

© 2019 American Psychological Association 0033-3204/19/\$12.00

2019, Vol. 56, No. 2, 297–308 http://dx.doi.org/10.1037/pst0000232

EVIDENCE-BASED CASE STUDY

Psychodynamic Art Psychotherapy for the Treatment of Aggression in an Individual With Antisocial Personality Disorder in a Secure Forensic Hospital: A Single-Case Design Study

Simon S. Hackett Newcastle University and Northumberland, Tyne and Wear NHS Foundation Trust, Newcastle upon Tyne, United Kingdom Katie Aafjes-van Doorn Yeshiva University

The aim of this single-case study was to investigate the responses to psychodynamic art psychotherapy from a man who had a diagnosis of antisocial personality disorder and ongoing aggressive behavior in a secure care setting. The intervention was 19 sessions of psychodynamic art psychotherapy lasting up to 1 hr per week. This study uses a single-case design with pretreatment, treatment, and posttreatment follow-up assessment of symptoms using multiple methods reported by the therapist, other staff members, and the patient. Treatment progress was assessed by (a) repeated self-report symptom measurements, (b) continuous assessment of observed aggressive behavior and risk incident reports in the hospital, (c) pre–post treatment assessment of relationship patterns and interpersonal schemas, and (d) interviews with the patient and his nurse at 9-month follow-up, retrospectively assessing the change. The patient showed a clinically significant reduction pre–post and pre–follow-up in symptoms. Behavioral observations indicated a reduction of overt aggression and risk-related incidents. Comparison of the Core Conflictual Relationship Theme pre–post treatment indicated positive changes in interpersonal schemas. This illustrative systematic single-case study highlights the potential for investigation of a novel psychotherapeutic approach that has in turn led to further developments in clinical research.

Clinical Impact Statement

Question: What are the responses to psychodynamic art psychotherapy from a man who had a diagnosis of antisocial personality disorder and ongoing aggressive behavior in a secure care setting? Findings: Clinicians could consider art psychotherapy to be a potentially helpful treatment option for antisocial personality disorder when patients are indicated as having additional difficulties in their cognitive capacity and/or adaptive functioning. Meaning: This systematic single-case study has indicated wider potential for the development, research, and application of art psychotherapy. Applying creative approaches may be particularly relevant to patients within secure care who may benefit from the inclusion of art making within psychotherapy to enhance its accessibility. Next Steps: Art psychotherapy could be considered as a potentially beneficial treatment, as indicated within this systematic case study. Further investment in the clinical development and research of art psychotherapy may prove to be informative and supportive in efforts to widen the evidence base and the choice of clinical treatments available to individuals in secure forensic settings.

Keywords: art psychotherapy, antisocial personality disorder, aggression, single-case design, intellectual disability

Simon S. Hackett, Institute of Health and Society, Newcastle University, and Arts Psychotherapies, Northumberland, Tyne and Wear NHS Foundation Trust, Newcastle upon Tyne, United Kingdom; Katie Aafjes-van Doorn, Ferkauf Graduate School of Psychology, Yeshiva University.

We thank John L. Taylor, Northumbria University, United Kingdom; Jaques Barber, Adelphi University, United States; and Mark Freeston, University of Newcastle, United Kingdom, for their support and advice.

A full protocol can be accessed from http://nrl.northumbria.ac.uk/10354/1/hackett.simon_phd.pdf.

Correspondence concerning this article should be addressed to Simon S. Hackett, Institute of Health and Society, Newcastle University, Baddiley-Clark Building, Richardson Road, Newcastle upon Tyne NE2 4AX, United Kingdom. E-mail: Simon.hackett@newcastle.ac.uk

Secure Forensic Care

Antisocial Personality Disorder

In the United Kingdom, the National Health Service (NHS) provides specialist low-, medium-, and high-secure inpatient hospitals on a local, regional, and national basis. Patients are referred for mental health treatment at these secure hospitals by other health care settings, the courts, and prisons. A large percentage of the prison population has a diagnosis of antisocial personality disorder (ASPD; 47%; Fazel & Danesh, 2002). This indicates that people suffering from ASPD are overrepresented within prison populations. A diagnosis of ASPD may result from overt antisocial acts plus traits of impulsivity, irritability, and remorselessness (De Brito & Hodgins, 2009) and can lead to considerable costs for the society as a whole (Marin-Avellan, McGauley, Campbell, & Fonagy, 2014; National Collaborating Centre for Mental Health, 2010; Skodol, 2012). Despite the high prevalence rate of ~25% of violent incidents within society, the high prevalence rate of the disorder itself among prison samples and the considerable costs to society, there is a surprising lack of research on ASPD (Bateman, Gunderson, & Mulder, 2015; De Brito & Hodgins, 2009; Meloy & Yakeley, 2010). For many forensic patients, life has been traumatic and continuous to be troublesome in a secure hospital setting. Many suffer from long-standing depression, anxiety, and low self-esteem (Ogloff, Talevski, Lemphers, Wood, & Simmons, 2015), display aggressiveness, and are involved in violent incidents (Davidson et al., 2010). A therapeutic aim to support the building of more positive interpersonal relationships does not only decrease mental suffering but also increase motivation to maintain valued relationships and is crucial for rehabilitation into the community (Hatton, 2002).

Intellectual Disability

In addition, there is a substantial number of people with mild or borderline (low) intellectual disabilities in the prison service (7% of prisoners have an IQ of less than 70 and a further 25% have an IQ between 70 and 79; Mottram, 2007), and there is provision in some secure hospitals to offer effective mental health treatment to people with a wide range of intellectual abilities who have difficulties in relation to cognitive capacity and adaptive functioning. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), defines intellectual disabilities as neurodevelopmental disorders that begin in childhood and are characterized by intellectual difficulties as well as difficulties in conceptual, social, and practical areas of living (American Psychiatric Association, 2013). Emotional, behavioral, and interpersonal difficulties are often further complicated by some level of intellectual disability. It is also recognized that some people with an IQ score above 70 may have such severe adaptive behavior problems in social judgment, social understanding, and other adaptive functioning that a person's actual functioning is comparable with that of individuals with lower IQ score (American Psychiatric Association, 2013, p. 37).

The use of IQ tests in demographically diverse populations presents challenges with accuracy of testing being questioned between groups with different cultural and socioeconomic status (Bradley & Corwyn, 2002; Sunderaraman, Zahodne, & Manly,

2016). Alternative constructs of IQ, such as assessments of day-to-day intellectually demanding activities (Ackerman, 2017) and nonverbal assessments of intelligence (McCallum, 2017), might be clinically more relevant and less culturally problematic at the level of interpretation.

However, there is some consensus that treatment for patients with intellectual disabilities may require adaptations to standard psychotherapies (National Institute for Clinical Excellence [NICE], 2016a). In this article, we argue that a psychodynamic approach to art psychotherapy might be usefully applied to forensic patients who suffer from ASPD and borderline to mild intellectual disability.

Art Psychotherapy

Art psychotherapy is applied within a wide range of inpatient health care and community health and social care settings to treat mental health symptoms (NICE, 2009, 2015, 2016b; Schouten, de Niet, Knipscheer, Kleber, & Hutschemaekers, 2015; Uttley, Stevenson, Scope, Rawdin, & Sutton, 2015). It is an approach that encompasses the unconscious and conscious expression of inner feelings and experiences, which in turn supports expressive communication between the therapist and patient (Abbing et al., 2018; Hackett, Ashby, Parker, Goody, & Power, 2017). Art psychotherapy offers an opportunity to explore and express emotional issues, through both verbal and nonverbal means, and thus does not solely rely on verbal communication to be successful. For people with borderline or mild intellectual disability and cognitive and social functioning difficulties, the added value of making art in psychotherapy has been seen to support communication, thinking, and self-reflection (Hackett, 2012; Hackett, Taylor, et al., 2017; Rothwell, 2008). Although theoretical underpinnings of art-based psychotherapy practice vary, there are clinical examples of art therapists who apply psychodynamic theory to their work and describe how they use picture symbols, drawings, and other communication aids within this psychodynamic therapy frame, for example (Naumburg, 2001).

The use of art work in psychodynamic psychotherapy has been described as enabling therapists to link specific themes of anger within the patients' art work to intrapsychic and interpersonal processes, "non-verbal processes in art-making may provide an opportunity for material to surface through the work, held within the therapeutic relationship and space" (Rothwell, 2008, p. 118).

Art Psychotherapy in Prisons and Secure Forensic Care

A limited number of art psychotherapy studies have been carried out in prisons and secure care. Art psychotherapy has been associated with lower levels of depression in a study of incarcerated men (n=44; Gussak, 2007) and reduction of prerelease anxiety for prisoners (n=72; Yu, Yu Ming, Yue, Hai Li, & Ling, 2016). Other literature that has been identified regarding art psychotherapy in secure care appears to be predominantly descriptive, practice based, and anecdotal. For example, through surveying arts therapists within forensic psychiatry services in the Netherlands (Smeijsters & Cleven, 2006), art work was identified as being used to address problems of self-image, emotional difficulties, and interpersonal problems (Smeijsters, Kil, Kurstjens, Welten, & Wil-

lemars, 2011). Practice-based reports, single-case studies, and rich case description indicate that there may be some reduction in patients' symptoms, maladaptive behaviors, and interpersonal struggles (Hackett, 2016; Hackett, Ashby, et al., 2017; Hackett, Porter, & Taylor, 2013; Rothwell, 2008, 2016; Rothwell & Hackett, 2018). Based on these practice-based indicators and the potential benefits of art as a nonverbal tool in psychotherapy, we illustrate a single-case where a psychodynamic approach to art psychotherapy has been applied within a secure forensic care setting.

Aim

The aim of this single-case study was to investigate the responses to psychodynamic art psychotherapy from a man who had a diagnosis of ASPD, borderline intellectual disability, and ongoing aggressive behavior in a secure care setting. The Single-Case Reporting Guideline in Behavioral Interventions checklist (Tate et al., 2016) for single-case design has been adhered to in the reporting of this study.

Method

Single-Case Experiments

Uncontrolled or anecdotal case studies can provide a useful backdrop for single-case experiments, particularly in generating hypotheses to be subjected to more rigorous testing (Kazdin, 2011). Although acknowledging the value of anecdotal case studies, Kazdin (2011) pointed out that uncontrolled case studies have little in common with experimental designs seeking to establish scientifically valid inferences. Research studies which use A–B (A = baseline, B = treatment) designs are also considered to have value in being able to demonstrate that an intervention is more effective than no intervention (Willner, 2005).

However, a number of methodological limitations remain in single-case designs. Threats to internal validity include "History," events other than the intervention occurring at the time of the experiment; "Maturation," changes within the subject over time, such as growing older, healthier, tired, or bored and so forth; "Instrumentation," such as changes in observation criteria over time; "Testing," related to processes effected by repeated assessment; "Statistical regression," reversion of scores to the mean; and "Diffusion of treatment," when the intervention is administered in nonintervention phases (Kazdin, 2011). Similarly, there are threats to external validity, which can include "Generality," across subjects, responses of measures, settings, time, and behavior-change agents. "Reactivity" may take place in the experimental arrangement if participants change their performance due to their awareness of the study or the assessment (Kazdin, 2011).

There are three important features within single-case study designs that lead to improved internal validity: (a) using a systematic approach and collecting quantitative data (as opposed to anecdotal accounts), (b) using multiple assessments of change over time, and (c) measuring the intervention across multiple cases. Change can be indicated by observing improvements in previously chronic or stable problems (Kazdin, 2011).

A Systematic Single-Case Study

An AB design (Kazdin, 2011; Kratochwill & Levin, 1992) was conducted with follow-up assessment added as a third phase. It had following phases: A = baseline/pretreatment (screen) phase (8 weeks); B = treatment phase (21 weeks); follow-up assessment (12 weeks) with the assumption being made that if improvements were shown during the treatment phase, this would continue during follow-up. Collection, analysis, and triangulation of data took place from multiple sources and observations, such as continuous measures, self-report questionnaires, therapist and observer ratings, and patient and staff interviews. The design includes convergence of different sources of data, multiple measures and perspectives, inclusion of a rich case record (Wall, Kwee, Hu, & McDonald, 2017), and verbatim clinical vignettes. No procedural changes took place during the study, randomization was not used, and the study was unblended.

Participants

Inclusion criteria. To be included in the study, participants were required to meet the following inclusion criteria: They were receiving inpatient hospital treatment in secure care; they have had a completed Wechsler Adult Intelligence Scale (WAIS) indicating an IQ of between 55 to 75 and were able to complete standardized mental health questionnaires validated for an intellectual disability population; they were between 18 to 60 years of age and were able to give informed consent; they showed some presentation of difficulties with anxiety symptoms, depressive symptoms, and/or interpersonal difficulties, such as difficulties in forming and maintaining relationships; and finally, their involvement in the study was supported by clinicians within the Multi-disciplinary Team (MDT).

Exclusion criteria. Participants were excluded on the basis that they were not within the IQ threshold (below 55 and above 75), had no clinical indicators for psychological treatment, were unable to give informed consent, and had a planned discharge within 12 months of the start of the study. Those receiving active assessment or treatment for acute psychotic symptoms (i.e., dose titration) or who would be unable to access treatment due to frequent/ongoing management in seclusion facilities were also excluded.

Selection criteria. The case of "Stuart" was involved in a wider research study in which four single-case study investigations were undertaken (Hackett, 2012, 2016). Participants were selected from an adult secure forensic hospital with medium- and lowsecure wards. A convenience sample was taken and the selection process was based upon the premise that recruitment to the study should mirror existing practice for allocating patients to therapy within the service. The multidisciplinary team within each secure unit and the responsible clinician, who had overall responsibility for each patient's case, were given information about the study and asked to identify patients who were clinically suitable for the treatment. Eight potential participants were initially identified. Five patients were assessed as having met the inclusion criteria. A decision was made not to include one patient who had met the study criteria but had recently completed an extensive period of art psychotherapy in an adolescent service prior to his transfer to adult services. Four cases in total were selected and completed. One of the cases has been reported in a book chapter (Hackett, 2016). Two of the cases had a history of aggressive behavior, a 21-year-old man and the case of "Stuart," a 38-year-old man. Both of these cases showed reductions in aggressive behavior during the study.

Although all completed cases are of potential interest, the case of Stuart has been selected for reporting here due to his specific clinical characteristics, including having a diagnosis of ASPD, his difficulties with cognitive capacity and adaptive functioning associated with borderline intellectual disability, and his initial expression of skepticism about the inclusion of art making within psychotherapy, which was subsequently followed by positive engagement in the treatment. We believe the case of Stuart includes clinical characteristics that can be identified in a wider population of people being treated within secure forensic care provision and that it is illustrative of his responses to a novel adapted psychotherapeutic approach.

Participant Characteristics

"Stuart" (pseudonym) was a 38-year-old white British man, who had been detained in a medium-secure hospital for 26 months after having been transferred from a high-secure hospital. A clinical assessment by a consultant clinical psychologist following his transfer to a medium-secure hospital stated that Stuart did not like to have his own needs thwarted and that he was a person who liked to be in control of people and situations. Clinical opinion at this time associated Stuart's long history of using violence against those who were seen as being more vulnerable than himself with his wish to be in control of others.

Within the medium-secure hospital, Stuart's aggressive and confrontational interaction style with staff and other patients was considered to be a challenge to the system. Stuart often presented himself as the victim of injustice and spoke of being stuck in "the system." He felt aggrieved and frustrated about the fact that following the end of his prison sentence he had not been released, but had been transferred to secure care in hospital.

Stuart met *DSM*–5 criteria (American Psychiatric Association, 2013) for ASPD, measured on the International Personality Disorder Examination (Loranger, 1999). As can be common in this forensic population, Stuart was within the range for borderline intellectual disability (full scale IQ score of 73) on the Wechsler Adult Intelligence Scale—Fourth Edition (WAIS–IV; Wechsler, 2008). Although his communication difficulties were not fully apparent at first (performance IQ score of 81), he had difficulties in processing language and interpreting meaning (verbal IQ score of 69).

Stuart's early family history was marked by several traumatic events. He witnessed domestic violence and an attempted suicide by his father. Following the separation and divorce of his parents, when Stuart was 10 years old, his mother became addicted to alcohol. Her soliciting behavior lead to Stuart being sexually abused by one of his mother's male partners. There is little information about his schooling other than that it was defined by bullying and high levels of aggression. In his late teens, he became involved in criminal gangs and recreational drug use. Stuart reported repeated incidents of extreme gang violence and criminality including being attacked with a knife, beaten, and shot. His physical and sexual violence, lead to convictions for two counts of rape. Prior to his imprisonment, Stuart had been in a long-term relationship with a woman, with whom he had two children. This rela-

tionship had broken down following incidents of extreme violence and sexual violence against her, which resulted in one of his convictions for rape. Since then, Stuart had ceased contact with his ex-partner, children, mother, and father.

Setting

The study was conducted in an NHS medium-secure hospital in the North East of England that offers specialist provision for people with intellectual and developmental disabilities. The hospital provides inpatient services on a local, regional, and national basis. Patients treated at the hospital have been referred to the service from other health care settings, the courts, and prisons. Patients have a highly structured day which consists of ward-based activities, sports, gardening, day services, and education. The multi-disciplinary clinical teams working on the service consist of nursing staff, psychiatrists, psychologists, art psychotherapists, speech and language therapists, and occupational therapists.

Approvals

Ethics. The study was given ethical approval by a County Durham and Tyne Tees Valley 2 Research Ethics Committee (reference 08/H0908/63), and participants' capacity to give consent was assessed using the Empirical Assessment of Capacity to Consent (Arscott, Dagnan, & Kroese, 1998). In addition to giving informed consent to participate in the research study, Stuart also gave written informed consent to the case study being written up for publication.

Informed consent. When an individual was identified as meeting the selection criteria, he or she was initially approached via a member of the MDT responsible for his or her care. Information was then verbally presented to the individual by an associate psychologist in accessible language and accompanied by "easy read" material. The participant's understanding of each component of the study information sheet and consent form was then checked using the "Empirical Assessment of Capacity to Consent" (Arscott et al., 1998).

Measures

Several standardized self-report outcome measures were administered at four different time points: at screening (8 weeks prior the start of treatment), pretreatment (Session 1), posttreatment (Session 19), and at follow-up (12 weeks posttreatment). An additional idiographic outcome measure of personal problems was administered pre- and posttreatment.

The Brief Symptom Inventory–18 (BSI-18; Derogatis, 2000) is a self-report symptom inventory designed to be used as a screen for psychiatric disorders. The BSI-18 has high levels of sensitivity and specificity (Franke et al., 2017). In this case, the BSI-18 was administered using an "assisted completion format," whereby a psychological assistant read the items out loud and Stuart gave

 $^{^{1}}$ WAIS–IV cutoff scores for mild intellectual disability is reflected by an IQ of 59–69. DSM–5 states that individuals with intellectual disability have scores of \sim 2 SD or more below the population mean, including a margin for measurement error (generally +5 points). On tests with a SD of 15 and a mean of 100, this involves a score of 65–75 (American Psychiatric Association, 2013, p. 37).

verbal responses (Kellett, Beail, Newman, & Hawes, 2004; Kellett, Beail, Newman, & Mosley, 1999).

The Glasgow Anxiety Scale for people with Intellectual Disability (GAS-ID; Mindham & Espie, 2003) is a 27-item self-rating scale of anxiety symptoms for people who have mild intellectual disabilities. GAS-ID subscales for 'worries', 'specific fears', and 'physiological symptoms' are added to produce a total score.

The Glasgow Depression Scale for people with Intellectual Disability (GDS-ID; Cuthill, Espie, & Cooper, 2003) is a valid and reliable depressive symptom rating scale for people with mild to moderate intellectual disabilities. The measure includes 20 questions and the rating scale was designed to be used in an assisted self-completion format with instructions and prompts for the test administrator.

The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1982; Rosenberg, Schooler, & Schoenbach, 1989) is a self-report measure of global self-worth. An adapted version with a visual analogue scale was used (Dagnan & Sandhu, 1999).

In addition to the standardized self-report measures, Stuart also completed an idiographic Personal Problem Scale, which was specifically designed for this study in line with the procedures of goal attainment scaling (Hart, 1978; Kiresuk & Sherman, 1968). The patient is asked to identify and rate the severity of three personal problems at the start and end of therapy on a 5-point Likert scale.

The Modified Overt Aggression Scale (MOAS; Oliver, Crawford, Rao, Reece, & Tyrer, 2007) provides a reliable observational measure of four types of aggression: verbal, physical against objects, physical against self, and physical against other people. For MOAS total scores, the level of agreement between raters has been shown to be high with an intraclass correlation coefficient above .90. (Oliver et al., 2007).

In standard practice in the service, the frequency of serious untoward incidents (SUIs) was monitored within the secure hospital setting. SUIs are recorded incidents in which Stuart (a) had been aggressive or violent to a degree that required staff to use an approved physical intervention for the management of violence and aggression, (b) had been placed in seclusion for a period of time (seclusion being the supervised confinement of a patient in a room that has been designed with the sole aim to contain severely disturbed behavior likely to cause harm to others), and (c) had been subjected to the use of rapid calming or tranquilizing medication that is taken as needed, pro re nata (PRN), to reduce agitated, aggressive, or violent behavior.

To assess Stuart's patterns of interpersonal schemas, we applied the Core Conflictual Relationship Theme (CCRT) method (Luborsky, 2003). "The CCRT method is the central relationship pattern, script, or schema that each person follows in conducting relationships" (Luborsky, 2003, p. 3). Four psychologists independent of the study were trained to judge the CCRT components from Relationship Anecdote Paradigm pre- and posttreatment interview transcripts according to the CCRT method (Luborsky, 2003).

At follow-up, 12 weeks following the end of treatment, a psychological assistant (who had no prior involvement in procedures during the study) conducted a semistructured audio-recorded Change Interview (Elliott, 2008; Elliott, Slatick, & Urman, 2001) with Stuart and his named nurse (i.e., staff member who holds responsibility for the ward-based treatment of this patient). The interviews were conducted separately and the therapist was not present.

Intervention

The therapy intervention consisted of 19 weekly 1-hr individual psychodynamic art psychotherapy sessions, provided during 21 weeks. Stuart was not undertaking any other psychological treatment during the period of the study, he was prescribed a stable dose of an antidepressant medication which remained unchanged during the study, and he was able to request rapid tranquilizing medication, as and when required (PRN). Stuart's use of PRN medication was monitored during the study and recorded as an "SUI".

The psychodynamic art psychotherapy treatment adhered to the seven commonly agreed features of psychodynamic psychotherapy (see Shedler, 2010) and followed other guidelines for dynamic psychotherapy (Barber, Krakauer, Calvo, Badgio, & Faude, 1997). The conceptual treatment model followed the principles of psychodynamic psychotherapy described by Blagys and Hilsenroth (2000) and emphasized the following: (a) a focus on affect and the expression of patient's emotions; (b) exploration of patients' attempts to avoid topics or engage in activities that hinder the progress of therapy; (c) the identification of patterns in patients' actions, thoughts, feelings, experiences, and relationships; (d) an emphasis on past experiences; (e) a focus on a patients' interpersonal experiences; (f) an emphasis on the therapeutic relationship; and (g) an exploration of patients' wishes, dreams, or fantasies.

Stuart's therapist, a male in his early thirties, worked in the medium-secure hospital where Stuart resided. The therapist had 10 years of clinical experience with people with intellectual disabilities using psychodynamic psychotherapy and 5 years of clinical experience in forensic services. He had received over 5 years of postgraduate supervision in psychodynamic psychotherapy and was qualified and registered with the Health and Care Professions Council as an Art Psychotherapist (Arts Therapist) in the United Kingdom.

The psychodynamic psychotherapy integrated the use of drawings to elicit unconscious material, enhance cognitive understanding of the verbal explorations, and increase treatment engagement. Art materials included a range of pencils, pens, and pastels provided by the therapist. Therapy sessions lasted up to 1 hr on a weekly basis in which the therapist encouraged Stuart to consider links between the creative work that he was involved in and his own thoughts, feelings, and circumstances. The therapist aimed to link themes or subject matter seen in the art image to things that Stuart had said or aspects of his life outside or on in the secure setting. The potential meaning placed upon the artwork was not fixed and changed over the course of therapy in relation to other images or events. The therapist continued to recognize emotion and give empathic responses to Stuart while making observations, with the intention of engendering and supporting the potential for positive change.

During art psychotherapy Stuart drew pictures in each session. In the first session, Stuart spoke about the physical and verbal abuse to which his mother had subjected him in his early teens. He added to this account by saying that following the separation of his parents one of his mother's male partners had raped him. Stuart told the therapist that when he had spoken about his mother in therapy he had felt a "deep hatred" toward her. Early periods of therapy can be seen to coincide with higher aggression ratings on MOAS observations (see, Figure 1).

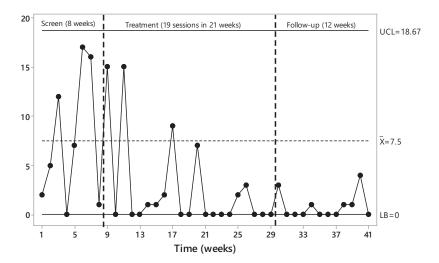


Figure 1. Modified Overt Aggression Scale, weekly total score observations between phases. UCL = Upper Control Limit; LB = Lower Bound Limit.

Stuart's use of drawings in therapy were also related to his thinking about his current circumstances and his future. In Session 4, Stuart drew an image of a high brick wall with nothing on the other side. When discussing this image with the therapist Stuart said that he was "stuck up against the wall" and was unable to articulate what was on the other side of the wall. In the following session, Stuart was asked again by the therapist to look at the picture and think about what might be on the other side of the wall; Stuart then added pictures of a table and chairs representing a meeting room. The additions to the picture depicted meetings in the hospital that were set up to discuss his future. This image was also mentioned by Stuart in his posttherapy interview as helping him to think about his future and feel more hopeful about it.

At the end of the treatment, Stuart selected three pictures that he had made in therapy that were important to him. One depicted a farm where he had moved to as a child. Stuart said that the farm was the place where his parents broke up and where his father had attempted to hang himself in a barn. In the therapy session, Stuart had spoken about witnessing domestic violence and feeling anger toward his parents. He told the therapist about a time when he had attempted to stab his father with a knife but was stopped by his mother. Stuart's second important picture, of a swimming pool, made in Session 12 was also related to a childhood memory. He said that he had been swimming in an outdoor pool, was struggling in the water, and thought that he might drown. Stuart said that his father had waited on the side of the swimming pool and had tried to stop his sister from entering the pool to help him. The third picture Stuart selected as being important to him was "block of flats" made in Session 17. The block of flats Stuart drew represented a place where he had been looked after by some friends after he had been badly beaten up and attacked with a knife in gang- and drug-related violence. He said that this was a serious time because he could have died.

In psychodynamic practice, there is a strong emphasis on relationship patterns, including past parental relationships, current relationships with friends and family, and the relationship that evolves between the patient and the therapist. Theoretically, during treatment, the patient will transfer relationship patterns from significant others in his or her life to the therapist. The gradual work required to make these transferred patterns conscious is regarded as a central curative process in psychodynamic psychotherapy (Etchegoyen, 2005).

Stuart's posttherapy description of the first meeting demonstrates his initial skepticism about art psychotherapy, in which he said.

... they came and saw me and we talked a bit about what it was about, what we'd do and that and stuff and then it was like he wanted me to draw pictures, which I wasn't too sure about at first. So I was a bit sort like 'who is this guy?' sort of thing.

Well, I didn't trust him. Trust's a big thing with me. You know, if I don't trust a person I won't be with them or speak to them or anything. So that was the big thing to start drawing, the trust and get to know him as well as he'd get to know me.

Stuart eventually found that the process of drawing made therapy feel easier for him, and he said, "Once you got into it, drawing the pictures and trying to get the images of what you wanted to draw, it started to like sort of get a bit easier like." Drawing images appeared to be a helpful starting point for discussion with the therapist, and Stuart said,

The thing that I found helpful was . . . talking about it. Talking about things and like. . . . You know, when you drew a picture, you know, you can sort of look at it and see like what's it . . . you know, what's it represent and that.

Results

Repeated Self-Report Measures

See Table 1 for an overview of the scores on the standardized repeated outcome measures at the different time-points, including the achieved clinical significant or reliable change. BSI-18 (global symptoms) Stuart's score at screen is above the clinical cutoff for

Table 1
Change on the Repeated Outcome Measures

Measure	Subscale	Screen	Pre	Post	Follow-up	Pre-post difference	Pre-follow-up difference
BSI-18 ^a	GSI	67	59	51	36	-8**	-23**
GDS-ID ^b	Depression	16	16	6	6	-10**	-10^{**}
GAS-ID ^c	Anxiety	8	11	6	5	-5	-6
RSES ^d	Self-Esteem	17	16	22	21	+6	+5

Note. BSI-18 = Brief Symptom Inventory–18; GDS-ID = Glasgow Depression Scale for people with Intellectual Disability; GAS-ID = Glasgow Anxiety Scale for people with Intellectual Disability; RSES = Rosenberg Self-Esteem Scale; GSI = Global Severity Index; Follow-up = 12 weeks following the end of treatment.

^a BSI-18 clinical cutoff is 57 (Zabora et al., 2001). Least change Reliable Change Index for BSI-18 is 7.38 based upon test–retests reliability (Franke et al., 2017).

^b GDS-ID total clinical cutoff is 15. Least change Reliable Change Index for GDS-ID is 4.27 based upon test–retest reliability (Cuthill, Espie, & Cooper, 2003).

^c GAS-ID total clinical cutoff is 15. Least change Reliable Change Index for GAS-ID is 6.20 based upon test–retest reliability (Mindham & Espie, 2003).

^d Least change Reliable Change Index for RSES is 6.25 based upon test–retest reliability (Dagnan & Sandhu, 1999). For the RSES, no clinical cutoff scores have been published.

* Reliable change.

**Reliable and clinically significant change.

psychological distress. Reliable and clinical significant change is shown at pre-post and follow-up. GDS-ID (depression) total scores at screen were within the clinical range. Scores show reliable and clinical significant change at pre-post and follow-up. GAS-ID (anxiety) total scores were below the clinical range at screen and pretest. RSES (self-esteem) scores improved between pre- and posttreatment and between pre- and follow-up.

Personal Problem Scale

See Table 2 for a visual representation of the changes on the three idiographic items on the Personal Problem Scale. Stuart identified three main areas in his life that were causing him problems that he rated on a 5-point Likert scale (from 1 = worst it can be, to 5 = best it can be) at the first and last session of treatment: (a) Stuart said that he was "feeling hopeless" and struggled to see a happy future for himself. (b) Stuart said he felt angry about "being stuck" in forensic services, being detained in a secure hospital after he had served time in prison. (c) Stuart said that he had difficulties trusting others and that it took him a long time to build up trust with people. At the start of therapy, Stuart rated each personal problem as being "the worst it can be" or one point removed from this. At the end of therapy these problems had improved to a point where Stuart rated them as "the best it can be" or one point removed from this.

Modified Overt Aggression Scale

An improvement in aggression is indicated by the run of (>7) scores (Callahan & Barisa, 2005; Oakland, 2008) below the pre-

Table 2
Change on the Personal Problem Scale

Problem statement	Pre	Post
Feeling [less] hopeless ^a	2	5
Being stuck in the system	1	4
Not trusting others	2	4

Note. 1 = worst it can be; 5 = best it can be.

treatment level (<7.5; mean score during screen phase) following therapy Session 10 (Week 18 of observations) and continuing during follow-up (see Figure 1). Effect sizes (Cohen, 1988) were calculated between the phases screen and treatment, screen and follow-up, and treatment and follow-up, see Table 3. In the interpretation of effect sizes, results of .90 and greater indicate very strong effects, from .70 to .89 represent moderate effectiveness, between .50 to .69 are considered to be potentially effective, and scores less than .50 are regarded as not effective (Lenz, 2013; Scruggs & Mastropieri, 1998). MOAS results indicate high effect sizes between the screen and treatment phases and screen and follow-up phases.

Serious Untoward Incidents

Stuart's baseline level of SUI was indicated by the frequency of SUI in the 12 months preceding treatment. During this period, a total of 33 SUIs were recorded, including five incidents where staff used physical intervention techniques for managing violence and aggression, 26 recorded incidents whereby PRN rapid tranquilizing medication was used, and two periods of seclusion. During the treatment period, one SUI was recorded for use of PRN medication, whereas during the 5-month follow-up period no SUIs were recorded.

Change in Interpersonal Schemas

Stuart's level of detail in the relationship episode narratives was moderate, with 50% moderately inferred statements and 2–3.5 completeness score range. We included relationship episodes with completeness scores of 2.5 and above for devising the CCRT (Luborsky, 2003). Given lower levels of agreement between trained judges measured in rating the CCRT wish component (Porter & Hackett, 2009), only the percentage of statements that are "moderately" or "explicitly" inferred are reported. See Table 4 for an overview of Stuart's CCRTs identified at the Relationship Anecdote Paradigm interviews conducted at the start and end of treatment. Pretreatment CCRTs reflected his internal conflict in that Stuart saw other people as untrustworthy and he was oppositional toward others, despite his underlying wish in relationships to

^a This was identified as the most prominent problem.

Table 3
Modified Overt Aggression Scale Phase Means and Between-Phase Effect Size

Phase	No. obs.	M(SD)	SE	Cohen's d	95% Lower limit	95% Upper limit
Screen	8	7.50 (6.74)	2.38			
Treatment	21	2.62 (4.77)	1.04			
Follow-up	12	0.83 (1.33)	0.38			
Screen/treatment		· · ·		-0.90	-1.75	-0.05
Screen/follow-up				-1.54	-2.55	-0.52
Treatment/follow-up				-0.36	-1.08	0.34

Note. Effect size calculation is indicated (Cohen, 1988). No. obs. = number of observations.

be close to others. This internal conflict seemed to have been altered following treatment, as there were no negative themes recorded in his responses toward others at the end of therapy. During Session 19, an increase in prosocial interactions was indicated by a more positive view of himself and others, and his interpersonal wishes.

Follow-Up Interviews

Change interview with Stuart. During the follow-up interview 12 weeks after ending treatment, Stuart reported three areas of change, including an improvement in that he felt more optimistic about his future; felt calmer, more cooperative with staff and less angry with the system; and was able to rebuild family relationships. Excerpts from the Change Interview are described here to reflect these different themes:

Thinking positively about the future. What changed?

Yeah, you know like . . . because I've been locked up for ten years so like it's a case of like the only way is to go out and start a new life and

get into something like a new job and that . . . just start your life again, really.

What helped?

I decided to like make a change in my life and get on with it... I drew pictures of like wanting my own business and my own house and a new family and stuff like that. So I drew pictures of like... the future, sort of thing, you know.

Feeling calmer, more cooperative with staff and less angry with the system. What changed?

 \dots I didn't really give a damn of what was going to happen and that, you know and as \dots like the penny sort of dropped and I sort of like got my head together. You know. I know where I want to be and I know what I want to do. The only way to do it is just to co-operate with people that are here to help you. \dots I think the staff and \dots relationships I have with the staff here have improved.

Well, I'm easier to get on with and, you know, I can . . . tolerate as much as I can sort of thing. . . . So yeah. I'm alright. . . . I'm not so

Core Conflictual Relationship Theme Interpersonal Schemas at the Start and End of Treatment

	Interpersonal schemas				
CCRT ^a	Session 1	Session 19			
Positive responses of others	Are open; expressive; disclosing; available	Are helpful; supportive; give to me; explain. Are happy; fun; glad; enjoy. Are accepting; not rejecting; approve of me; include me.			
Negative responses of others	Are not trustworthy; betray me; deceitful; dishonest. Hurt me; violent; treat me badly; punishing Are distant; unresponsive; unavailable. Are rejecting; disapproving; critical.	——————————————————————————————————————			
Positive responses of self	<u>-</u>	Feel self-confident; successful; proud; self-assured. Feel happy; excited; good; joy; elated. Like others; friendly. Feel accepted; approved of. Feel comfortable; safe; satisfied; secure.			
Negative responses of self	Oppose others; competitive; refuse/deny others; conflict. Dislike others; hate others.	Am uncertain; torn; ambivalent; conflicted.			
Wish	To be close to others; included; not to be left alone; be friends.	To be accepted; approved of; affirmed; to not be judged			
	To be independent ; self-reliant; autonomous; self-sufficient.	To be understood; comprehended; empathized with; seen accurately. To better myself; improve; get well.			

Note. CCRT = Core Conflictual Relationship Theme.

^a The results of each CCRT component has been reported in full, with the most dominant theme identified in bold.

bad-tempered . . . than I used to be. Because I was really angry. You know, I wasn't a nice person to be around . . . really.

What helped?

I think the therapy has helped quite a lot to be quite honest. . . . if you draw pictures and you see it from a bit of paper that you've drawn it on, then it makes a lot more sense than what it is in your head.

Rebuilding a relationship with others. What changed?

Well, $I\ldots I$ 'm back in touch with my father so, you know, that's a start and that. You all have arguments in families and you just get on with it, you know. So, I think \ldots my Dad's my Dad, you know. So I'm just going to try and \ldots like I said earlier, not rush into it but just take it as it goes, you know.

What helped?

"I did talk about my Dad in therapy . . . and my children really . . . just keeping in touch with them and, you know, to see how they are and that."

Well, I'm writing a bit more than I was and I'm trying to keep as much contact with them as I can until I get out and hopefully I can leave \dots go back to court and see my children. \dots I think if I hadn't had the therapy I wouldn't have bothered.

Change interview with named nurse. Stuart's identified changes were confirmed by observations from his named nurse. He had, for example, noticed his changed interactions with staff and his family: "Just his clinical presentation has been a lot more settled. He's been more willing to . . . to look into . . . insight into his problems and what have you. He's been more willing to engage with people." Stuart's sense of being less angry with the system was also supported by the nurse's observations:

I think his self-esteem has improved. I think there is still a feeling of being hard done by and injustice there, on his part. But it's not as obvious as what it was and that's evidenced by the fact that he's more willing to partake in things. Because, beforehand, he wasn't really interested because he thought he shouldn't be here, because it was unjustified for him to be here.

The named nurse described how Stuart had continued to make use of the support provided to him in the weeks following treatment and how he was able to rebuild his relationships with a family member, peers, and staff. Stuart's reduced levels of aggression and SUIs within the medium-secure hospital had lead the staff team to propose a transfer to a low-secure hospital within the next 8 weeks (20 weeks after completing treatment).

Discussion

Systematic single-case and/or evidence-based case studies can be particularly useful in generating hypotheses to be subjected to more rigorous testing (Kazdin, 2011). However, the inherent methodological challenges of this research design, including the lack of generalization, mediation, moderation, comparisons to no treatment or other treatments (Kazdin, 2001), means that future larger scale studies are needed. We believe that systematic single-case studies can be a helpful step toward the ongoing development of interventions and research. Further to this, systematic case studies, such as the case of Stuart, can assist in providing clinical insights that in turn assist in the

important development of further clinical research. Progression toward a well-designed, methodologically sound Randomized Controlled Trial (RCT) evaluating an intervention can provide improved patient outcomes if therapeutic effectiveness is demonstrated (Kendall, 2003).

Given Stuart's history of trauma, diagnosis of ASPD and borderline intellectual disabilities, patient characteristics that are routinely identified as being present in prisons and secure forensic settings, this case offers a welcome illustration of the possibility to engage and motivate patients to participate in future psychodynamic treatments. If therapies can be developed, adapted, and refined for complex clinical populations to target symptoms and interpersonal improvements, we anticipate potential benefits for many individuals treated within secure forensic care and also to the society at large. The support of prosocial behaviors within secure forensic settings is a desirable outcome for treatment, not least when negative styles of relating to others are expressed in aggressive behavior (Novaco & Taylor, 2008).

Whether or not patients receive a formal diagnostic label of ASPD, interpersonal problems are part and parcel of the lives and treatments of most forensic patients. From an interpersonal point of view, maladjusted individuals operate within a narrow scope of relationships that serves to reinforce their rigid models of self and other. Antisocial behaviors have, for example, been associated with trauma/attachment insecurity (Fisher, 2007) and with troubling underlying interpersonal expectations (i.e., lack of trust, lack of self-esteem, lack of self-concept, or lack of trust of others; Burke, Loeber, & Lahey, 2007). Moreover, research on interpersonal relationship themes suggests that certain populations accessing mental health or forensic services can experience other people and themselves as negative, often struggle with intimate relationships, and have done so for many years (Beretta et al., 2005; Drapeau, de Roten, & Körner, 2004).

The case of Stuart and his response to psychodynamic art psychotherapy, reported within this systematic single-case study, has contributed to the development of "interpersonal art psychotherapy" and an RCT feasibility study conducted in secure care (Hackett, Ashby, et al., 2017). Future development and testing of novel approaches, such as the one reported here, offers potential to widen the evidence base for psychotherapies and the treatment choice available to individuals within secure forensic care.

References

Abbing, A., Ponstein, A., van Hooren, S., de Sonneville, L., Swaab, H., & Baars, E. (2018). The effectiveness of art therapy for anxiety in adults: A systematic review of randomised and non-randomised controlled trials. *PLoS ONE*, *13*, e0208716. http://dx.doi.org/10.1371/journal.pone

Ackerman, P. L. (2017). Adult intelligence: The construct and the criterion problem. *Perspectives on Psychological Science*, *12*, 987–998. http://dx.doi.org/10.1177/1745691617703437

American Psychiatric Association. (2013). *Diagnostic and statistical man*ual of mental disorders (5th ed.). Arlington, VA: Author.

Arscott, K., Dagnan, D., & Kroese, B. S. (1998). Consent to psychological research by people with an intellectual disability. *Journal of Applied Research in Intellectual Disabilities*, 11, 77–83. http://dx.doi.org/10.1111/j.1468-3148.1998.tb00035.x

Bateman, A. W., Gunderson, J., & Mulder, R. (2015). Treatment of personality disorders. *The Lancet*, 385, 735–743.

Barber, J. P., Krakauer, I., Calvo, N., Badgio, P. C., & Faude, J. (1997).
Measuring adherence and competence of dynamic therapists in the treatment of cocaine dependence. *Journal of Psychotherapy, Practice*

- and Research, 6, 12–14. Retrieved from http://jppr.psychiatryonline.org/cgi/reprint/6/1/12
- Beretta, V., Roten, Y., Stigler, M., Drapeau, M., Fischer, M., & Despland, J. (2005). The influence of the patient's interpersonal schemas on early alliance building. Swiss Journal of Psychology, 64, 13–20. http://dx.doi.org/10.1024/1421-0185.64.1.13
- Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, 53, 371–399. http://dx.doi.org/10.1146/annurev.psych.53.100901.135233
- Blagys, M. D., & Hilsenroth, M. J. (2000). Distinctive Features of Short-Term Psychodynamic-Interpersonal Psychotherapy: A Review of the Comparative Psychotherapy Process Literature. *Clinical Psychology: Science and Practice*, 7, 167–188. http://dx.doi.org/10.1093/clipsy.7.2 .167
- Burke, J. D., Loeber, R., & Lahey, B. B. (2007). Adolescent conduct disorder and interpersonal callousness as predictors of psychopathy in young adults. *Journal of Clinical Child and Adolescent Psychology*, 36, 334–346.
- Callahan, C. D., & Barisa, M. T. (2005). Statistical process control and rehabilitation outcome: The single-subject design reconsidered. *Rehabilitation Psychology*, 50, 24–33. http://dx.doi.org/10.1037/0090-5550.50.1.24
- Cohen, J. (1988). Statistical power analysis for the behavioural sciences (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cuthill, F. M., Espie, C. A., & Cooper, S.-A. (2003). Development and psychometric properties of the Glasgow Depression Scale for people with a Learning Disability. Individual and carer supplement versions. *The British Journal of Psychiatry*, 182, 347–353. http://dx.doi.org/10 .1192/bip.182.4.347
- Dagnan, D., & Sandhu, S. (1999). Social comparison, self-esteem and depression in people with intellectual disability. *Journal of Intellectual Disability Research*, 43, 372–379. http://dx.doi.org/10.1046/j.1365-2788 .1999.043005372.x
- Davidson, K., Halford, J., Kirkwood, L., Newton-Howes, G., Sharp, M., & Tata, P. (2010). CBT for violent men with antisocial personality disorder. Reflections on the experience of carrying out therapy in MASCOT, a pilot randomized controlled trial. *Personality and Mental Health*, 4, 86–95.
- De Brito, S., & Hodgins, S. (2009). Antisocial personality disorder. In M. McMurran & R. Howard (Eds.), *Personality, personality disorder and risk of violence: An evidence-based approach*. West Sussex, UK: John Wiley and Sons.
- Derogatis, L. R. (2000). Brief Symptom Inventory 18 (BSI 18) administration, scoring, and procedures manual. Minneapolis, MN: NCS Pearson, Inc.
- Drapeau, M., de Roten, Y., & Körner, A. C. (2004). An exploratory study of child molesters' relationship patterns using the core conflictual relationship theme method. *Journal of Interpersonal Violence*, 19, 264–275. http://dx.doi.org/10.1177/0886260503260248
- Elliott, R. (2008). Client Change Interview Protocol (CSEP, 9/99). Retrieved from www.experientialresearchers.org/instruments/elliott/changei.html
- Elliott, R., Slatick, E., & Urman, M. (2001). Qualitative change process research on psychotherapy: Alternative strategies. In J. Frommer & D. L. Rennie (Eds.), *Qualitative psychotherapy research: Methods and methodologies* (pp. 69–111). Lengerich, Germany: Pabst Scientific Publishers
- Etchegoyen, R. H. (2005). Fundamentals of psychoanalytic technique. London, UK: Karnac Books.
- Fazel, S., & Danesh, J. (2002). Serious Mental Disorder in 23,000 Prisoners: A Systematic Review of 62 Surveys. *The Lancet*, 359, 545–550. http://dx.doi.org/10.1016/S0140-6736(02)07740-1

- Fisher, S. F. (2007). Neurofeedback, affect regulation and attachment: A case study and analysis of anti-social personality. *International Journal* of Behavioral Consultation and Therapy, 3, 109–116.
- Franke, G. H., Jaeger, S., Glaesmer, H., Barkmann, C., Petrowski, K., & Braehler, E. (2017). Psychometric analysis of the brief symptom inventory 18 (BSI-18) in a representative German sample. BMC Medical Research Methodology, 17, 14. http://dx.doi.org/10.1186/s12874-016-0283-3
- Gussak, D. (2007). The effectiveness of art therapy in reducing depression in prison populations. *International Journal of Offender Therapy and Comparative Criminology*, 51, 444–460. http://dx.doi.org/10.1177/030 6624X06294137
- Hackett, S. (2012). Art psychotherapy with adult offenders who have intellectual and developmental disabilities. Newcastle upon Tyne, United Kingdom: University of Northumbria.
- Hackett, S. (2016). Art psychotherapy with an adult with autistic spectrum disorder and sexually deviant dreams: A single-case study including the client's responses to treatment. In K. Rothwell (Ed.), Forensic arts therapies: Anthology of practice and research. London (pp. 145–162), United Kingdom: Free Association Books Limited.
- Hackett, S., Ashby, L., Parker, K., Goody, S., & Power, N. (2017). U. K. art therapy practice-based guidelines for children and adults with learning disabilities. *International Journal of Art Therapy*, 22, 84–94. http://dx.doi.org/10.1080/17454832.2017.1319870
- Hackett, S., Porter, J., & Taylor, J. L. (2013). The core conflictual relationship theme (CCRT) method: Testing with adult offenders who have intellectual and developmental disabilities. Advances in Mental Health and Intellectual Disabilities, 7, 263–271. http://dx.doi.org/10.1108/AMHID-06-2013-0039
- Hackett, S. S., Taylor, J. L., Freeston, M., Jahoda, A., McColl, E., Pennington, L., & Kaner, E. (2017). Interpersonal art psychotherapy for the treatment of aggression in people with learning disabilities in secure care: A protocol for a randomised controlled feasibility study. *Pilot and Feasibility Studies*, 3, 42. http://dx.doi.org/10.1186/s40814-017-0186-z
- Hart, R. R. (1978). Therapeutic effectiveness of setting and monitoring goals. *Journal of Consulting and Clinical Psychology*, 46, 1242–1245. http://dx.doi.org/10.1037/0022-006X.46.6.1242
- Hatton, C. (2002). Psychosocial interventions for adults with intellectual disabilities and mental health problems: A review. *Journal of Mental Health*, 11, 357–375. http://dx.doi.org/10.1080/09638230020023732
- Kazdin, A. E. (2001). Almost clinically significant (p < .10): Current measures may only approach clinical significance. *Clinical Psychology: Science and Practice*, 8, 455–462. http://dx.doi.org/10.1093/clipsy/8.4 455
- Kazdin, A. E. (2011). Single-case research designs: Methods for clinical and applied settings (2nd ed.). New York, NY: Oxford University Press.
- Kellett, S., Beail, N., Newman, D. W., & Hawes, A. (2004). The factor structure of the Brief Symptom Inventory: Intellectual disability evidence. *Clinical Psychology and Psychotherapy*, 11, 275–281. http://dx .doi.org/10.1002/cpp.410
- Kellett, S., Beail, N., Newman, D. W., & Mosley, E. (1999). Indexing psychological distress in people with an intellectual disability: Use of the symptom checklist-90-R. *Journal of Applied Research in Intellectual Disabilities*, 12, 323–334. http://dx.doi.org/10.1111/j.1468-3148.1999 .tb00088.x
- Kendall, J. M. (2003). Designing a research project: Randomised controlled trials and their principles. *Emergency Medicine Journal*, 20, 164–168. http://dx.doi.org/10.1136/emj.20.2.164
- Kiresuk, T. J., & Sherman, R. E. (1968). Goal attainment scaling: A general method for evaluating comprehensive community mental health programs. *Community Mental Health Journal*, 4, 443–453. http://dx.doi.org/10.1007/BF01530764
- Kratochwill, T. R., & Levin, J. R. (1992). Single-case research design and analysis. Hillside, NJ: Erlbaum.

- Lenz, A. S. (2013). Calculating effect size in single-case research: A comparison of nonoverlap methods. *Measurement and Evaluation in Counseling and Development*, 46, 64–73. http://dx.doi.org/10.1177/ 0748175612456401
- Loranger, A. W. (1999). *International Personality Disorder Examination* (*IPDE*). Odessa, FL: Psychological Assessment Resources.
- Luborsky, L. (2003). The Relationship Anecdote Paradigm (RAP) interview as a versatile source of narratives. In L. Luborsky & P. Crits-Christoph (Eds.), *Understanding transference: The core conflictual relationship theme method* (2nd ed., pp. 109–120). Washington, DC: American Psychological Association.
- Marin-Avellan, L. E., McGauley, G. A., Campbell, C. D., & Fonagy, P. (2014). The Validity and Clinical Utility of Structured Diagnoses of Antisocial Personality Disorder With Forensic Patients. *Journal of Personality Disorders*, 28, 500–517. http://dx.doi.org/10.1521/pedi_2014_28_129
- McCallum, R. S. (2017). Context for nonverbal assessment of intelligence and related abilities. In R. S. McCallum (Ed.), *Handbook of nonverbal* assessment (pp. 3–19). Cham, Switzerland: Springer International Publishing. http://dx.doi.org/10.1007/978-3-319-50604-3_1
- Meloy, J. R., & Yakeley, J. (2010). Treatment of cluster B disorders: Antisocial personality disorder. In C. J. Fonagy & P. Gabbard (Eds.), Psychodynamic Psychotherapy for Personality Disorders: A Clinical Handbook (pp. 349–378). Washington, DC: American Psychiatric Publishing.
- Mindham, J., & Espie, C. A. (2003). Glasgow Anxiety Scale for people with an Intellectual Disability (GAS-ID): Development and psychometric properties of a new measure for use with people with mild intellectual disability. *Journal of Intellectual Disability Research*, 47, 22–30. http://dx.doi.org/10.1046/j.1365-2788.2003.00457.x
- Mottram, P. G. (2007). HMP Liverpool, Styal and Hindley Study Report. Liverpool, UK: University of Liverpool.
- Naumburg, M. (2001). Spontaneous art in education and psychotherapy. American Journal of Art Therapy, 40, 46–63. Retrieved from https://www.researchgate.net/publication/292012814_Spontaneous_art_in_education_and_psychotherapy
- National Collaborating Centre for Mental Health. (2010). Antisocial Personality Disorder: The NICE guidelines on treatment management and prevention. London, UK: British Psychological Society & Royal College of Psychiatrists.
- National Institute for Clinical Excellence (NICE). (2009). Schizophrenia: Core interventions in the treatment and management of schizophrenia in adults in primary and secondary care (updated ed.). London, United Kingdom: NICE.
- National Institute for Clinical Excellence (NICE). (2015). Depression in children and young people: Identification and management (NICE Clinical Guideline CG28). London, United Kingdom: NICE.
- National Institute for Clinical Excellence (NICE). (2016a). *Mental health problems in people with learning disabilities: Prevention, assessment and management*. London, United Kingdom: NICE.
- National Institute for Clinical Excellence (NICE). (2016b). Psychosis and schizophrenia in children and young people: Recognition and management (NICE Clinical Guideline CG115). London, United Kingdom: NICE.
- Novaco, R. W., & Taylor, J. L. (2008). Anger and assaultiveness of male forensic patients with developmental disabilities: Links to volatile parents. *Aggressive Behavior*, 34, 380–393. http://dx.doi.org/10.1002/ab.20254
- Oakland, J. S. (2008). Statistical process control (6th ed.). Oxford, United Kingdom: Butterworth-Heinemann. http://dx.doi.org/10.1016/B978-0-7506-6962-7.50018-3
- Ogloff, J. R., Talevski, D., Lemphers, A., Wood, M., & Simmons, M. (2015). Co-occurring mental illness, substance use disorders, and antisocial personality disorder among clients of forensic mental health

- services. *Psychiatr Rehabil J*, 38, 16–23. http://dx.doi.org/10.1037/prj0000088
- Oliver, P. C., Crawford, M. J., Rao, B., Reece, B., & Tyrer, P. (2007). Modified Overt Aggression Scale (MOAS) for people with intellectual disability and aggressive challenging behaviour: A reliability study. *Journal of Applied Research in Intellectual Disabilities*, 20, 368–372. http://dx.doi.org/10.1111/j.1468-3148.2006.00346.x
- Porter, J., & Hackett, S. S. (2009, March). Evaluation of a novel manualised group training package underpinned by the core conflictual relationship theme across disciplines in a medium-low secure service for offenders with intellectual disabilities. Paper presented at the International Association for Forensic Psychotherapy: 18th Annual Conference: Ruptures and relations, group dynamics and forensic psychotherapy, Konstanz, Germany.
- Rosenberg, M. (1982). Self conceptions: Configurations of content. In M. Rosenberg & H. B. Kaplan (Eds.), Social psychology of the self-concept (pp. 110–123). Wheeling, IL: Davison Inc.
- Rosenberg, M., Schooler, C., & Schoenbach, C. (1989). Self-esteem and adolescent problems; modelling reciprocal effects. *American Sociological Review*, 54, 1004–1016. http://dx.doi.org/10.2307/2095720
- Rothwell, K. (2008). What anger? Working with acting-out behaviour in a secure setting. In M. Liebmann (Ed.), *Art therapy and anger* (pp. 117–133). London, United Kingdom: Jessica Kingsley.
- Rothwell, K. (2016). Forensic arts therapies: Anthology of practice and research. London, United Kingdom: Free Association Books Limited.
- Rothwell, K., & Hackett, S. (2018). Violent acts and creative responses: Resilience building through art psychotherapy. In J. Adlam, T. Kluttig, & B. X. Lee (Eds.), Violent states and creative states: From the global to the individual. Volume II—Human violence and creative humanity (pp. 195–208). London, United Kingdom: Jessica Kingsley Publishers.
- Schouten, K. A., de Niet, G. J., Knipscheer, J. W., Kleber, R. J., & Hutschemaekers, G. J. (2015). The effectiveness of art therapy in the treatment of traumatized adults: A systematic review on art therapy and trauma. *Trauma, Violence and Abuse*, 16, 220–228. http://dx.doi.org/10.1177/1524838014555032
- Scruggs, T. E., & Mastropieri, M. A. (1998). Summarizing single-subject research. Issues and applications. *Behavior Modification*, 22, 221–242. http://dx.doi.org/10.1177/01454455980223001
- Shedler, J. (2010). The efficacy of psychodynamic psychotherapy. *Am Psychol*, 65, 98–109. http://dx.doi.org/10.1037/a0018378
- Skodol, A. E. (2012). Personality Disorders in DSM-5. Annual Review of Clinical Psychology, 8, 317–344. http://dx.doi.org/10.1146/annurevclinpsy-032511-143131
- Smeijsters, H., & Cleven, G. (2006). The treatment of aggression using arts therapies in forensic psychiatry: Results of a qualitative inquiry. *The Arts in Psychotherapy*, 33, 37–58. http://dx.doi.org/10.1016/j.aip.2005.07.001
- Smeijsters, H., Kil, J., Kurstjens, H., Welten, J., & Willemars, G. (2011). Arts therapies with young offenders in secure care—A practice-based research. *The Arts in Psychotherapy*, *38*, 41–51. http://dx.doi.org/10.1016/j.aip.2010
- Sunderaraman, P., Zahodne, L., & Manly, J. (2016). A commentary on "Generally representative is representative of none: Pitfalls of IQ test standardization in multicultural settings" by A. B. Shuttleworth-Edwards. *The Clinical Neuropsychologist*, 30, 999–1005. http://dx.doi .org/10.1080/13854046.2016.1211321
- Tate, R. L., Perdices, M., Rosenkoetter, U., McDonald, S., Togher, L., Shadish, W., . . . Vohra, S. (2016). The Single-Case Reporting Guideline in Behavioural Interventions (SCRIBE) 2016: Explanation and elaboration. *Archives of Scientific Psychology*, 4, 10–31. http://dx.doi.org/10.1037/arc0000027
- Uttley, L., Stevenson, M., Scope, A., Rawdin, A., & Sutton, A. (2015). The clinical and cost effectiveness of group art therapy for people with non-psychotic mental health disorders: A systematic review and cost-

- effectiveness analysis. *BMC Psychiatry*, 15, 151. http://dx.doi.org/10.1186/s12888-015-0528-4
- Wall, J. M., Kwee, J. L., Hu, M., & McDonald, M. J. (2017). Enhancing the hermeneutic single-case efficacy design: Bridging the researchpractice gap. *Psychotherapy Research*, 27, 539–548. http://dx.doi.org/ 10.1080/10503307.2015.1136441
- Wechsler, D. (2008). Wechsler Adult Intelligence Scale–Fourth edition administration and scoring manual. San Antonio, TX: Pearson.
- Willner, P. (2005). The effectiveness of psychotherapeutic interventions for people with learning disabilities: A critical overview. *Journal of Intellectual Disability Research*, 46, 73–85.
- Yu, Y. Z., Yu Ming, C., Yue, M., Hai Li, J., & Ling, L. (2016). House Tree Person drawing therapy as an intervention for prisoners' prerelease anxiety. *Social Behavior and Personality*, 44, 987–1004. http://dx.doi.org/10.2224/sbp.2016.44.6.987
- Zabora, J., Brintzenhofeszoc, K., Jacobsen, P., Curbow, B., Piantadosi, S., Hooker, C., . . . Derogatis, L. (2001). A new psychosocial screening instrument for use with cancer patients. *Psychosomatics*, 42, 241–246.

Received September 11, 2018
Revision received March 29, 2019
Accepted March 30, 2019