

# Northumbria Research Link

Citation: Jayne, Kelly, Hackett, Simon and Hill, Michael (2021) Art Psychotherapy for adults who have experienced complex trauma: An international survey. Perspectives on Trauma, 1 (2). pp. 33-43. ISSN 2635-0807

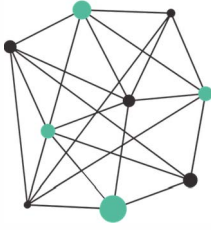
Published by: Complex Trauma Institute

URL: <https://www.complextraumainstitute.org/ctijournal>  
<<https://www.complextraumainstitute.org/ctijournal>>

This version was downloaded from Northumbria Research Link:  
<http://nrl.northumbria.ac.uk/id/eprint/48722/>

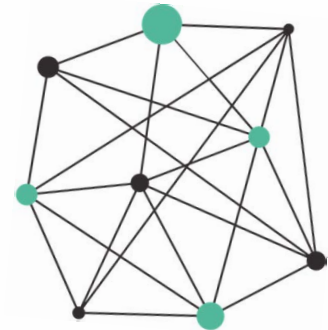
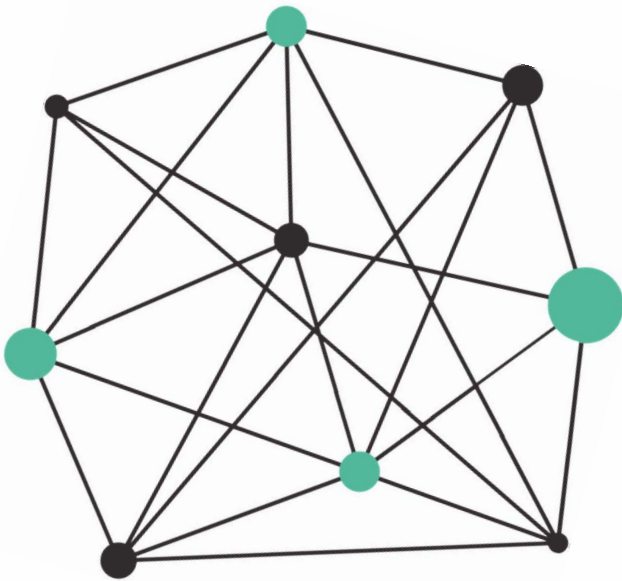
Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)



# *Perspectives on Trauma*

The Journal of the Complex Trauma Institute



# Content

---

What is complex trauma? Part 2: Working with the body. Michael Guilding	1-11
Nightmares, trauma and the orthodoxy of narrative Robert Davies, Tom Stoneham & Dzmitry Karpuk	12-32
Art Psychotherapy for adults who have experienced complex trauma: An international survey Kelly Jayne, Simon Hackett & Michael Hill	33-43
Understanding help-seeking behaviour of adults experiencing recurrent isolated sleep paralysis: A qualitative analysis using the theory of planned behaviour Máire McGeehan, Michelle Thomas & Jonathan Egan	44-56

# Art Psychotherapy for adults who have experienced complex trauma: An international survey

Kelly Jayne, Simon Hackett and Michael Hill

---

## **Abstract**

*Adults who have complex trauma can experience mental ill health that invariably results in significant restrictive impacts upon their lives. The purpose of this international survey was to identify what Art Psychotherapy practitioners consider to be the important aspects of treatment supporting recovery and healing for this client group. International Art Psychotherapists treating adults with complex trauma were invited to answer four categories of questions: participant information, environment, practical/clinical components, and additional information. Whilst there is a good evidence base for the uses and effectiveness of Art Psychotherapy in general, there has been little causal analysis of which mechanisms and contexts of Art Psychotherapy can prove effective. The survey data identified that expert practitioners consider positive therapeutic impact to be associated with specific art medium, the therapeutic environment, and clinically informed approaches.*

## **Introduction**

This article first describes Art Psychotherapy and complex trauma to contextualise the international survey. It then reports the recommended treatments for adults who have experienced complex trauma and the evidence for the use of Art Psychotherapy when used to treat this client group. The aims of the study will be outlined, including a description of the method used, the questionnaire, respondent information, environment, practice components, and additional information. The data analysis will then be explained and reported, followed by a discussion of the findings.

## **Art Psychotherapy**

In 2019, the World Health Organisation (WHO) reported that,

(...) global evidence on the role of the arts in improving health and well-being, with a specific focus on the WHO European Region. Results from over 3000 studies identified a significant role for the arts in the prevention of ill health, promotion of health, and management and treatment of illness across the lifespan. (Fancourt, 2019, p.4)

Art Psychotherapy uses art media as its primary mode of communication. People referred to an Art Psychotherapist need not have experience or art skills (BAAT, 2014). The Art Psychotherapist is not primarily concerned with making an aesthetic assessment of the person's image. The overall aim is to enable a person to develop and grow on a personal level using art materials in a safe and facilitating environment. Art Psychotherapists have a considerable understanding of art techniques and are proficient in using materials to facilitate non-verbal communication.

---

Metaphors, symbols, and the expressive use of art materials combine to create a rich language for self-reflection and the opportunity to translate strong emotions into a pictorial expression that can be visceral in its intensity. Differences in scale or perspective, tone, and colour, along with the use of metaphors, allow for a potentially sophisticated articulation of thoughts and feelings (Hogan, 2016).

Art Psychotherapy integrates Psychotherapeutic techniques with the creative process. In addition to the process of making and reflecting upon one's image or how one makes an image, other components of Art Psychotherapy such as attachment, the therapeutic relationship, the environment, theoretical orientations, duration of treatment, location of sessions, and a persons' intentions, contribute to how Art Psychotherapy works and how a person interacts with the process.

When a person engages in the process of seeing or making an image and is witnessed within a therapeutic and safe environment whilst engaging in such processes, changes occur psychologically, neurologically, biologically and physiologically. Research shows that visual art interventions stabilise an individual by reducing distress, increasing self-reflection and self-awareness, altering behaviour and thinking patterns, and normalising heart rate, blood pressure, and cortisol levels. Cortisol is the hormone directly associated with stress (Bolwerk, 2014). Whilst there is a reasonable evidence base for the uses and effectiveness of Art Psychotherapy in general (Regev, 2018), there has been little causal analysis of which mechanisms and contexts of Art Psychotherapy can prove effective for people who have experienced complex trauma.

### **Complex Psychological Trauma**

The International Classification of Disease (ICD-11) diagnosis reports Complex Post Traumatic Stress Disorder (C-PTSD), as being 'a disorder that may develop following exposure to an event or series of events of an extremely threatening or horrific nature, most commonly prolonged or repetitive events from which escape is difficult or impossible' (WHO, 2018). All diagnostic requirements for Post-Traumatic Stress Disorder (PTSD) are met. In addition, C-PTSD is characterised by severe and persistent problems as feeling diminished, defeated, or worthless, accompanied by feelings of shame, guilt, or failure related to the traumatic event and difficulties in sustaining relationships and feeling close to others. Regier (2019) reports that these symptoms cause significant impairment in personal, family, social, educational, occupational, or other important areas of functioning.

It is important to note that PTSD is more often associated with other psychiatric disorders than the sole diagnosis. Several mental health diagnoses can be considered as post-traumatic (Nutt, 2001). Because the diagnosis or categorisation of the symptoms of mental illness of a person who has experienced complex trauma can be complex, only the term, complex trauma, is used in the survey without specific diagnostic terms.

### **Treatment for Complex Trauma**

The National Institute for Health and Care Excellence (NICE) guidelines currently recommend Cognitive Behavioural Therapy (CBT) and Eye Movement Desensitisation and Reprocessing (EMDR) as the psychological treatments for Post-Traumatic Stress Disorder. People who have experienced complex trauma may develop a range of mental health difficulties. It is important to note that the common disorders that follow a traumatic event or a series of complex traumatic events have a large body of evidence indicating that certain interventions can be highly beneficial. Exposure therapies, including Prolonged Exposure Therapy, have also been proven efficacious in many Randomised Control Trials, and thus have been recommended as a first-line treatment for PTSD in several treatment guidelines (Foa, Keane, Friedman & Cohen, 2009). The design of this survey considered questions that would focus on the treatment of the trauma, therefore the impact and presenting symptoms and issues.

## **Evidence for Art Psychotherapy and Trauma**

Art Psychotherapy is often applied in clinical settings offering PTSD treatment. Qualitative research shows consensus among experts on the core elements of Art Psychotherapy in accessing traumatic memories and emotions, increasing emotional control, strengthening self-esteem, and a sense of autonomy (Collie et al., 2006). There are indications that Art Psychotherapy can effectively reduce PTSD symptoms such as avoidance, arousal, re-experiencing, and reduce depression (Schouten et al., 2015). A systematic review (Van Lith, 2016) aimed to identify and connect what Art Psychotherapists know and what they do when they support people who have mental health difficulties. The review reports that research undertaken between 1994 and 2014 was examined to ascertain the Art Psychotherapy approaches applied when working with people who have mental health difficulties. Furthermore, to identify how the approaches were used within clinical mental health systems. Thirty articles were identified which demonstrated an Art Psychotherapy approach to a mental health issue. From the search, the review reports four identified groups of diagnostic terms: depression, borderline personality disorder (BPD), schizophrenia, and PTSD.

For Art Psychotherapy approaches practised with people who have PTSD, seven articles were identified that explored specific approaches by providing clinical implications. Although trauma may be a significant contributing factor to diagnostic outcomes, our focus here is on the studies directly about PTSD. Namely, the group Art Psychotherapy model (Backos & Pagon, 1999), the Psychoanalytic Art Psychotherapy approach (Buck, 2009), the Neurobiological Art Psychotherapy model (Gantt & Tinnin, 2009), the Task-oriented Art Psychotherapy approach (Rankin & Taucher, 2003), the Cognitive Behavioural Intervention Art Psychotherapy approach (Sarid & Huss, 2010), the Art Psychotherapy Trauma Protocol (Talwar, 2007) and the Art Psychotherapy with Eye Movement Desensitisation and Reprocessing through bilateral stimulation (Tripp, 2007). All articles reported benefits from each approach.

Buk's (2009) article reported that, through the exploration of mutative actions of psychoanalytically informed Art Psychotherapy intervention, the art-making process enabled the client to become conscious of and verbally process dissociated memories involving the threat of sexual abuse. The Gantt and Tinnin (2009) literature review article reported that Art Psychotherapy techniques utilise right brain processes by activating limbic structures in the brain involved in processing fear (trauma). The Rankin and Taucher (2003) article provides an outline for how to use a task-orientated approach to Art Psychotherapy. The six identified basic tasks are safety planning, self-management, telling the trauma story, grieving losses, self-concept and world view revision, and self/relational development. Their article (Rankin & Taucher, 2003) reports exploring meaning through the identified tasks. The Sarid and Huss (2010) extensive literature review article illustrates the benefits of Cognitive Behavioural Art Psychotherapy. It reports, by using this approach, new connections and pathways can be created between the physical, emotional, and cognitive components of trauma memory, resulting in decreased stress levels which enables the restricting of fragmented traumatic memories into more coherent positive memories. The Talwar (2007) article proposes an Art Psychotherapy trauma protocol. It reports the integration of cognitive, emotional, and physiological levels of trauma by combining EMDR, bilateral art-making, and painting. It reports that this approach helps to process non-verbal traumatic memories, creates sensory awareness, sensorimotor experiences, and promotes proprioception. The Tripp (2007) article also explores the approach of Art Psychotherapy and EMDR. Associations of traumatic memory are brought to conscious awareness through drawing. As new information is accessed, affective material is metabolised and integrated, leading to the transformation of traumatic memory and an adaptive resolution of the trauma.

In addition, a pilot study, 'Trauma-Focused Art Psychotherapy in the Treatment of Post-traumatic Stress Disorder' (Schouten, 2018) tested the feasibility and applicability of trauma-focused Art Psychotherapy in clinical practice. Participants were adults with PTSD due to multiple and prolonged traumatisations, such as patients with early childhood traumatisations and refugees and asylum seekers from different cultural backgrounds. Patient reports showed satisfaction and improvements after

treatment. In addition, some patients reported decreased PTSD symptom severity. Schouten (2018) states that Art Psychotherapy might help to decrease avoidance by providing concretised forms of representation, either visual or tactile, in visual artworks. These changes appear to be consistent with Collie and colleagues' findings (Collie et al., 2006), who reports that relaxation in Art Psychotherapy reduces arousal and offers safe and gradual access to traumatic memories, thus enabling the patient to overcome avoidance and to endure exposure.

### **Aims of the Study**

The Art Psychotherapy literature identifies a positive influence upon trauma symptoms such as depression and anxiety, improved emotional well-being, and increased confidence in expressing trauma experiences. However, there is little evidence of what specific contexts and mechanisms of Art Psychotherapy treatment cause certain impacts. This survey aimed to capture what international expert practitioners consider to be important factors in Art Psychotherapy to enhance positive outcomes for clients who have experienced complex trauma.

### **Method**

The software used was Online Surveys, formally named Bristol Online Surveys, to create and implement the survey. The online survey tool was originally designed for academic research, education and public sector organisations within the United Kingdom and is compliant with General Data Protection Regulations (GDPR).

This study employed an international survey process, a research method used for collecting data from a predefined group of respondents. The survey's focus was to gain information and insights from International Art Psychotherapists concerning four categories of questions around the Art Psychotherapy intervention when used to treat adults who have complex trauma. The design and structure of the questionnaire were informed by current literature, as previously outlined, and expanded further on current findings.

Potential respondents were invited to complete the survey via e-bulletins with Art Psychotherapy associations around the world. Some associations include the British Association of Art Therapy, The American Art Therapy Association and Hong Kong Art Therapy Association. Participation criteria was exclusive for qualified and practising Art Psychotherapists working with adults who have experienced complex psychological trauma. All questions were carefully constructed to associate with a variety of considerations relating to Art Psychotherapy practice. The four categories of questions within the survey were: participant information, environment, practice and clinical components, and additional information offering respondents more space to respond further to the questions. The survey was live from 25th October 2019 for one month. Respondents were offered a data report on completion of the analysis.

### **The Questionnaire**

The questionnaire had 21 questions and was designed to capture practitioners' views about the impact of the primary contexts and mechanisms of Art Psychotherapy practice. The questions were organised into four categories. The first asked about their participants, their gender, age, location, duration of practice as an Art Psychotherapist and work sector. The second focused on the environment where the sessions occur, including accessibility, aesthetics and decoration of the therapy room and surrounding spaces, and comfort. The third asked about the practical and clinical mechanisms, including art materials, the length, duration and time of the sessions, theoretical orientations, combined therapeutic approaches, and exhibitions of artworks. The questionnaire combined open-ended questions and multiple-choice questions with predefined answers offering respondents the possibility to choose and rank among several options or grade on a five point scale with 'significantly detrimental impact' to 'significant positive impact'. The ending category for additional information offered an optional space to elaborate on the answers.

### Respondent Information

There were 23 female and 4 male respondents, all meeting the survey inclusion criteria. All survey respondents were anonymised, and identifiable personal questions were not asked. The geographical locations of the respondents were broken down into five locations. England; Scotland; Europe; the USA and the rest of the world.

Most respondents were qualified for more than 10 years, with only one respondent qualified for under 5 years. The respondent Art Psychotherapists worked in a variety of sectors, with some selecting more than one. For analysis purposes, the sectors were broken down into two categories: The National Health Service (NHS) or Voluntary/Private sector.

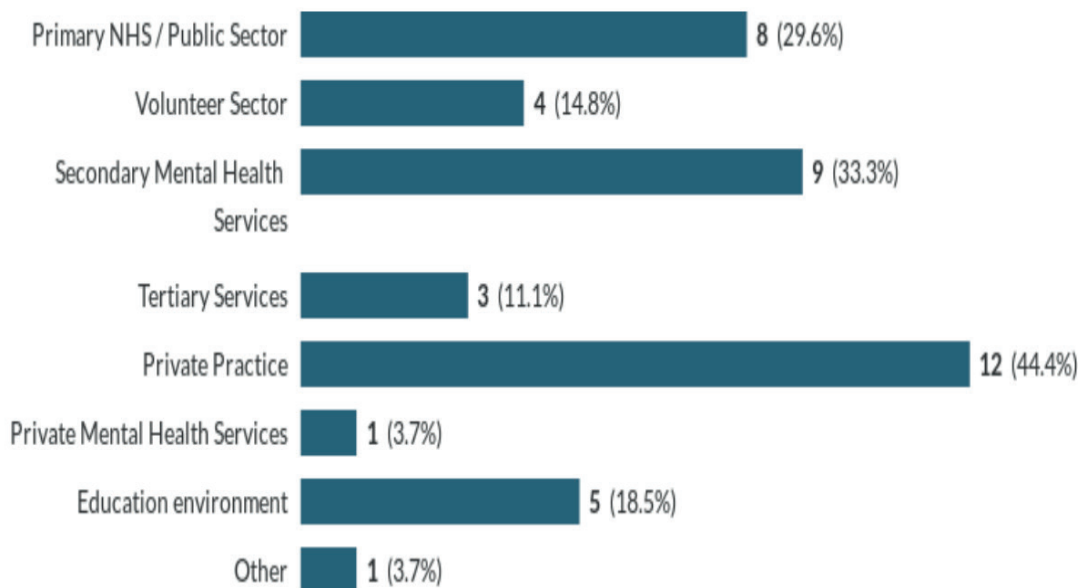


Figure 1 - Percentage of respondents who selected each place of practice option.

### Environment

81.4% of participants reported some or significantly positive impact on treatment outcomes if the location of treatment is on a bus or train route. Data from this survey also shows that the importance of the décor of the therapy room or surrounding spaces can have a considerable impact on therapeutic outcomes. Again, 84% of respondents reported either some or a significantly positive impact. 79.2% of respondents reported some or significantly positive impact when asked to consider sensory environmental factors.

### Practice Components

When considering the amount of time spent on a waiting list and how this can impact the effectiveness of Art Psychotherapy treatment, the survey data reported a clear definition that there would be no detrimental impact without a waiting list. In contrast to these findings, the opposite effect is apparent for a waiting list of 3 months where 81.5% of respondents reported some or significant detrimental impact on therapeutic outcomes. The mental health charity Mind (2013) states that,

The Health and Social Care Act (2012) put mental health on a par with physical health, and the government reiterated this commitment through its current mental health strategy (Mind, 2013, pg. 4).



Furthermore, the current Mandate to NHS England requires NHS England to,

(...) achieve parity of esteem between mental and physical health. As a first step towards achieving this commitment, timely and appropriate access to psychological therapies was agreed to be available in the NHS to all who need them. (Mind, 2013 pg.4).

However, a question arises here about the branding of Art Psychotherapy as it is unknown whether it is a talking therapy.

The current recommended waiting time is 28 days. Mind released findings from their research (2010) reporting that one in ten people have been waiting over a year to receive treatment; over half have been waiting over three months to receive treatment; around 13 percent of people are still waiting for their first assessment for psychological therapy. Their report states, 'Timely access to mental health services is a critical issue. Considerable harm can be caused by long waits for psychological therapies, which can exacerbate mental health problems and lead to a person experiencing a mental health crisis.' (Mind, 2010). Furthermore, British Medical Association research found 3700 patients waited more than six months for talking therapies in 2017 and 1500 for longer than a year, according to Freedom of Information requests. However, this data grossly underestimates the full scale of the problem as nine in ten clinical commissioning groups (CCG's), keep no records of waiting times (Cooper, 2018). The findings from this survey reiterate the detrimental impact of long waiting times for treatment.

The survey data reported slight preference for sessions being held in afternoons, weekends, or evenings for positive therapeutic outcomes, with mornings being the least desirable, although the definition was slight. Regarding the amount of Art Psychotherapy sessions allocated to clients/patients, the survey data reported a distinct shift in impact. For example, almost half of participants reported some or significant detrimental impact on the therapeutic outcome for an allocation of 12 (limited) sessions, reducing to no detrimental impact when clients/patients were offered 12 – 46 Art Psychotherapy sessions. The number of allocated sessions also has an impact on attendance. The survey data reports an improvement in attendance as the allocated number of sessions increase, with the most effective being 12 – 46 sessions. 'Figure 5' shows the reported therapeutic and attendance impacts to the amount of allocated Art Psychotherapy sessions.

Amount of sessions	Detrimental (some and significant) impact	Neither impact	Positive (some and significant) impact	Reduced/non-attendance	Improved attendance
Up to 6 sessions	29.8%	23.1%	46.1%	19.2%	19.2%
Up to 12 sessions (restricted)	48.1%	11.1%	40.7%	18.5%	7.4%
12 sessions (can extend)	14.8%	11.1%	74%	11%	40.7%
12 – 46 sessions	0%	7.4%	92.6%	7.4%	40.7%
Unlimited sessions	18.5%	14.8%	66.7%	18.5%	40.7%

Figure 5 - Therapeutic and Attendance Impact resulting from Quantity of Allocated Art Psychotherapy Sessions

This survey reported the three most effective art mediums used to treat adults who have psychological complex trauma to be painting with brushes, using clay or plasticine and pastels (including oil) or charcoal. The three least effective mediums reported are portraiture, photography, and using coloured paper. The survey data also reported that joint image-making, mirroring, free association and non-directive creative tools were reported as having the most positive impact when incorporated as part of Art Psychotherapy practice.

The questionnaire asked respondents which mechanisms from those identified within a systemic review exploring Art Psychotherapy when used to treat adults who have anxiety (Adding et al, 2018), had the most significant impact within their own practice. Respondents reported the mechanism 'a positive and containing therapeutic relationship' as being the most effective for positive therapeutic outcomes.

Additionally, 40.7% of participants reported that they enable opportunities for their patients/clients to exhibit their artworks and that it has a positive impact on the therapeutic process (90%); improves confidence and self-esteem (100%); enables empowerment (100%) and it increases opportunities (90%).

### **Additional Information**

Survey participants were invited to expand on their answers and comment on what they thought were the main components of Art Psychotherapeutic practice that supported recovery and healing for adults with complex trauma. Emphasis was placed on the art materials being the means to verbalise a person's distress, feeling safe within the therapeutic relationship, the provision of psychoeducation, consistency of the Art Psychotherapist and the sessions, and using body-based approaches including sensory materials.

### **Data Analysis**

All quantitative data analysis was undertaken using the Software Package for the Social Sciences (SPSS; Version 26, IBM Inc.; Armonk, NY, USA).

The level of statistical significance was predetermined as a p-value of <0.05.

27 practitioners responded to the International Survey: 19 were UK-based therapists and eight were based in the 'rest of the world'; 23 were female and four male; 18 had practised for 10 years or longer whilst the remaining nine had practised for less than 10 years; 10 were NHS-based whilst 14 were practising in the private and voluntary sectors (n.b. there were four non-responses to this question).

After initial descriptive analysis of variables, Kruskal-Wallis tests were used to determine statistically significant differences ( $p < 0.05$ ) in response to the survey questions between key grouping variables, e.g. geographical location of practice, length of professional practice, sector of practice, and gender of the respondent. Only one grouping variable – that of the length of practice yielded significant differences. Those in practice for over ten years favoured:

- Extended assessment – up to 6 weeks ( $u = 109.50, p < 0.033$ );
- Up to 12 sessions with the possibility to extend ( $u = 121.00, p < 0.041$ ); and,
- The statement that the latter had a positive effect on attendance ( $u = 121.00, p < 0.041$ ).

The Kruskal–Wallis test is a statistical method for ascertaining the significance of differences between the median values for K+ sub-groups from within the same sample: sometimes referred to as 'ANOVA by Ranks', this is the test of choice when analysing ordinal data such as that generated by a survey instrument.

Because no other consistent patterns of difference emerged based upon grouping variables, a hierarchical cluster analysis was undertaken to identify patterns of similarity and difference of response within the data. Yim and Ramdeen (2015) identified that, 'Cluster analysis refers to a class of data reduction methods used for sorting cases, observations, or variables of a given dataset into homogeneous groups that differ from each other'.

Cases (individual participants) are clustered based upon chosen characteristics – in this instance, similarity in the way they scored responses in the main domains of the survey instrument – and not any of the grouping variables outlined above. Cases in each specific cluster share many characteristics and are dissimilar to those not belonging to that cluster. A two-cluster solution proved to be the most parsimonious, and 12 respondents were classified as in cluster 1 whilst 11 were in cluster 2 (n.b. 4 respondents were excluded from the analysis based on non-response). When the clusters were cross-tabulated with original grouping variables, only one significant pattern emerged – namely that all male respondents were classified in cluster 1 ( $\chi^2 = 4.439$ ,  $p < 0.035$  with 1 df). Otherwise, the clusters differed on the following basis:

- Those classified in cluster 1 favoured afternoon appointments ( $u=33.00$ ;  $p < 0.044$ );
- Those classified in cluster 1 were more likely to identify aesthetic aspects of the therapeutic environment as significant in determining treatment outcomes such as the architecture of the building ( $u=14.00$ ;  $p < 0.001$ ), and décor ( $u=31.00$ ;  $p < 0.032$ ); and,
- Those classified in cluster 1 favoured providing more than twelve sessions to achieve a positive therapeutic effect ( $u=6.00$ ;  $p < 0.000$ ).

## Discussion

Contributing to existing research on Art Psychotherapy and the treatment of complex trauma, this study identified components and contexts primarily associated with recovery and healing for this client group. International Art Psychotherapists treating adults with complex trauma were invited to answer four categories of questions: participant information, environment, practical/clinical components, and additional information. The data reported significant positive impact for healing and recovery, within a variety of areas of Art Psychotherapy practice. Additionally, the study reports how Art Psychotherapy can offer further processes for expression and enable a route of recovery that does not solely rely on verbal communication.

The study highlights significant positive impact of certain art mediums when used to access and express traumatic memories, such as the use of malleable mediums (paint, clay, pastels) all of which include the use and process of haptic engagement and experiencing embodiment as part of the process of expression.

Art Psychotherapy offers a gentle and powerful opportunity for accessing, expressing and processing traumatic memories. An individual who engages in Art Psychotherapy can choose to share their retrieved memories verbally should they wish but it is not an essential part of the therapeutic process. This makes space for the individual to have control of their own healing process and lead the pace and direction of their treatment. This process differs by offering an alternative approach to talking therapies. Furthermore, Art Psychotherapy treatment can be used for extended aims such as sharing and gained empowerment via exhibiting art works made in sessions.

This study provides clarity from cluster identification of survey participants, that highlights patterns of preference for therapeutic practice and contexts aimed at healing and recovery. There is a consensus that the environment, time of sessions, length of waiting lists, and the duration of treatment, are an important consideration for client engagement. If not approached responsive to the client's needs, such contexts can persuade non engagement or detrimental therapeutic impact. Furthermore, the study reports a majority emphasis on the importance of the therapeutic relationship.

This study adds to the body of research for Art Psychotherapy when used to treat adults who have experienced complex trauma, by providing evidence on which mechanisms and contexts of Art Psychotherapy can prove effective. In future studies, exploring the limitations and/or challenges that clients who engage in an Art Psychotherapy intervention in the context of complex trauma, has also been considered.

Although this study reports significant empirically informed research, this area requires more studies to be conducted. Further comparisons of interventions when used to treat adults who have experienced complex trauma, with the aim to ascertain empirically evidenced key benefits for clients to consider when accessing treatment, would be useful. In addition, further research of somatic expression and healing within Art Psychotherapy practice, particularly when using identified mediums from this study, would be of benefit for people impacted by trauma, and trauma informed services.

## References

- Adding, A., Ponstein, A., Van Hooren, S., De Sonnevill, L., Swaab, H. & Baars, E. (2018). The effectiveness of art therapy for anxiety in adults: A systematic review of randomised and nonrandomised controlled trials. *PLoS ONE* 13(12): e0208716. <https://doi.org/10.1371/journal.pone.0208716>.
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders. 5th ed.* Arlington: American Psychiatric Association.
- Avrahami, D. (2005). Visual Art Therapy's unique contribution to the treatment of PTSD. *Journal of Trauma and Dissociation*. 6 (4) 5-38.
- The British Association of Art Therapists (2014) *Art Therapy Information*. London: BAAT. Available online: <https://www.baat.org/Assets/Docs/General/ART%20THERAPY%20TRAINING%20July%20%202014.pdf>.
- Backos, A. K. & Pagon, B. E. (1999). Finding a voice: Art Therapy with female adolescent sexual abuse survivors. *Art Therapy: Journal of the American Art Therapy Association*, 16 (3), 126-132.
- Bolwerk, A. (2014). How Art Changes your Brain: Differential Effects of Visual Art Production and Cognitive Art Evaluation on Functional Brain Connectivity. *PLoS. ONE*.
- Buk, A. (2009). The mirror neuron system and embodied simulation: Clinical implications for the art therapists working with trauma survivors. *The Arts in Psychotherapy*, 36 (2) 61-74.
- Collie, K., Backos, K., Malchiodi, C. & Spiegel, D., (2006). Art Therapy for Combat related PTSD: Recommendations for research and practice. *Art Therapy*, 23, 157-164.
- Cooper, K. (2018). *The devastating cost of treatment delays*. British Medical Association.
- Fancourt D., Finn S. (2019). The World Health Organisation, Health Evidence Network synthesis report 67. What is the evidence on the role of the arts in improving health and well-being? A scoping review. *Eur J Psychotraumatol*. 10(1): 1606625.
- Foa, E. B., Keane, T. M., Friedman, M. J. & Cohen, J. A. (2009). *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies*. New York: Guilford.
- Gantt, L. & Tinnin, L. (2009). Support for the neurobiological view of trauma with implications for art therapy. *The Arts in Psychotherapy*, 36 (3), 148-153.

- Hindz, L. (2009). *The Expressive Therapies Continuum*. New York: Routledge.
- Hogan, S. (2016). *Art Therapy Theories, A Critical Introduction*. New York: Routledge.
- Martyn, J. (2019) 'Can Exhibiting Art Works from Therapy be Considered a Therapeutic Process?' *ATOL: Art Therapy OnLine* 10(1).
- Mind (2010) *We Need to Talk: getting the right therapy at the right time*.
- Mind (2013) *We Still Need To Talk*. Available online: [https://www.mind.org.uk/media-a/4248/we-still-need-to-talk\\_report.pdf](https://www.mind.org.uk/media-a/4248/we-still-need-to-talk_report.pdf)
- NICE (2018). NG116, Post Traumatic Stress Disorder. <https://www.nice.org.uk/guidance/ng116>.
- Rankin, A. & Taucher L. (2003). A task-oriented approach to art therapy in trauma treatment. *Art Therapy: Journal of the American Art Therapy Association*, 20 (3), 138-147.
- Regev, D. & Cohen-Yatziv, L. (2018). Effectiveness of Art Therapy With Adult Clients in 2018-What Progress Has Been Made. *Frontiers in psychology*, 9, 1531. <https://doi.org/10.3389/fpsyg.2018.01531>
- Regier, M. (2019). Available online: <https://www.michaelregier.com/what-is-complex-ptsd-how-does-ptsd-affect-relationships/>.
- Sarid, O. & Huss, E. (2010). Trauma and acute stress disorder: a comparative between cognitive behavioural intervention and art therapy. *The Arts in Psychotherapy*, 37 (1), 8-12.
- Schouten, K. A., De Niet, G. J., Knipscheer, J. W., Kleber, R. J. & Hutschemaekers, G. J. M. (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.
- Schouten, K. A. (2018). Trauma-Focused Art Therapy in the Treatment of Posttraumatic Stress Disorder: A Pilot Study, *Journal of Trauma & Dissociation*.
- Springham, N. & Jayne, K. (2020). Telephone interview.
- Talwar, S. (2007). Accessing trauma memory through art making: An art therapy trauma protocol (ATTP). *The Arts in Psychotherapy*, 34 (1), 22-35.
- Tripp, T. (2007). A short-term therapy approach to processing trauma: Art therapy and bilateral stimulation. *Art Therapy: Journal of American Art Therapy Association*, 24 (4), 178-183.
- Van Lith, T. (2016). Art Therapy in Mental Health: A systemic review of approaches and practices. *The Arts in Psychotherapy*. 47, 9-22.
- WHO (2018). International Statistical Classification of Diseases and Related Health Problems 11th Revision (ICD-11). Geneva: World Health Organization.
- Yim, O. & Ramdeen, KT. (2015) Hierarchical cluster analysis: comparison of three linkage measures and application to psychological data. *The Quantitative Methods for Psychology*, 11(1):8-21.

**Corresponding Author:**

Kelly Jayne

Art Psychotherapist

Visiting Lecturer

Artist

Email: [kelly.jayne@northumbria.ac.uk](mailto:kelly.jayne@northumbria.ac.uk)

**Co-Authors:**

Simon Hackett

Population Health Sciences Institute,

Newcastle University & Cumbria.

Northumberland, Tyne & Wear NHS Foundation Trust.

Email: [simon.hackett@newcastle.ac.uk](mailto:simon.hackett@newcastle.ac.uk)

Michael Hill

Associate Professor

Health and Life Sciences

Northumbria University

Email: [michael.hill@northumbria.ac.uk](mailto:michael.hill@northumbria.ac.uk)