Ontario Centre of Excellence
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Mental Health

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Evidence In-Sight:

ART THERAPY IN CHILDREN'S MENTAL HEALTH SERVICES

Date: August 2012

The following Evidence In-Sight report involved a non-systematic search and summary of the research and grey literature. These findings are intended to inform the requesting organization, in a timely fashion, rather than providing an exhaustive search or systematic review. This report reflects the literature and evidence available at the time of writing. As new evidence emerges, knowledge on evidence-informed practices can evolve. It may be useful to re-examine and update the evidence over time and/or as new findings emerge.

Evidence In-Sight primarily presents research findings, along with consultations with experts where feasible and constructive. Since scientific research represents only one type of evidence, we encourage you to combine these findings with the expertise of practitioners and the experiences of children, youth and families to develop the best evidence-informed practices for your setting.

While this report may describe best practices or models of evidence-informed programs, Evidence In-Sight does not include direct recommendations or endorsement of a particular practice or program.

This report was researched and written to address the following question(s):

- According to the literature, what are the benefits of using art therapy to assist children and youth with mental health issues?
- Are there sub-sets of children and youth who benefit particularly from art therapy?
- Are there existing evidence-informed practices and/or models of for art therapy?

We prepared the report given the contextual information provided in our first communications (see Overview of inquiry). We are available at any time to discuss potential next steps.

We appreciate your responding to a brief satisfaction survey that the Centre will e-mail to you within two weeks. We would also like to schedule a brief phone call to assess your satisfaction with the information provided in the report. Please let us know when you would be available to schedule a 15-minute phone conversation.

Thank you for contacting Evidence In-Sight. Please do not hesitate to follow up or contact us at evidenceinsight@cheo.on.ca or by phone at 613-737-2297.

1. Overview of inquiry

The agency requesting research on art therapy provides individual and family counseling for children and youth up to age 18 from a rural community. The agency sees up to 90 children and youth per year. Most clients are seen for mood disorders and school difficulties, and the local high school is also dealing with an abnormally high number of youth on suicide watch.

The agency is a multi-service organization, with three mental health therapists but only one that concentrates exclusively on child and youth services. A psychologist and a psychiatrist are accessible every few months, while the high school has one social worker. The organization does not have an evaluation framework to measure for outcomes, or the capacity to develop a comprehensive program evaluation, but they have expressed interest in developing this capacity and developing their own practice-based evidence.

Over the past year, the art therapy program was delivered to 12 clients by one of the agency's placement students. Most clients were under 12 years of age and presented with anger, aggression, bullying and separation issues. Clients also typically had other complex problems, such as challenges with verbal communication in services-as-usual. The art therapy program was perceived by the mental health staff to be effective in engaging children who did not usually fare well with other provided services. Before committing to providing the program again in future the agency would like a summary of the research on the benefits, effectiveness, and existing programs of art therapy for children and youth.

2. Summary of findings

- The existing literature on art therapy, including recent reviews, demonstrates that there is a lack of empirical evidence that is reliable, valid, and generalizable.
- The theoretical evidence for art therapy with children and youth suggests that as an intervention it is a constructive way to manage emotional and physical disturbances through the promotion of self-discovery and healing.
- Studies commonly consider art therapy to be beneficial for the therapist-client relationship, and for engaging younger populations. It can also help clients express emotions in a safe environment without needing to verbalize difficult experiences.
- Art therapy is typically more effective in achieving positive outcomes when it is used in conjunction with other forms of therapy, but it lacks reliable evidence when used as the sole method of treatment.
- The significance of outcomes for art therapy decrease when compared to other treatments.
- Art therapy might be beneficial as a treatment component for children and youth with learning disabilities, emotional disturbances, traumatic experiences, histories of abuse, aggressive behaviours, bipolar disorder, anxiety, and depression.
- Our search of the literature found no proven, manualized, evidence-informed art therapy practices or programs. However, several associations and organizations specialize in research and education on art therapy and provide guidelines. Links to these organizations are provided at the end of this report.

3. Answer search strategy

- Search tools: PsychINFO, AMED- Allied and Complementary Medicine, Ovid MEDLINE ®, Ovid MEDLINE ® In-process & Other Non-Indexed Citations, PubMED, PsychARTICLES, Google Scholar, EBSCO Host
- Search terms: Art therapy, children, adolescents, youth, aggression, separation, abuse, trauma, education

4. Findings

The available research on art therapy as a mental health intervention lacks rigorous evidence to prove the effectiveness, especially in consideration of the sample characteristics and research designs used in studies. The majority of studies are limited because they include case studies and single-group with no control group designs, and use sample sizes below standard population samples, thus reducing generalizability (Boekhoven et al., 2012; Metzl, 2008; Reynolds, Nabors, & Quinlan, 2000). See **Appendix A** for a summary of the research evidence.

Despite the current state of the evidence, art therapy is a promising practice and might be a beneficial treatment component for children and youth with mental health difficulties. The treatment may facilitate improvement in social and coping abilities, allow for development of problem solving skills, and improve self-esteem, particularly for children and youth with complex problems. Researchers stress the importance of expanding the existing literature to find standardized and evidence-informed implementation of art therapy practices, with an emphasis on specific populations (Boekhoven et al., 2012; Reynolds et al., 2000).

4.1 Benefits of art therapy

Art therapy is a therapeutic process that involves visual arts, music, poetry, dance, and other mediums. The therapeutic process draws on psychodynamic theories and the humanistic approach to therapy, which concentrates on self-fulfillment and the promotion of well-being (Eaton et al., 2007; Case & Dalley, 2006). Eaton and colleagues (2007) describe how art therapy focuses on creating an individualized program to engage the client through counseling techniques that are potentially more accessible than traditional verbal therapies. Art therapy programs and interventions help with personal development by activating self-exploration through self-expression, self-awareness, and empowerment.

Effectiveness

Research indicates that art therapy is a highly individualized process and lacks evidence for generalizability of a standardized procedure (Reynolds et al., 2000). Most studies, completed as case studies, focus on adapting the therapeutic process to the needs of the individual in response to how the client creates or adapts to a specific form of art. However, the studies do not show a standardized procedure in analyzing and measuring changes or developments in the art form used. Also, it appears to be common for art therapists in these studies to use theoretical rather than practice-based evidence as the foundation for the treatment process. Importantly, almost all case studies show significant or positive outcomes. On the other hand, in randomized or nonrandomized controlled trials, differences between outcomes associated with art therapy versus other therapies are typically non-significant. The most recent review of the literature, by Boekhoven and colleagues (2012), describes a lack of both theoretical and empirical evidence, difficulties with generalizability and reliability, and no clear evidence on specific populations.

Art therapy has been studied in group and individual settings with both adults and child and youth populations. Most studies focus on its advantages with sub-sets of younger populations. Group settings seem to be important for the improvement of social skills and empowerment, and enhance art therapy's effectiveness (Kozlowska & Hanney, 2001). Researchers also emphasize how the process creates a beneficial therapeutic relationship, one of the most important aspects of therapeutic results, and considers emotional, behavioural and cognitive experiences (Eaton, Doherty, & Widrick, 2007; Frielich & Shechtman, 2010).

Eaton and colleagues (2007) also explain how a non-verbal approach to understanding children's subjective experiences can be more accessible for some clients, especially at the youngest ages. It is suggested that children and adolescents become more engaged and motivated in therapy, and are better able to express themselves via art (Casey & Dalley, 2006). This therapeutic relationship, coupled with providing a safe environment for the healing process, seems to provide key benefits for the effectiveness of art therapy with children and youth.

Theoretical Evidence

Art therapy might function by allowing the client to express psychological distress from past experiences through a medium of art, which can facilitate the healing process (Boekhoven, Bowker, Davidson, Cacciato, & Gray, 2012; Keen, 2008; McMurray & Schwarz-Mirman, 2001; Waller, 2006). McMurray and Schwarz-Mirman (2001) found that most theories rely on the psychodynamic perspective with a focus on Object Relations theory to guide the therapeutic process. Object Relations theory refers to representations in the present environment that are associated to affective experiences due to internalized negative associations from childhood. For example, a child may have unconsciously repressed an experience with a parent from the past that associates to anger or frustration. In the present, the child externalizes this anger or frustration toward an object representation of the experience with the parent, such as another relationship. Through art, the frustration and anger from the repressed experience are more accessible and may be externalized and accepted in a controlled way (McMurray & Schwarz-Mirman, 2001).

Waller (2006) describes how attachment theory and family systems theory are now increasingly being integrated into the art therapist's work. For instance, the majority of research studies have included child populations with past traumatic experiences, including exposure to violence and abuse in a family setting (Frielich & Shechtman, 2010). Studies such as these state how this population benefits from the non-verbal expression of emotional experiences that may surpass their language abilities and from the need to externalize this psychological distress from the past in a safe and constructive means (Eaton et al., 2007; Keen, 2008; Kozlowska & Hanney, 2001; Pifalo, 2002).

The evidence suggests that children and youth benefit from art therapy in several ways:

- Supports the non-verbal therapeutic approach in children and youth to describe their subjective experiences
- Engages children and youth in a non-confrontational or non-threatening environment
- Enhances the therapist-client relationship, which effectively supports positive outcomes
- Allows a group setting in which social support, acceptance, and empowerment are encouraged
- Shows promising evidence to improve several areas of psychological, behavioural, and emotional functioning

4.2 Sub-sets of children and youth

Appendix A provides a summary of the research literature and specifies the evidence that indicates the benefit of art therapy to sub-sets of children by disorder or problem area. It is important to note that oftentimes the evidence is not rigorous. Eaton and colleagues (2007) further describe this lack of evidence as related to the qualitative analyses reported by art therapists, and the unclear outcome variables and methods used. Nonetheless, research findings for sub-groups of children show promising results for the use of art therapy. Casey and Dalley (2006) explain that art therapy is well-documented for specific sub-sets of children, and is especially useful for attachment problems and developmental experiences at very young ages.

Children and youth with trauma

The research on art therapy for children and youth with trauma is promising, but there is no clear approach or process of art therapy. Eaton and colleagues (2007) review of the literature on traumatized children identified limitations in research methodologies. In most studies reviewed, the decision to use art therapy relied on past studies' findings that it was beneficial to the therapist-client relationship and the ability of clients to express their subjective experiences of trauma in a safe and encouraging environment. Although most studies did not provide inferential statistics, a study by Pifalo (2002) found significant decreases in symptoms of anxiety, posttraumatic stress, and dissociation.

Another study by Kozlowska and Hanney (2001) reports a group intervention for five children with traumatic backgrounds aged 4-8 who had also participated in several other intervention programs. Numerous traumatic events had been experienced, including ongoing parental separation issues and violence. All children had post-traumatic stress symptoms as well as developmental issues and difficulties with emotional regulation and expression. Art therapy was chosen for several reasons: non-verbal therapy allowed more accessibility to these memories, art increased self-control and competence by breaking negative associations to traumatic events, the therapy constructively externalized psychological distress into the art form, and distress was confronted in a group setting by creating positive social support. The program also desensitized children to their traumatic experiences. All of the participating children improved in global functioning. However, this study did not consider the effect of art therapy compared to other treatments that the children had previously participated in.

Learning Disabilities

Although research on children and youth with learning disabilities is lacking, a recent study by Frielich & Shechtman (2010) contributes to the topic. They describe how a non-verbal approach to therapy aided in the decision to apply art therapy, as language difficulties may impede on the therapeutic success in this population. Also, a greater acceptance of therapy and the opportunity to have a visual representation of subjective experiences may enhance successful outcomes. To significantly improve adjustment, the authors support the use of one art therapy session per week accompanied with academic assistance.

School settings

Art therapy related to education or schooling provides significant results compared to other approaches. A Clinical Art Therapy Department has been functioning in Miami-Dade County Public Schools for over 30 years (Isis, Bush, Siegel, & Ventura, 2010). Isis and colleagues report that this program helps students with emotional or behavioural disabilities between the grades of Kindergarten to 12. Individualized sessions are provided in a group or individual setting. Trained

professionals, teachers, parents, and faculty plan and implement the program, with standardized assessment tools for children and youth. Program evaluations have found improvements in emotional and behavioural functioning, and the process has been continuously adjusted over the years in response to process evaluation findings. Other studies show significant evidence of improved social skills, self-esteem, and attitudes related to both school and home settings.

Depression/mood-related disorders

Boekhoven and colleagues (2012) state that art therapy is particularly relevant to populations with bipolar disorder. However, few studies were found for this sub-group. One study described the use of an intervention program entitled Enemy/Friend art therapy (Henley, 2007). The author presented precautions in implementing this therapy with children diagnosed with bipolar disorder for reasons relating to characteristics of the disorder and the diagnosis of the disorder in children. Tibbets & Stone (1990) found significant comparative evidence of a decrease in level of depression for a population of 20 seriously emotionally disturbed children. Limitations for this study may exist in the comparison of art therapy to socialization activities, which lacks a therapeutic approach.

Additionally, a study by Silver (2009) presents the use and creation of two art-based assessments, The Stimulus Drawing Task (SDT) and the Draw a Story (DAS), that are shown to be adequately reliable and valid in early identification of children and adolescents at-risk for developing depression. It is important to note that the internal consistency calculated by Cronbach's alpha is not reported for these tools, which is of concern for clinical purposes (Boekhoven et al., 2012). These assessments may be used by art therapists, which allows for early intervention to prevent potential suicides or related issues. For example, The Miami-Dade County Public Schools described above have integrated these assessments into The Clinical Art Therapy Department's processes.

Behaviour-related

Significant changes in behaviour were found for only one study, in 1992, by Springer and colleagues, with a sample size of 71 children of alcoholic and drug users. Other studies showed changes in behaviour without empirical or statistical evidence to support these changes. Most studies qualitatively describe changes in the populations' behaviours throughout the intervention, such as McMurray and Schwarz-Mirman's study in 2001. Programs in the educational and school setting seem to also address school-related behaviour problems (Isis et al., 2010).

Other

Although no studies involving children and youth with autism were found, Casey and Dalley (2006) explain that children or adolescents who are autistic or who have Asperger's syndrome might also benefit from art therapy when it is integrated into specialized school programs or centres. The non-verbal approach and non-threatening environment of this therapy may reduce anxiety and difficulties with social and emotional communication experienced by this population.

In a study assessing 23 siblings of children with cancer, findings were significant relating to mood, communication, knowledge of cancer, and feelings in both the interpersonal and intrapersonal context (Dolgin, Somer, Zaidel, & Zaizov, 1997). However, when comparing a type of art therapy to an open discussion group, no significant differences were found in a sample of 37 psychiatric inpatients (Kymissis et al., 1996). Significant improvements were found on the outcome measures for general functioning and interpersonal distress in the latter study.

4.3 Evidence-based programs/models

Although several models and programs of art therapy were found, the processes for implementation of art therapy programs are not fully supported by evidence and do not provide a clear method or approach to specific populations and their needs.

Models

Nissimov-Nahum (2008) provides a model of art therapy for aggressive children, applied in a school setting. This model was developed from a variety of art therapists of the Israeli education system who completed questionnaires and interviews. It is a dialectical approach of acceptance and change that focuses on three areas: the child, teachers and parents, and the therapists themselves. In the clinical setting, both areas of acceptance and change have different implications for the domains of treating the child, working with other systems (school and family systems), and coping with personal experiences. Although the author presents detailed descriptions of the implementation of the model, success in generalizing its implementation to other populations has yet to be supported.

A second model by Huss (2009) presents a four layered art therapy approach and provides four examples of its application in a clinical setting. The levels can be adapted to the goals of the intervention:

1. Dynamic level: individual and therapist establish the art form as a reflection of subjective lived experiences.
2. Humanistic level: therapist focusses and engages client toward well-being through insight and reflection.
3. Systemic level: art is used to facilitate positive enhancement in roles and relationships.
4. Community/social level: considers societal and cultural structure to involve minorities and other groups in the process.

Although both models show promising foundations for program implementation, further evidence is needed to support their application (Boekhoven et al., 2012).

Programs

Research support for evidence-based art therapy programs is not clear. A few programs emerged from the literature, but are specific to the context where the program functions.

Fliegel (2005) presents the Arts Incentive Program (AIP) found at the United South End Settlements (USES) (http://www.uses.org/) in Boston. The program is intended for adolescent girls ages 11 to 19 who have multiple risk factors, including trauma, abuse, neglect, poverty, substance abuse, and who suffer from discrimination. Several agencies collaborate to implement this program, which has a specific individualized structure that includes links to the community, art modules, Sunday night check-in phone calls, supported referrals, community interactions, case management, family engagement and home visits, artwork presentation, and community integration culminating events.

The Clinical Art Therapy Program at Miami-Dade County Public Schools, as discussed above, also presents an education setting program that has been extensively developed over the years (http://arttherapy.dadeschools.net/).

4.4 Practitioner competencies

The most recent research (Boekhoven et al., 2012) states that art therapists should be qualified in several areas:

- Services should be implemented by qualified art therapists with an artist background (Involvement of artist/therapist has been shown to enhance the therapeutic process)
- Postgraduate level training in Art Therapy, including a Master's degree in Arts Therapy, Master of Arts, or Diploma in counseling with specialization in Arts Therapy
- Entry-level backgrounds may include the arts, social work, psychology, sociology, or education

Associations exist regionally and nationally and provide information on education, research publications, and training for art therapy, as well as contact information of local art therapists:

Ontario Art Therapy Association
http://www.oata.ca/

Canadian Art Therapy Association
http://www.catainfo.ca/journal.php
http://catainfo.ca/cata/

American Art Therapy Association
http://www.arttherapy.org/

National Coalition of Creative Arts Therapies Associations
http://www.nccata.org/

National Association for Poetry Therapy
http://www.poetrytherapy.org/

5. Next steps and other resources

Knowing what works and receiving training on an evidence-informed practice or program is not sufficient to actually achieve the outcomes that previous evaluations indicate are possible. A program that has been shown to improve mental health outcomes for children and youth but that is poorly implemented will not achieve successful outcomes (Fixsen et al, 2005). In order for a program to be evidence-informed, it needs to be applied with fidelity to the design and it needs to be implemented using supportive "drivers" related to staff competency, organizational leadership and organizational capacity. These drivers include assessing and monitoring the outcomes of your practice using evaluation or performance measurement frameworks, which are particularly important when there is insufficient evidence in the literature to guide clinical decisions. Choosing a practice is an initial step toward implementation, but the implementation drivers are essential to ensure that the program reaches appropriate clients, that outcomes are successful and that clinical staff members are successful in their work.

The Ontario Centre of Excellence for Child and Youth Mental Health has a number of resources and services available to support agencies with implementation, evaluation, knowledge mobilization, youth engagement and family engagement. For more information, visit:
http://www.excellenceforchildandyouth.ca/what-we-do or check out the Centre's resource hub at http://www.excellenceforchildandyouth.ca/resource-hub.
For general mental health information, including links to resources for families:
http://www.ementalhealth.ca

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Appendix A – Evidence Summary

Problem Area	Research Findings	Reference	Study Information
Trauma	Children showed desensitization in exposure to anxiety-provoking issues; Social encouragement in group setting; Increase in positivity toward the future	Kozlowska, K. & Hanney, L. (2001)	5 children ages 4-8 with PTSD diagnoses, conduct disorder, depression & parents with unresolved separation/ exposure to familial violence; Art Therapy was an adjunct to several other interventions; Participated in 7 Group Therapy sessions; Difficult to distinguish effect of Art Therapy compared to other intervention strategies
	Significantly decreased symptoms of anxiety, posttraumatic stress, & dissociation; Non-statistically significant results show reductions in anger, depression, sexual concerns, feelings of threat of harm, traumatization; Improvements in coping and self-protective behaviours seem apparent	Pifalo, T. (2002)	13 females ages 8-17 years participated in 3 Group Art Therapy programs at a treatment centre based & designed on developmental stages of females (ages 8-10, 11-13, 14-17); 10 week program of group 1 group meeting per week for 1 ½ hours; Assessed for clinical levels of dysfunction in pre- & post- test design with the Briere Trauma Symptom Checklist for Children (TSCC); Goals to reduce symptoms of anxiety, depression, posttraumatic stress, anger, dissociation, sexual preoccupation & distress
	Results reported mostly in *qualitative observations without statistical evidence*; Evidence in effectiveness for emotion regulation & expression, reduction in PTSD symptom scores, reduction in anxiety & disassociation, increase in understanding of traumatic events	Eaton, L.G., Doherty, B.S. & Widrick, R.M., (2007) – *Review of research for Art therapy as treatment in traumatized children (2 studies included in this review)*	Found 12 studies using Art therapy as method/ treatment; Traumatic events varied as childhood physical & sexual abuse, exposure to violence/war/gun violence/9-11 terrorist attacks, & grief in losing loved one; 17% PTSD diagnoses, 50% not diagnosed, 33% unclear traumatic experience; Programs were community interventions, prospective/structured studies, specific art therapy programs, formal art therapy in hospital settings with varying lengths (64% did not report); 10 Case study methods, 1 prospective randomized cohort design, 1 quasi-experimental
	Increase participation in therapeutic process; Increase motivation in daily tasks; Increase positivity in relationship functioning	Keen, A.E. (2008)	13 year old female adolescent with traumatic experiences & impaired positive functioning areas; Participated in individual sessions involving music therapy & relaxation techniques; Individual case study presented
	Improvements found significant for forming groups, ordering a matrix & spatial orientation	Silver, R. A. & Lavin, C. (1977)	11 children with learning disabilities participated in 10 week program 1 session/week for 1hr; Art Therapy assessed abilities in representation, perception, association, and ordering of a matrix

	Child report indicates significant improvements in adjustment for Art therapy group (Teacher report shows adequate evidence); Both conditions improved academic achievements; Supports use of 1 session/week of Art therapy plus academic assistance	Frielich, R. & Shechtman, Z., (2010)	93 children from Israel, 42 in Art therapy, 51 in academic assistance from 7 to 15 years all identified with learning disabilities (70% male), 26% with ADHD; Assessed *Art therapy vs. academic assistance* with experts in respective fields; 1 session/week of group therapy; Measured adjustment by Archenbach's Child Behavior Checklist & Teacher Evaluation Form, academic achievements, bonding, session evaluation (mood, depth, smoothness), & adherence to the intervention
Educational/ School Setting	Significant differences found in improvements of self-concept for Art counseling group	White, K., & Allen, R. (1971)	30 boys about to complete 6th grade; 8 week *Art counseling program vs. nondirective counseling* for 5 days/week <90 minutes; Assessed on the Tennessee Self-Concept Scale in a randomized controlled trial design
	Changes found significant for self-esteem & social skills in ratings by teachers	Chin et al. (1980)	7 adolescents defined as "Educationally underserved"; Participated in 4 week therapies using Art therapy, social skills training, & video therapy 5 times/week for 3 hours; Assessed on How I Felt Scale & Behavior Checklist rated by teachers/therapists; Limits in use of multiple treatments to distinguish effect of Art therapy
	Improvements found significant for creative thinking & reading comprehension; Significant change not found for self-concept	Harvey, S. (1989)	56 Elementary school students; Participated in 12 week 2 times/week for 30 minutes in Music/Art/Dance Therapy; Assessed on 3 scales for self-concept, creative thinking, & reading comprehension; Single group with no control group design
	Significant differences found for improvements in social self-esteem related to peers & self-esteem related to school	Omizo, M. M., & Omizo, S. A. (1989)	50 Elementary school students in Hawaii participated in 10 sessions of 45-60 minutes; Assessed Art activities as treatment vs. regular routines using the Culture Free Self-Esteem Inventory; Randomized controlled trial design
	Scores significantly decreased on attitude inventory toward school, family & self	Rosal, M. L., McCulloch-Vislisel, S., & Neece, S. (1997)	50 9th grade students participated in 9 sessions 1/month in Art therapy included in regular English class; Assessed on an attitude inventory toward school, family & self (Jefferson County Public Schools Student Attitude Inventory), failing grades, & dropout rates
Depression/ Mood Disorders	Significantly greater decrease in level of depression for Art Therapy group; Increase in positive emotions & personal pride; No significant difference in behaviour rating changes	Tibbets, T.J. & Stone, B. (1990)	20 Seriously Emotionally Disturbed (SED) children enrolled in Los Angeles County Office of Education Special Class Alternative Setting; Assessed *Art Therapy vs. socialization activities* with 2 self-report scales (behaviour, personality, social & emotional functioning); Participated in 6 week therapy 1/week for 45 minutes of a nonrandomized control trial

	Qualitative analysis of behavioural outcomes described	Henley, D. (2007)	Presented findings of 5 case studies of children ages 9-15 chosen from a group of 16 children with varying early onset bipolar disorders who participated in 32 interventions; Intervention program of Enemy/Friend art therapy adapted from "Naming the Enemy" strategies toward goals of self & symptom awareness
Behaviour-related	Significant improvements in behaviour problems & competencies	Springer et al. (1992)	71 children of alcoholic & drug users; Participated in 12 week Creative therapy program 1/week for 90 minutes; Assessed on Archenbach Child Behavior Checklist in a single group w/ no control group study design
	Differences in significance were not found between all; Treatment groups showed non-significant improvements of locus of control vs. control group	Rosal, M. L. (1993)	36 children with moderate to severe behavioural problems; Participated in 10 week therapy programs 2 sessions/week for 50 minutes; Assessed differences in *Cognitive-behavioural art therapy vs. Art as therapy vs. Control group* on locus of control & classroom behaviour scales; Randomized controlled trial design
	First child showed improvement in managing expressions of anger, aggression, and working through social integration; Second displayed increase in engagement with therapy & decrease in destructive behaviour (Qualitative report)	McMurray, M. & Schwarz-Mirman, O. (2001)	Presents 2 case studies (9 & 8 year old boys) from outpatient psychiatric child and adolescent clinics; First referred for social skills, fears of sleeping alone, bed wetting, vocal & motor tics, second referred for school & home behaviour problems, anxieties & phobias; Interventions conducted by professional therapists & art therapists with specializations in depth oriented psychodynamic therapy
	Outcome not reported; Individual goals included decrease in social isolation, impulsivity & increase in school/home interest, performance, & engagement in art activities	Fiegel, L.S. (2005)	Presents 1 adolescent female referred by Human Rights and Refugee Trauma Network in Boston to Arts Incentives Program (AIP) in United South End Settlements (USES); Showed disruptive behaviour at home & in school, impaired cognitive functioning & impulsivity, poor academic performance, evidence of bullying & abuse; Group & individual treatment plan goals (See section 4.3 for details of the AIP)
Other	No significant differences were found between the 2 therapy programs; Outcome measures assessed showed significant improvements in both groups	Kymissis, P., Christenson, E., Swanson, A. J., & Orlowski, B. (1996)	37 adolescent psychiatric inpatients participated in 2 week therapy 4 sessions/week; Assessed *Synallactic Collective Image Therapy vs. Open discussion group* with 2 scales for general functioning (Children's Global Assessment Scale) & interpersonal distress (Inventory of Interpersonal Problems); Randomized control trial design
	Significant improvements in knowledge of cancer, mood, communication, feelings in intra/inter personal context	Dolgin, M. J., Somer, E., Zaidel, N., & Zaizov, R. (1997)	23 siblings of children with cancer; Participated in 6 week group intervention with art therapy 1 session/week; Assessed with Feelings and Attitudes Questionnaire, Mood Questionnaire, Satisfaction Questionnaire in single group with no control group study