to this measure quality of life was significantly better for participants in the intervention group post-intervention than for the wait list control group, who saw a slight decrease in quality of life.

Wasmuth and Pritchard (2016) measured social and occupational participation with the Occupational Circumstances Assessment Interview and Rating Scale (Forsyth et al., 2005) and self-efficacy with the General Self-Efficacy Scale (Schwarzer, Babler, Kwiatex, Schroeder & Zhang, 1997). Social and occupational engagement improved significantly post intervention and six weeks follow up, but started to wane at six months follow up. Conversely, self-efficacy did not differ significantly between pre- and post-intervention or at either follow-up period. Similarly, Jaaniste (2008) found no significant change in self-esteem pre- and post-intervention using the Rosenberg Self-Esteem Scale (Rosenberg, 1965), which may be because participants were already in the typical self-esteem range pre-intervention.

Quality Assessment

The quality reviews for the included papers are shown in Table 2 and Table 3. While Dehnavi and colleagues' (2016) study employs a valid experimental design, there were insufficient details provided about the methodology which puts it at a high risk of bias. The experimental design, described as "quasi-experimental" (p. 243), is cause for confusion, due to the presence of a control group and randomised allocation. Additionally, the relevance of drama therapy techniques to substance use recovery is ambiguous, but it is implied that improving quality of life enhances substance use recovery outcomes. Due to the lack of protocol detail it would be difficult to replicate this study with a greater number of participants.

Similarly, Jaaniste's (2008) findings should also be interpreted with caution, due to the small sample size and lack of statistical data. However, there is sufficient detail in the intervention description and sound theoretical basis for the techniques used, which bolsters the validity of the findings.

Moreover, Wasmuth and Pritchard's (2016) findings have the least risk of bias, especially considering the extensive follow-up period. Although this intervention takes a different approach than the other two studies, the techniques used are explicitly targeted at substance users with the intention of promoting recovery.

[Table 2 Here]

[Table 3 Here]

Discussion

Drama therapy and the recovery of substance use

This review identified a very small number of studies using drama therapy to facilitate the recovery process. While theoretical underpinnings and themes of drama therapy support the development of new skills, relapse prevention, and identity transformation (Somov, 2008) it remains unclear whether this is achieved solely through a drama therapy intervention. Since the included studies all took place with participants already in a process of recovery (through referrals from treatment centres and rehabilitation clinics), it is difficult to say how their recovery trajectory changed as a result of the

drama therapy groups (Hser, Longshore & Anglin, 2007). Only Dehnavi and colleagues (2016) utilised a control group that demonstrated a comparative increase in quality of life for the intervention group, however, authors failed to include a measure of abstinence. As such, we cannot state whether clients' recovery processes are changed or assisted with drama therapy.

Drama therapy, however, does appear to offer some psychosocial benefits. Group-based recovery drama therapy inherently fosters engagement with others in recovery (Leeder & Wimmer, 2007) and potentially wider arts communities (Zontou, 2013). Since drama therapy takes place over several weeks, it provides structure and time to develop therapeutic and meaningful relationships (Bruun, 2012; von Braun, 2013). The indirect manipulation of fantasy and reality through role-play allows clients to (re)live negative experiences and appraise actions to help prevent future relapse (Dehnavi et al., 2016). In addition, drama therapy provides a safe environment for clients to express needs and vulnerabilities (Gordon et al., 2018) and promote discussion regarding substance misuse and recovery (Krasanakis, 2017). By empowering people in this way, it may help them understand what prevented abstinence in the past, assist the recovery process and thus, help change future behaviour (Somov, 2008).

The quality of present studies is indicative of a broader debate around the need for evidence-based reporting by art therapists and researchers (Dokter & Winn, 2010; Miller, 2017). There is growing interest in the application of art-based therapies for health and wellbeing, but the quality of research in this area has been widely criticised for being of poor quality and inaccessible to those unfamiliar with art therapies (All-Party Parliamentary Group on Arts, 2017; Megranahan & Lynskey, 2018). As the British Association of Dramatherapists note, this lack of high-quality drama therapy research has a detrimental impact on the ability of therapists to deliver clear outcome and evidence-based practice (Dokter & Winn, 2010).

Limitations

A key limitation of the studies included in this review is a lack of consistent reported outcomes; while two studies reported differing measures of abstinence, each paper focussed on self-reported secondary outcomes and anecdotal evidence than primary recovery outcomes (Metrebian et al., 2014). Future

research should therefore attempt to record abstinence with both self-report and official drug test data; this is likely to provide reliable estimates of substance use than self-report measures alone (Darke, 1998; Simons, Wills, Emery & Marks, 2015). The results are also limited in their generalisability; while they may be applicable to small groups of men (who currently make up 74% of NHS admissions; Burkinshaw et al., 2017), there is little evidence to support their use across different cultures or with women (Leeder & Wimmer, 2007; Stahler, 2007). Finally, there is a degree of reporting bias; authors of this review included recent research published only in English, as well as, the exclusion of single case data; this means valuable insights may have been missed. Likewise, many qualitative drama therapy reports go unpublished, future reviewers should attempt to collate case study data and their counterpart studies.

Conclusions and Implications

This review is the first to consolidate research into the use of drama therapy to facilitate substance use recovery and provides an overview of how a range of techniques can be delivered by multidisciplinary teams. Drama therapy has the potential to improve abstinence and quality of life for motivated clients as part of a cost-effective therapeutic group. However, small sample sizes and methodological issues hamper the already scarce published research around this topic. Drama therapy practitioners and researchers need to reconcile issues with practice-based research in order to provide clearer demonstrations of their work and have confidence in their outcomes (Dokter & Winn, 2010; Miller, 2017). Future research using direct comparators and objective, consistent outcome measures will help identify effective components of drama therapy, when used in isolation or in addition to standard rehabilitation protocols.

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Tables

Table 1

Table 1 Characteristics of Included Studies

Authors	Design of Study	Setting	Participant Characteristics	Intervention Details	Measures	Results
Dehnavi et al. (2016)	Randomised pre-post design	Addiction Treatment Clinic (Iran)	N = 30; Age 20-52 years (M = 31.4, SD = 4.37). Opiate-dependant males with high school diploma education (or higher) who had passed a detoxification programme. Participants had negative urine tests and no comorbid psychiatric or physical disorders at intervention start. Participants randomly assigned to either intervention or control group.	12 group sessions (6 weeks). Sessions consisted of warm-up, casting, and sharing segments. Duplication, role-reversal, mirror, projection of future, monologue, and self-actualization techniques were used. One 'director' acted as leader, therapist, producer and analyst. The control group received no intervention.	36-Item Short Form Survey (SF-36) to measure quality of life. Measured pre- and post-intervention.	Drama therapy group had increased SF-36 score from before (M = 16.82, SD = 4.27) to after the intervention (M = 25.74, SD = 4.16). Control group saw a slight decrease in SF-36 from time one (M = 17.91, SD = 5.12) to time two (M = 16.25, SD = 3.51). ANCOVA found difference in mean SF-36 score was significantly different pre- and post- intervention between the experimental and control group ($F(1,27) = 93.84$, $p < .001$, $\eta = .714$, $d = 1.88$).
Wasmuth & Pritchard (2016)	One-group pre-post design	Residential Rehabilitation Centre for Veterans (USA)	N = 7; Age (not provided). Veterans diagnosed with substance use disorder who were enrolled onto a Substance Use Disorder Recovery Program. 6 had dual diagnoses. All 7 completed each session. 3 people dropped out after session 1 and were used as baseline comparators.	3 sessions per week (6 weeks). Sessions included warm-up, acting exercises, 'table work' (discussions) and wrap-up. An adaptation of 7 Greek myths, involving themes of addiction was rehearsed. Delivered by an occupational therapist, a director/playwright, an actor, an occupational	Abstinence. Occupational Circumstances Assessment Interview and Rating Scale (OCAIRS), General Self-Efficacy Scale (GSE). Measured at baseline, post-intervention, 6-week	43% abstinent pre-intervention, 71% abstinent during, 86% abstinent at 6 weeks and 6 months post-intervention (1 participant regularly using drugs). OCAIRS from baseline (M = 34, SD = 5.77) to postintervention (M = 44, SD = 2.07), to 6-week (M = 43, SD = 3.31) and 6-mo follow up (M = 41, SD =

				therapy student, and an art therapist.	follow up, and 6-month follow up.	5.80) differed significantly ($F(3,20) = 6.51$, $p < .01$, $\eta = .89$). Scores were significantly different from baseline post-intervention ($p < .01$, $d = 2.31$) and at 6 weeks ($p < .01$, $d = 1.91$) but not at 6 months ($p = .198$, $d = 1.21$). No significant differences between GSE scores.
Jaaniste (2008)	One-group pre-post design	Community Psychiatric Facility (Australia)	N = 5; Age (M = 42 years). Local case management referrals with co-morbid mental health and substance use issues but were motivated to be abstinent. (One participant had bipolar affective disorder, four had schizophrenia). All 5 attended every session.	Weekly group sessions (11 weeks) based on a Dutch biographical model of substance abuse recovery (Lievegoed, 1988) including drama therapy and psychoeducation. Embodiment, projection, improvisation, and role-reversal strategies were used.	Rosenberg Self-Esteem Scale (RSES), Substance Abuse Treatment Scale (SATS), Clinician Rating of Alcohol Use Disorder (CRAUD), Clinician Rating of Drug Use Disorder (CRDUD). Measured pre- and post-intervention.	No significant change in RSES from pre- (M: 15.4) to post-intervention (M: 15.2) [SD not reported; d cannot be calculated]. 2 participants maintained 'Remission'/'Early Persuasion' SATS scores. 3 participants improved from 'Engagement'/'Early Persuasion' pre- to 'Late Persuasion'/'Early Active' Treatment post-intervention. 3 Participants maintained 'Abstinence' CRAUD scores. 1 improved from 'Dependent' to 'Abuse' and the other to 'Use Without Impairment'. 4 maintained 'Abstinence', 'Use Without Impairment' and 'Abuse' CRDUD ratings. 1 deteriorated from 'Abstinence' to 'Abuse'.

Table 2

Table 2. Quality Assessment for Dehnavi and colleagues (2016): POOR

Criteria	**Dehnavi et al. (2016)**
1. Described as randomized?	NO
2. Method of randomization adequate?	NR
3. Treatment allocation concealed?	NR
4. Participants and providers blinded to group assignment?	NR
5. Outcome assessors blinded to group assignments?	NR
6. Were the groups similar at baseline?	YES
7. Overall drop-out 20% or lower of the number allocated to treatment?	CD
8. Differential drop-out rate 15% or lower?	NR
9. Adherence to the intervention protocols?	YES
10. Other interventions avoided or similar in the groups?	CD
11. Outcomes assessed using valid and reliable measures?	YES
12. Sample size was sufficient to detect a difference with at least 80% power?	NO

13. Outcomes prespecified?	YES
14. Were participants analysed in the group they were originally assigned?	CD

Key: NR: Not reported; CD: Cannot Determine.

Table 3

Table 3. Quality Assessment for Wasmuth and Pritchard (2016): FAIR; and Jaaniste (2008): FAIR

Criteria	**Wasmuth & Pritchard (2016)**	**Jaaniste (2008)**
1. Study objective clearly stated?	YES	NO
2. Eligibility criteria for the study population prespecified and described?	YES	YES
3. Participants representative of those who would be eligible for the intervention?	YES	YES
4. All eligible participants that met entry criteria enrolled?	CD	CD
5. Sample size sufficient to provide confidence in the findings?	NO	NO

6. Intervention clearly described and delivered consistently?	YES	YES
7. Outcome measures pre-specified, clearly defined, valid, reliable, and assessed consistently?	YES	YES
8. Outcome assessors blinded to participants' intervention?	NO	NO
9. Loss to follow-up after baseline 20% or less? Accounted for in the analysis?	YES	YES
10. Did the statistical methods examine changes in outcome measures from before to after the intervention? Were statistical tests done that provided p values for the pre-to-post changes?	YES	NO
11. Were outcome measures of interest taken multiple times before the intervention and multiple times after the intervention (i.e., did they use an interrupted time-series design)?	YES	NO
12. If the intervention was conducted at a group level (e.g., a whole hospital, a community, etc.) did the statistical analysis consider the use of individual-level data?	YES	YES

Key: NR: Not reported; CD: Cannot Determine.