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Schweizer, Celine; Knorth, Erik J.; Van Yperen, Tom A.; Spreen, Marinus

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Consensus-based typical elements of art therapy with children with autism spectrum disorders

Celine Schweizer, Erik J. Knorth, Tom A. van Yperen and Marinus Spreen

ABSTRACT

Art therapy (AT) offers a specific treatment for developmental, social and behavioural problems of children with autism spectrum disorders (ASD). In this study typical elements of AT with ASD diagnosed children are specified and validated in a two-round Delphi study with 19 art therapists and 10 referrers. In the first round, relevance and applicability of the elements were rated. The degree of consensus per element was computed using the Gower coefficient. Results were subsequently, to the extent necessary, clarified by a focus group discussion involving seven professionals (five art therapists; one psychologist-ASD specialist; one social worker with an ASD diagnosis who is also a parent of an ASD diagnosed child). Consensus was achieved on 46 elements which relate to goals, means, and outcomes of AT, including therapists' appropriate attitude and behaviour. The findings are helpful to clarify the role of AT in treatments for children with ASD.

Plain-language summary

Children with autism are often referred to AT for a range of problems. Their self-image and self-esteem is often low. A lack of flexibility often appears in daily life and at school. Also these children often have difficulties in expressing themselves. These problems have consequences for their social behaviour.

The art therapist facilitates and supports the child to express him or herself. Behavioural changes are expected to be achieved by experiencing art materials and making personal art work. Development of emotional, cognitive, social and physical functioning is stimulated. The nonverbal character of AT can offer an opportunity for children with communication problems.

Knowledge about the effects of art therapy with children diagnosed with autism is mostly based on practice experiences. Scientists, policymakers and a growing number of art therapists feel the need to expand this knowledge. Clarifying typical elements in art therapy that contribute to treatment outcomes are important as a vital step towards extensive research on the effects.

In two former studies, typical elements in art therapy with children diagnosed with autism were identified in practice and in literature. The current study is aimed to investigate professionals' consensus regarding these typical elements. Referrers and art therapists have been invited to give their opinions: do they concur with the previous findings?

There is consensus about typical elements for art therapy with children diagnosed with autism in five areas: (1) the problems that lead to children with autism being referred to art therapy; (2) art materials and forms of expression; (3) the handling of the art therapist; (4) contextual issues (such as duration of the therapy, and involvement of parents and teacher); and (5) criteria for treatment outcomes.

The results of this study will be applied as building blocks in further planned research into the effects of an AT treatment programme.

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Introduction

Children diagnosed with autism spectrum disorders (ASD) often have difficulties with social and communicative behaviour and preoccupations (American Psychiatric Association, 2013). When these difficulties have become problematic, art therapy (AT) may offer a specific treatment. In AT the child with ASD is communicating with the art therapist in an indirect way, i.e. by making art. Especially for children with communication problems the basic nonverbal character of AT might be an opportunity to develop and

experience adequate skills. Working with art materials involves a focus on sensory experiences and personal expressions, which might stimulate a better integration of cognitive, sensoric and kinesthetic experiences as well as behavioural changes (Bergs-Lusebrink, 2013; Case & Dalley, 1990; Gilroy, 2006; Hinz, 2009; Malchiodi, 2003). In AT the visual and tangible products and the shaping process itself serve as a tool to stimulate behavioural change and stabilisation of concerns or problems in an experiential way (Malchiodi, 2003; Rubin, 2001; Schweizer et al., 2009). The role of the

art therapist is to facilitate and support a client's emotional, cognitive, social or physical functioning in a systematic cycle of observation, defining aims, implementation of treatment, completing treatment, and evaluation (Smeijsters, 2008; Visser, 2009).

One out of five art therapists in the Netherlands (Schweizer, 2016) and one out of six art therapists in the US (Elkins & Deaver, 2013) are treating clients with autism. Children with autism are often referred to AT for problems with self-image, expressing themselves, flexibility, and social and learning problems. However, well-designed empirical studies of art therapeutic interventions with children with autism are very scarce (Schweizer, Knorth, & Spreen, 2014).

Art therapists are educated to deliver personalised care: each client has to discover his or her own personal way of expression with art materials (Malchiodi, 2005). A practice-based tradition almost without scientific evidence demonstrates the collective professional attitude: art therapists strongly rely on their clinical expertise (Haeyen, Van Hooren, & Hutschemaekers, 2015). However, scientists, policymakers as well as a growing number of art therapists feel the need to systematically investigate those 'typical elements' that define art therapeutic interventions (Barkham & Mellor-Clark, 2003; Blase & Fixen, 2013; Borgesius & Visser, 2015; Spanjaard, Veerman, & Van Yperen, 2015). By clarifying these elements, empirical supported treatments can be applied in practices of personalised care (Ng & Weisz, 2016).

In other nonverbal therapies like music therapy and dance therapy there is international consensus on the theoretical working elements that may improve sense of self, expressive and social behaviour for children with ASD (Geretsegger et al., 2015; Hildebrandt, Koch, & Fuchs, 2016; Koch, Mehl, Sobanski, Sieber, & Fuchs, 2015). However, these working elements have not been elaborated specifically for AT.

A recent literature review (Schweizer et al., 2014) and a pilot study into tacit knowledge of art therapists about AT with children diagnosed with ASD (Schweizer, Knorth, VanYperen, & Spreen, 2017) resulted in a theoretical framework on favourable typical elements of AT with children diagnosed with ASD. This framework, referred to as the COAT model, consists of four core categories:

- (1) The **C**ontext category refers to the setting of the treatment, the referral criteria and treatment aims, the duration and frequency of the treatment, and environmental influences on the child's behaviour.
- (2) The **O**utcomes category refers to the problem behaviours of the child to be treated and monitored, such as more flexible and relaxed behaviour, improved social and communication skills, improved self-image, and improved learning skills.

- (3) The **A**rt therapeutical materials and expressions category refers to the handling and process of working with materials evoking tactile and visual sensory experiences, such as offering variations of/with art materials to improve the child's flexibility and expressivity. Verbal and nonverbal communication during art making are part of the process.

- (4) The **T**herapeutic behaviour category refers to attunement of the therapist to clients' needs, both non-directive and directive, to stimulate visual and tactile sensory experiences, to support the shaping process, to give verbal support, and to share experiences.

The present study is focused at further specification of the AT characteristics as defined in the COAT framework. The purpose of the Delphi study is to investigate the extent of consensus about the perceived relevance and applicability of the AT-elements for children with autism by exploring the extent to which these elements are recognised by therapists and referrers. The aim of the focus group discussion is to develop further understanding about some inconsistencies in the Delphi results in Table 3. The results of both studies will be applied as building blocks in further investigations of an AT treatment programme.

Method

First, a Delphi study was performed in which agreement between a sample of experienced art therapists and professional referrers was studied concerning the elements of the COAT framework. In this Delphi study experts were consulted anonymously, to prevent them influencing each other (Hsu & Sandford, 2007; Skulmoski, Hartman, & Krahn, 2007; Turoff, 1970). The study consisted of an iteration of two successive questionnaires. The method has been modified – regularly applied – by not facilitating participants with information about rankings from the first round; this has been decided to support private decision-making as much as possible (cf. Jünger, Payne, Brine, Radbruch, & Brearley, 2017).

Second, a focus group discussion was organised with a group of experts (different from the Delphi study) to elaborate and clarify some of the results of the Delphi study. Exchanging experiences, reflections and thoughts in the focus group discussion was expected to add extra perspectives to the Delphi results in a form of 'controlled opinion feedback' (Hsu & Sandford, 2007; Krueger & Casey, 2009; Skulmoski et al., 2007; Turoff, 1970). Both research techniques were intended to collect information from practitioners as well as to assess (the degree of) consensus on relevant topics (Gibbs, 1997; Hsu & Sandford, 2007).

Participants

Respondents in both studies were selected by convenience sampling (Etikan, Musa, & Alkassim, 2016). Included were experienced art therapists (BA) and professional referrers from ten different provinces in the Netherlands. Participants joined this study for different reasons. Some offered to join the research by themselves, others were asked to join by other participants or colleagues. In this study 'experienced' is defined as: art therapists who have been treating ASD children aged 6–12 years for at least five years. Art therapists were invited by e-mail to participate and they were asked to invite a referrer to join the research. Anonymity of participation was guaranteed in this e-mail invitation. Art therapists and referrers were allowed to work with children with autism with all levels of intellectual ability. In the Delphi study 19 art therapists with 6–30 years' work experience and 10 referrers participated. Referrers were psychiatrists ($n = 2$), psychologists ($n = 5$) and individual special education teachers ($n = 3$). One referrer collaborated with an art therapist for only one year and another referrer for two years. The other 8 of the 10 referrers had 3–16 years' experience in collaborating with art therapists and referring children with autism to AT. Art therapists and referrers worked in the same (umbrella) organisations (see Table 1).

To participate in the focus group study seven experts were invited who had experience in working with ASD children from six years to life-long. To improve reliability of the results, different art therapists were invited from those of the Delphi study. Two of the participants in the focus group were not professional art therapists. One participant was a psychologist specialised in ASD and the other was a specialised social worker who was also the mother of an ASD diagnosed son. All participants worked with children with all variations of autism in different institutions (see Table 2).

Procedure

Participants were consulted between December 2014 and April 2016. For the Delphi study a questionnaire has been developed with typical AT statements

(items) based on the core categories of the COAT model. The statements refer to those aspects of AT that are assumed to characterise the treatment of children with ASD. As an illustrative example of the A-category: 'At the start of the treatment the child has restricted interests for specific art materials'.

For the present study extra items were added to the items related to the COAT categories with the aim of collecting the respondents' views regarding the starting point for treatment, i.e. the diagnosis, the specific problems of the child, and the reasons for referral (Schweizer, 2016; Schweizer et al., 2014).

Two versions of the questionnaire were used: a version for art therapists containing 78 items and one for the referrers with 30 items. The items about art therapeutic methods (A-category) and art therapeutic behaviour (T-category) were not presented to the referrers.

The participants were invited to evaluate each item in three ways. First, they were asked to rate the *relevance* of each item for AT with children diagnosed ASD on a scale from 0 (not relevant at all) to 10 (highly relevant). Second, they had to rate each item, using the same scale, concerning the *applicability* in AT practice. Third, the participants were allowed to add *qualitative comments* on each item in case of unclear descriptions.

The Delphi study was performed in two rounds. The first round resulted in a preliminary consensus item list based on the amount of (dis)agreement between the participants and on the added qualitative comments. In the second round the revised questionnaire was sent to the same participants for the same rating procedure as in the first round.

After the Delphi study the resulting list of typical AT elements in the treatment of ASD children was subject to a focus group discussion. This meeting lasted four hours (including a coffee break) and was organised with the aim to further explore items that remained questionable and needed further explanation. To enable the participants to prepare, a document with an explanation of the purpose of the meeting and information about the topics was sent to the participants one week before the meeting.

Table 1. Overview of participants in Delphi study ($N = 29$).

Type of organisation to which participants are affiliated	Number of participating art therapists N	Experience with children with ASD ^a in years M (range)	Number of participating referrers N	Years of collaboration between referrer and art therapist M (range)
Institute for child and youth psychology/psychiatry	9	17.2 (9–30)	5	7 (3–10)
Institute for children, youth and adults with (mental) retardation	1	17 (na) ^b	1	8 (na)
School (for special needs education)	4	16.7 (8–32)	3	14 (10–16)
Private practice	3	14.5 (10–20)	-	-
Institute specialised in treatment of children with ASD ^a	2	8 (6–10)	1	6.5 (3–10)
Total	19	15.1 (6–32)	10	8.9 (3–10)

^aASD = Autism Spectrum Disorder; ^bna = not applicable.

Table 2. Overview of participants in focus group ($N = 7$).

Type of organisation to which participants are connected	Number of participating art therapists N	Number of participating psychologists N	Number of participating (parents of) clients N	Experience with children with ASD ^a in years M (range)
Institute for child and youth psychology/psychiatry	2	1	1	26.8 (15–30)
Private practice	1	-	-	30 (na) ^b
Institute specialised in treatment of children with ASD	2	-	-	8 (6–10)
Total	5	1	1	21.9 (6–30)

^aASD = Autism Spectrum Disorder; ^bna = not applicable.

Analysis

The degree of agreement in the Delphi study was computed with the Gower coefficient (Gower, 1971). Sufficient agreement between the participants about each single item was defined as having an average score equal or larger than 8 (very relevant or useful), and a Gower coefficient larger than 0.8. The latter cut-off level was based on usual criteria for interrater reliability (Busschers, Boendermaker, & Dinkgreve, 2016; Evers, Lucassen, Meijer, & Sijtsma, 2010). Similarities and differences between identical single items of art therapists and referrers were analyzed employing an independent Student's *T*-test.

The recorded conversation from the focus group discussion was typed verbatim. The text was coded by two independent researchers by using content analysis (Mayring, 2000). Decisions for determining concepts were based on rules for constant comparison (Glaser, 1965). After 'incidents' (relevant text parts) had been identified and coded, they were compared with each other. After that the codes were integrated into categories. The codes were compared with the focus group items. Next the codes and categories were compared and discussed with those from a trained art therapy student. After that the codes and categories were reported to the focus group participants with a request for feedback. After a second request for feedback the researcher did not receive suggestions any more.

Results

Based on the criteria of agreement the Delphi questionnaire for art therapists was reduced from 78 to 46 items in the second round. From the list for referrers 5 out of 30 items were excluded. The hypothesis was not confirmed that there is no difference between the two groups of professionals in terms of valuation (between the sum scores) of those 25 items. Art therapists ($n = 19$) valued items significantly more positively (more relevant, more applicable) compared to referrers ($n = 9$) ($t = 4.54$; $p < .001$).

Table 3 shows the outcomes of the second round in the Delphi study. The Parts I, II, III, IV and V in Table 3 consist of 'the child's problems' (when referred to AT) and the four COAT categories. Respondents were asked to score from 0 (not relevant / applicable) to 10 (fully

relevant / applicable). Selected in the Tables were relevant scores from 0.8 up to 0.1 and average scores from 8 up to 10. The decision about relevant scores means 80% of consensus between respondents, which is valued as 'good' (Busschers et al., 2016; Evers et al., 2010). The columns at the right side of the tables show the amount of agreement and the amount of consensus concerning 'relevance' and 'applicability' of each item.

Typical AT features for ASD children

In Table 3 only those items satisfying the agreement criteria are displayed.

Part I contains items about the problems of the child with autism in AT. According to the referrers as well as the art therapists, the statement about using DSM diagnoses in AT practice did not reach agreement. Instead it was stated that the (behavioural) problems of the child must be the main focus in AT, not the classification. Also in the school situation children are not often diagnosed when referred to AT. Another commentary of respondents was that ASD children with all intelligence levels can profit from AT although the capacity to talk about and to reflect upon their functioning varies.

Part II (COAT) primarily offers an overview of forms of expressions in art making and related behaviour of the child. The consensus-based items concern varied topics: visual and sensory experiences through handling art materials, dealing with unexpected situations during art making, and cooperation and sharing experiences with the art therapist during art making. An item about standardising the art activities offered in the first three sessions did not reach a sufficient level of agreement. Some art therapists preferred to follow the child's preferences for art activities. Others preferred to offer their own standard art activities, which were varied.

Part III (COAT) covers the art therapists' behaviour, and includes an active attitude offering and supporting contact with the child by mirroring with body language, art materials, themes, making the child feel safe, and inviting the child to varied sensory experiences and personal art expressions. An important aspect of the therapists' behaviour considered by the participants is shifting between a nondirective, following attitude and a more directive, structuring attitude dependent on the child's needs to express him/herself with art making. Making contact by art

Table 3. Results of the Delphi study regarding assessment and treatment elements that are relevant and applicable in art therapy with children with autism spectrum disorders (second round, $N = 29$).

	Relevant; Average	Relevant; Agreed	Applicable; Average	Applicable; Agreed
<i>I Child with autism</i>				
1. An official diagnosis is not needed because focus of art therapy is on behaviour of the child.	8	0.88	8.1	0.81
2. Children with autism at all levels of physical and intellectual levels can profit from art therapy; this has consequences for verbal psycho-education and reflections.	8.1	0.86	8.2	0.86
3. The child has problems at home and in school with flexibility.	8.2	0.89	8.8	0.93
4. The child has problems at home and in school with expressing him/herself and with communicative behaviour.	8.7	0.94	8.7	0.94
5. The child has problems at home and in school with his/her self-image and has often a negative self-image.	8.6	0.86	8.6	0.92
6. The child has problems at home and in school with emotion regulation.	8.3	0.87	8.6	0.88
<i>II Art means and forms of expression</i>				
7. Observing and mapping behaviour and expressions in problem areas: flexibility, social communicative behaviour, self-image.	9	0.88	8.7	0.84
8. To become familiar with the art materials, environment and art therapist.	8.4	0.88	8.7	0.84
9. At the start of the treatment the child is tense about unexpected situations.	8.1	0.85	8.6	0.84
10. At the start of the treatment the child has restricted interests in specific art materials.	8	0.88	8.3	0.85
11. At the start of the treatment the child has difficulty talking about problems during art making.	8.4	0.86	8.3	0.85
12. At the start of the treatment the child has difficulty talking about positive experiences during the art work.	8.1	0.87	8.3	0.87
13. The child talks about positive experiences during art making, in relation to his/her verbal and reflective abilities.	8.3	0.80	8.4	0.83
14. The child talks about difficult experiences during art making, in relation to his/her verbal and reflective abilities.	8.1	0.87	8.1	0.85
15. The child prefers result-oriented work during art making.	8.3	0.85	8	0.84
16. The child learns to accept help from the art therapist and to ask for it when needed during art making.	8.5	0.82	8.4	0.80
17. At the end of the treatment the child is more open to working with a greater variation of art materials.	8.6	0.82	8.2	0.86
18. At the end of the treatment the child has more skills and is more familiar with an increased amount of techniques to work with art materials.	8.5	0.80	8.3	0.86
19. At the end of the treatment there are more moments of shared attention with the art therapist during art making.	8.3	0.80	8.4	0.82
20. At the end of the treatment there are more moments of exchange between the child and the art therapist and the art work.	8.1	0.81	8.3	0.84
21. At the end of the treatment the child enjoys the therapeutic relationship more.	8	0.82	8.2	0.84
22. At the end of the treatment the child is more aware of his/her own skills in working with art materials and techniques.	8.3	0.83	8.3	0.85
23. At the end of the treatment the child is more aware of his/her own contribution to disappointing experiences.	8	0.80	8	0.80
<i>III Art therapist's behaviour</i>				
24. During the first treatment phase the art therapist talks with the child about the reasons why s/he comes to art therapy, depending on the verbal and reflective skills of the child.	8.6	0.91	8.6	0.91
25. The art therapist has an active attitude offering and supporting contact, follows the child's choices, mirrors body language and themes to support the child, makes the child feel safe, invites him/her to personal art expressions and observes preferences and resistances in working with art materials.	9.6	0.82	9.4	0.83
26. The art therapist shifts between a non-directive and following attitude with a directive and structuring attitude due to the child's needs to express him/herself with art making.	9.3	0.98	9.3	0.90
27. The art therapist offers opportunities to exchange experiences during art making.	9.3	0.88	9.3	0.84
28. The art therapist supports the child to focus attention to the art making.	9.2	0.85	8.6	0.86
29. The art therapist stimulates varied tactile and visual experiences by the child.	9.1	0.85	9.1	0.87
30. The art therapist invites the child to make eye contact during art making, depending on the ability of the child to bear this.	8.7	0.94	8.9	0.94
31. The art therapist stimulates the child to follow directions; this is not self-evident.	8.6	0.91	8.6	0.92
32. The art therapist stimulates reciprocity during art making and working together.	8.6	0.84	8.7	0.82
<i>IV Context: indications, treatment goals, family & school support, art therapy room</i>				
33. Indication: art therapy may help the child to improve emotion regulation, to become more relaxed, to develop confidence in own skills, and to become less easily frustrated and scared.	8.6	0.93	8.2	0.93
34. Indication: art therapy may help the child to improve to express him/herself.	8.5	0.89	8.7	0.90
35. Indication: art making together with the art therapist and/or other children may support the improvement of social skills.	8.5	0.85	8.9	0.85
36. Indication: art making is like a mirror for the child and improves his/her self-awareness.	8.3	0.88	8.5	0.90
37. Indication: art therapy is contraindicated if the child becomes more scared and restless when working with art materials.	8	0.84	8.1	0.84

(Continued)

Table 3. Continued.

	Relevant; Average	Relevant; Agreed	Applicable; Average	Applicable; Agreed
38. Goal: gaining successful experiences to improve self-esteem, self-confidence, inner rest, and mood.	8.5	0.93	8.4	0.92
39. Goal: handling and expressing feelings, emotions, and thoughts.	8.5	0.85	8.4	0.89
40. Goal: acceptance of (autism related) problems.	8.4	0.87	8.4	0.87
41. Goal: development of planning and organising skills (executive functioning).	8.3	0.88	8.4	0.87
42. Goal: handling oversensitivity and develop differentiation.	8	0.80	8	0.87
43. Art therapist goes in consultation with parents, carers and teachers to attune how to support the child to improve development of other behaviour.	8.5	0.90	8.4	0.88
44. Art therapy room contains a wide collection of art materials and techniques to be able to offer sensitive variations of new experiences.	9.1	0.84	9	0.87
<i>V Outcomes</i>				
45. Art therapy facilitates successful experiences to improve self-image, mood and inner rest.	9.2	0.84	8.9	0.82
46. Art therapy improves handling and expression of emotions, feelings and thoughts.	8.8	0.87	8.6	0.87

making is prominent during treatment. The therapist also talks with the child, specifically about the aims of AT. Stimulating, supporting and inviting the child could be initiated both verbally and nonverbally. Other important relational aspects during therapy according to the participants are carefully stimulating eye contact and reciprocity, creating a mode of 'working together', and stimulating the child to ask for help when needed. All items about the therapists' behaviour reached the acceptable level of consensus.

Part IV (COAT) shows different kinds of contextual elements for AT with children diagnosed with ASD. Firstly, indications and treatment goals are shown, thereby addressing the development of the child's self-image, flexibility, emotion regulation and social behaviour. Secondly, requirements are indicated such as opportunities for consultation with parents, teachers and/or other carers, and the availability of an adequate space for working with the child. One of the items that did not reach a sufficient level of agreement was about parents and the child making art in art therapy together, with the aim to stimulate joint attention and interaction.

Part V (COAT) focuses on outcomes of AT with children diagnosed with ASD. A majority of outcome descriptions in the original item list did not meet the inclusion criteria. The participants had consensus about the notion that successful experiences in art therapy improve self-image, mood and inner calm as well as improvement in the expression of emotions, feelings and thoughts for a child with ASD. Two of the items in Part V did not reach a sufficient level of agreement. The first one was about improvement of flexibility of the child diagnosed ASD. Referrers doubted if this could be an outcome of art therapy in contrast with art therapists who agreed sufficiently that improvement of flexibility was one of the outcomes of AT aimed for. The other item with too little agreement concerned improvement of learning skills as an important outcome.

Focus group additions

To enable the use of the Delphi results as building blocks for further studies on the characteristics and effectiveness of AT some items were further explored in the focus group session. Selection of the topics was made upon the overlap and differences in results from the Delphi study (see Table 3). This concerns items in the art therapy means and expressions section (Part II, COAT) and in the therapist's section (Part IV, COAT), and the outcomes section (Part V, COAT). Comparison of these three Parts in Table 3 raised questions by the researcher about the improvement of self-image, flexibility and expressive behaviour during art making. The concept of 'Self-image' raised questions because of different concepts: a 'Negative self-image' was mentioned (item 5) and 'Self-awareness' (item 36), 'Self-esteem' and 'Self-confidence' (item 38). The concept 'Flexibility' was mentioned as a problem (item 3) but not found in other Parts of Table 3. And 'Handling of emotions, feelings, thoughts' is mentioned as a result, but not in the art therapist's Part III and Art expressions Part II. Discussing these questions in the focus group and analysing the results, the following explanatory notes could be added to understand the mentioned inconsistencies of the Delphi results.

1a. Regarding: *Development of self-image, mood and inner calm because of successful experiences*. In AT it is observed that children diagnosed with ASD are mainly not automatically aware of their own moods, tensions, experiences and actions. The focus group members stressed how important it is for the child with autism to become aware of experiences during art making (acting and feeling), because these children often have a poor *sense of self* and sometimes difficulties in thinking how (s)he relates to the art making. This sense of self is supposed to be more than just self-image. An art therapist contributed in the discussion with the following statement:

An 'I feeling' starts with tactile and emotional experiences. It is about your own experiences and not about another person's experiences about you.

1b. A shared opinion emerged during the focus group discussion that *self-perception*, *self-confidence*, and *self-insight* are successive developmental steps in AT contributing to an improvement of sense of self. A way to develop sense of self is by improving technical skills. For example, in the Art Studio of one of the focus group members' children learns step by step painting techniques. The two final instructions by the therapist are to make (1) a self-portrait and (2) a portrait of their favourite stuffed animal. '*No need to mention how proud and happy children are to show such results*', as was said by this participant. The art work created by the child was considered to be important as a tool for experiences of success and as a medium to learn to talk about positive and negative experiences.

2. Regarding: *Flexibility and varied experiences in art making*. Although this item was not mentioned in the outcomes part in Table 3, the focus group participants mentioned that a major part of the AT process with these children consists of finding and stimulating (small) changes in preoccupied or obsessive behaviours. It was argued that this may happen in a process of attunement to art material by offering sensory experiences with paint (as an example); or a moment of change may emerge by focusing on a preferred theme; or going along with a fantasy of the child in a separate 'own world'. To stimulate the child to various sensory or fantasy experiences, the art therapist should carefully invite the child to make small achievable steps regarding the moving, touching and handling of art materials, including the selection of art materials to be worked with. One art therapist reported:

I was working with a boy who only wanted to draw electricity poles. After some sessions, when we became more used to each other, he became more open to other art materials and subjects. But when something difficult had happened in the classroom or at home, he used to ask for a huge piece of paper. He drew a huge electricity pole and after this was done he said: 'So, what are we going to do today?' From obsessive behaviour it changed into a way to reduce stress.

3. Regarding: *Development of expressive behaviour and improving regulation of emotions*. In the focus group it was noticed that sometimes the child does express his/her own emotions or stress in the art work itself, and this could be supported by the art therapist. The art therapist might support the child to express fantasies by proposing possible materials and technical solutions. For example:

A boy diagnosed with ASD was referred to AT because of his (uncontrolled) anger outbursts. I proposed that

he should become a volcanologist. During several weeks and in varied ways we researched stages before and during a volcano outburst. For example, we used coca cola in a bottle, made drawings from what happened under the surface. This boy was able to connect the outburst phases from the volcano with his own behaviour and we talked about it.

The art therapist helped the child to create several images of volcanos with art materials. During several sessions, the child developed awareness and control of emotions (Table 3, Part V, outcomes). This then was a visible and touchable experience with many possibilities for talking about problem behaviour.

During such a process the art therapist attunes to and mirrors body language and art expressions to connect with the child. This is the way in which moments of shared attention and exchange can be developed in the triangular relationship between child, art, and art therapist.

Discussion

Clinical opinions of experts (second round: 10 referrers, 19 experienced art therapists) have been collected in a Delphi study to reflect on the general research question of this research: to what extent are art therapeutic elements, categorised by the COAT framework, relevant and applicable in AT daily practice with children with ASD? To further tailor the findings of the Delphi study, expert opinions of seven members of a focus group were collected. The participants in the Delphi study had consensus about 46 typical elements that, according to them, define AT with children diagnosed ASD.

The results of our study reflect consensus about treatment conditions for AT to meet the problematic behaviours of children diagnosed ASD. The findings confirm specific characteristics of AT. Outcomes have been defined with respect to what the child has to develop or learn. An art therapeutic intervention facilitates successful experiences for ASD children and is considered to contribute to improvement of sense of self, mood and inner calm. Also art therapy with ASD children is assumed to offer opportunities to improve the handling and expression of emotions, feelings and thoughts (Table 3, Part V). These consensus-based elements, organised in the COAT model, can be used as building blocks for a treatment model that can be used for further investigating the effectiveness of AT (Van Yperen, Van der Steege, Addink, & Boendermaker, 2010).

The relevance of this study is reflected by a broad spectrum of treatment possibilities of AT for the child with ASD. Problems relating to sense of self, social communicative problems, flexibility problems and emotion regulation problems are all known goals of AT

treatment. These concepts have been explored and each of them needs further explorations in practice and literature. For instance, it is unknown how these problem behaviours interrelate with each other. Children with ASD have heterogeneous profiles; some show mild difficulties, some severe difficulties (Fein, 2011; Feinstein, 2010). This may be associated with differences in how problems appear and co-morbidities of children with autism (Fein, 2011; Feinstein, 2010; Gillberg & Fernell, 2014; Waterhouse & Gillberg, 2014). In accordance with the concept of personalised care, the broadly oriented AT approach may focus on various aspects of the child's behaviour at the same time, but also on specific behavioural problems of the child.

The individually oriented approach of ASD related problems in AT is supported by a typical result of the Delphi study: both referrers and art therapists agree that the ASD diagnosis is not decisive for the type of AT treatment to be offered. Instead, the specific (problematic) behaviour of the child should be leading. Nevertheless, the recently-introduced DSM-5 criteria for people with ASD have close resemblance with the consensus-based AT elements, especially the treatment goals. Indeed, people diagnosed with ASD tend to have social and communication problems such as misinterpreting verbal and nonverbal interactions. Also, people with ASD often are committed to certain habits and behaviours, and may respond in a highly sensitive way to changes in their environment (American Psychiatric Association, 2013; Fein, 2011). Furthermore, problems in executive functioning are described as one of the main areas. These concern (difficulties in) processes such as working memory, planning skills, attention, inhibition, cognitive flexibility, and self-monitoring (Rozga, Anderson, & Robins, 2011). These are all skills that direct the treatment goals in an AT programme.

The results of the Delphi study about the core components as organised by the COAT model can also be understood in the light of the operation of intervention factors. A specific or typical factor in AT treatments for ASD children which was taken into account is 'art means and expressions' (COAT, Part II in Table 3). Working with art materials (COAT) involves a focus on sensory experiences and personal expressions, which might stimulate a better integration of cognitive, sensoric and kinesthetic experiences as well as the behavioural changes of the child (Bergs-Lusebrink, 2013; Case & Dalley, 1990; Gilroy, 2006; Hinz, 2009; Malchiodi, 2003).

A new understanding of the concept *self-image* from the Delphi study (Table 3: items 5, 7, 38 and 45) came as a result from the focus group discussion. The focus group experts agreed that children diagnosed with ASD often have problems with self-consciousness and self-image and in AT the first focus is development of self-perception. In music and dance therapy with children diagnosed with ASD, Stern's theory about

development of a sense of self is described with the stages of an emergent sense of self, a core sense of self and a verbal sense of self (Stern, 1985; Trevarthen, 1998; Trevarthen & Hubley, 1978). In the theoretical frame of a test for measuring self-esteem the concepts are described as: self-perception, self-image, self-concept and self-esteem (Veerman, Straathof, Treffers, Bergh, & Ten Brink, 1997). These results from the focus group study have added new insights regarding the COAT model. The term *self-esteem* has been changed into *sense of self*, which seems more appropriate as an umbrella concept for descriptions of behaviours in effect studies.

General factors influencing AT outcomes are 'therapists' behavior' (COAT, Part III in Table 3) and 'context of the treatment' (COAT, Part IV Table 3). In his/her behaviour the art therapist is continuously adjusting to the clients' needs and expectations (Hermanns & Menger, 2009; Van Yperen et al., 2010). In order to monitor the therapeutic alliance, continued investigation of the elements in Part III of Table 3 is recommended. Also in the context there are influential aspects of the child such as treatment motivation, hope and expectations and the possibility to change or mitigate problems in the environment (Liber, Van der Leeden, Sauter, & Treffers, 2007; Van Yperen et al., 2010). In further studies attention must also be paid to general contextual factors, such as changes in the school (for example, a new teacher) or at home (for example, moving to a new house where the child has a room of his/her own).

One finding of this study partly conflicts with findings in our earlier study based on theoretical evidence (Schweizer et al., 2014). It concerns an element in the category 'art therapists' behaviour' (COAT, Part III) in the Delphi study, namely 'attunement to client's behavior'. It was excluded from the list. Nevertheless, attunement is an important item in literature concerning the treatment of developmental problems (Stern, 1985; Trevarthen, 1998; Trevarthen & Hubley, 1978), and is a central element in adjacent treatment modalities like dance therapy and music therapy (Poismans, 2009; Samaritter & Payne, 2013). It may well be that the participants in our study excluded this item, mainly because it was too general, and supporting items that describe more specific how this attunement is practiced (e.g. item 25: *The art therapist has an active attitude offering and supporting contact, follows the child's choices, mirrors body language and themes to support the child, makes the child feel safe, invites him/her to personal art expressions and observes preferences and resistances in working with art materials.*).

Another remarkable result is a lack of consensus in the category 'context', namely on 'duration and frequency of treatment' (COAT, Part IV). Added comments of respondents referred to the actual situation of governmental limitations of budgets; often only ten

sessions are funded. Twenty weekly sessions often seem to be necessary but not feasible according to our respondents. ASD children tend to develop slowly; a treatment of 40 weeks actually was described as most desirable.

Comparison of results between referrers and art therapists showed a more appreciative image of AT coming from the art therapists. Although no conclusions can be drawn due to the small amount of participants, this raises questions such as: do art therapists have a more optimistic view of what happens in AT, and is this why they have higher expectations of the results achieved? A positive attitude among professionals contributes to positive social and vocational outcomes (Byrne, Sullivan, & Elsom, 2006; Cleary, Horsfall, O'Hara-Aarons, & Hunt, 2012).

Strengths and limitations

There is no unambiguous description available on how to conduct a Delphi study (Humphrey-Murto et al., 2017; Jünger et al., 2017). To decrease bias as much as possible by working with experts to develop consensus about AT elements, professionals other than AT therapists collaborated in this study: referrers (psychiatrists, psychologists, special education teachers) were involved in the two Delphi rounds. Diversity of informants has been further strengthened by selecting different experts for the Delphi study and focus group. In the focus group also a mother of a child with ASD and a psychologist who is an ASD researcher were involved.

A limitation of our study is that bias about interpreting relevance and applicability of AT elements may have been introduced by the convenience sampling of experts. The 'accessibility' of a broader group of participants was restricted because they were invited by e-mail and there is no complete overview of experienced art therapists and their location (including the work setting) in our country.

Future research

Further research should focus on these elements that are very specific for AT. Investigations of AT practices as well as into the literature about the larger body of ASD evidence is needed to improve further specification and legitimization of the outcome measures concerning sense of self, emotion regulation, flexibility and social behaviour. The practice-based evidence this study generated concerning the core concepts of the COAT model, can be used as a guide to develop AT treatment schemes and evaluation scales regarding AT for children with ASD and their families. To measure the effects of AT including the therapeutic processes, observation scales on the child's and therapist's behaviour during AT are desirable. Such instruments can be

helpful in evaluating AT treatment with children with autism, and also in monitoring treatment integrity and in connecting process and outcome data (Goense, 2016; Van Yperen, Veerman, & Bijl, 2017).

Conclusion

This study reports how consensus on 46 items of art therapy with children diagnosed with ASD was achieved by a Delphi study among 29 participants. The items concern the reasons why a child is being referred to art therapy, the art expressions of the child, the handling of the art therapist, aspects of the context during treatment, and the treatment outcomes. A deeper insight into the results was gained with a focus group discussion.

Implications for practice and policy

An art therapeutic intervention facilitates successful experiences for ASD children and is considered to contribute to improvement of sense of self, mood and inner calm. Also this treatment is assumed to offer opportunities to improve the handling and expression of emotions, feelings and thoughts, improvement of flexible behaviour and stimulating shared attention and communication skills. The results from this study can be used as building blocks for a treatment model that defines what AT typically offers. This provides clients and policy makers with a clearer picture about AT for children diagnosed with ASD.

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No potential conflict of interest was reported by the authors.

Notes on contributors

Celine Schweizer is an art therapist and doctoral candidate at Groningen University and lecturer at the art therapy education of NHL Stenden University of Applied Sciences in Leeuwarden, the Netherlands.

Erik J. Knorth is an emeritus professor in child psychology at Groningen University, the Netherlands.

Tom A. Van Yperen is a professor in child psychology at Groningen University.

Marinus Spreen is a professor in sociology and methodology at NHL Stenden University of Applied Sciences.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Barkham, M., & Mellor-Clark, J. (2003). Bridging evidence-based practice and practice-based evidence: developing a rigorous and relevant knowledge for the psychological therapies. *Clinical Psychology and Psychotherapy*, 10(6), 319–327. doi:10.1002/cpp.379
- Bergs-Lusebrink, V. (1990/2013). *Imagery and visual expression in psychotherapy*. Heidelberg/ Berlin: Springer.
- Blase, K., & Fixen, D. (2013). *Core intervention components: identifying and operationalizing what makes programs work*. ASPE Research Brief. Washington, DC: US Department of Health and Human Services. Retrieved from <http://nirn.fpg.unc.edu/resources/core-intervention-components>
- Borgesius, E., & Visser, E. C. M. (2015). *Vaktherapie en dagbesteding in de GGZ. Adviesrapport van het Zorginstituut Nederland aan de Minister van Volksgezondheid, Welzijn en Sport [Occupational therapy and day care in mental health care services. Advice of the Dutch National Health Council to the Minister of Health, Wellbeing and Sports]*. Diemen, the Netherlands: Zorginstituut Nederland.
- Busschers, I., Boendermaker, L., & Dinkgreve, M. (2016). Validation and operationalization of intensive family case management: a Delphi study. *Child and Adolescent Social Work Journal*, 33(1), 69–78. doi:10.1007/s10560-015-0403-7
- Byrne, M. K., Sullivan, N. L., & Elsom, S. J. (2006). Clinician optimism: Development and psychometric analysis of a scale for mental health clinicians. *Australian Journal of Rehabilitation Counselling*, 12(1), 11–20.
- Case, C., & Dalley, T. (1990). *Working with children in art therapy*. London: Routledge.
- Cleary, M., Horsfall, J., O'Hara-Aarons, M., & Hunt, G. E. (2012). Mental health nurses' views on therapeutic optimism. *International Journal of Mental Health Nursing*, 21, 497–503. doi:10.1111/j.1447-0349.2011.00805.x
- Elkins, D. E., & Deaver, S. P. (2013). American Art Therapy Association, Inc.: 2011 Membership Survey Report. *Art Therapy*, 30(1), 36–45. doi:10.1080/07421656.2013.757512
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. doi:10.11648/j.ajtas.20160501.11
- Evers, A., Lucassen, W., Meijer, R., & Sijtsma, K. (2010). *COTAN beoordelingssysteem voor de kwaliteit van tests [COTAN rating system for quality of tests]*. Amsterdam: Nederlands Instituut van Psychologen.
- Fein, D. A. (Ed.). (2011). *The neuropsychology of autism*. Oxford: Oxford University Press.
- Feinstein, A. (2010). *A history of autism. Conversations with the pioneers*. Malden: Wiley-Blackwell.
- Geretsegger, M., Holck, U., Carpentier, J. A., Elephant, C., Kim, J., & Gold, C. (2015). Common characteristics of improvisational approaches in music therapy for children with autism spectrum disorder: developing treatment guidelines. *Journal of Music Therapy*, 52(2), 258–281. doi:10.1093/jmt/thv005
- Gibbs, A. (1997). Focus groups. *Social Research Update*, 19. Retrieved from <http://sru.soc.surrey.ac.uk>
- Gillberg, C., & Fernell, E. (2014). Autism plus versus autism pure. *Journal of Autism and Developmental Disorders*, 44, 3274–3276. doi:10.1007/s10803-014-2163-1
- Gilroy, A. (2006). *Art therapy, research and evidence-based practice*. London: Sage Publications Ltd.
- Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social Problems*, 12(4), 436–445.
- Goense, P. B. (2016). *Bridging the implementation gap: a study on sustainable implementation of interventions in child and youth care organizations* (PhD thesis). University of Groningen, Groningen, the Netherlands.
- Gower, J. C. (1971). A general coefficient of similarity and some of its properties. *Biometrics*, 27(4), 857–872.
- Haeyen, S., Van Hooren, S., & Hutschemaekers, G. (2015). Perceived effects of art therapy in the treatment of personality disorders, cluster B/C: a qualitative study. *The Arts in Psychotherapy*, 45, 1–10. doi:10.1016/j.aip.2015.04.005
- Hermanns, J., & Menger, A. (2009). *Walk the line. Over continuïteit in het reclasseringswerk [Walk the line. About continuity in professional rehabilitation]*. Utrecht, the Netherlands: Hogeschool Utrecht.
- Hildebrandt, M. K., Koch, S. C., & Fuchs, T. (2016). We dance and find each other: effects of dance/movement therapy on negative symptoms in autism spectrum disorder. *Behavioral Sciences*, 6(4), 24. doi:10.3390/bs6040024
- Hinz, L. D. (2009). *Expressive therapies continuum: a framework for using art in therapy*. New York: Routledge, Francis & Taylorgroup.
- Hsu, C. C., & Sandford, B. A. (2007). The Delphi technique: making sense of consensus. *Practical Assessment, Research and Evaluation*, 12(10), 1–8. doi:10.4135/9781412961288.n107
- Humphrey-Murto, S., Varpio, L., Wood, T. J., Gonsalves, C., Uffholz, L.-A., Mascioli, K., & Foth, T. (2017). The use of the Delphi and other consensus group methods in medical education research: a review. *Academic Medicine*, 92(10), 1491–1498. doi:10.1097/ACM.0000000000000181
- Jünger, S., Payne, S. A., Brine, J., Radbruch, L., & Brearley, S. G. (2017). Guidance on conducting and reporting Delphi studies (CREDES) in palliative care: recommendations based on a methodological systematic review. *Palliative Medicine*, 31(8), 684–706. doi:10.1177/0269216317690685
- Koch, S. C., Mehl, L., Sobanski, E., Sieber, M., & Fuchs, T. (2015). Fixing the mirrors: a feasibility study of the effects of dance movement therapy on young adults with autism spectrum disorder. *Autism*, 19(3), 338–350. doi:10.1177/1362361314522353
- Krueger, R. A., & Casey, M. A. (2009). *Focus groups: a practical guide for applied research* (4th ed.). Los Angeles: Sage Publishers.
- Liber, J. M., Van der Leeden, A. J. M., Sauter, F., & Treffers, P. D. A. (2007). *Therapeutische alliantie: de tpocs-a^{nl}. Een observatie-codeersysteem voor het beoordelen van de band tussen cliënt en therapeut bij kinderver psychotherapie [Therapeutic alliance: the tpocs-a^{nl}. An observation-coding system to evaluate binding between client and therapist in child psychotherapy]*. *Kind en Adolescent*, 28(1), 13–20. doi:10.1007/BF03061007
- Malchiodi, C. A. (2003). *Handbook of art therapy*. New York: the Guilford Press.
- Malchiodi, C. A. (Ed.). (2005). *Expressive therapies*. New York: the Guilford Press.
- Mayring, P. (2000). Qualitative content analysis. *Forum Qualitative Social Research*, 1(2), art.20, 1–10. Retrieved from <http://nbnresolving.de/urn:nbn:de:0114-fqs0002204>
- Ng, M. Y., & Weisz, J. R. (2016). Annual research review: building a science of personalized intervention for youth mental health. *Journal of Child Psychology and Psychiatry*, 57(3), 216–236. doi:10.1111/jcpp.12470
- Poismans, K. (2009). Shared time. Timing in muziektherapie met autistische kinderen. [Shared time. Timing in music

- therapy with autistic children]. *Wetenschappelijk Tijdschrift Autisme: Theorie en Praktijk*, 8(1), 14–20.
- Rozga, A., Anderson, S., & Robins, D. L. (2011). Major current neuropsychological theories of ASD. In D. A. Fein (Ed.), *The neuropsychology of autism* (pp. 97–137). Oxford: Oxford University Press.
- Rubin, J. A. (2001). *Approaches to art therapy: theory and technique*. New York: Taylor & Francis.
- Samaritter, R., & Payne, H. (2013). Kinaesthetic intersubjectivity: a dance informed contribution to self-other relatedness and shared experience in non-verbal psychotherapy with an example from autism. *The Arts in Psychotherapy*, 40(1), 143–150. doi:10.1016/j.aip.2012.12.004
- Schweizer, C. (2016). Ik zie ik zie wat jij niet ziet. Behandelresultaten van beeldende therapie bij cliënten met autisme spectrum stoornissen [I spy with my little eye. Treatment results of art therapy with clients with autism spectrum disorders]. *Tijdschrift voor Vaktherapie*, 12(2), 13–17.
- Schweizer, C., De Bruin, J., Haeyen, S., Henskens, B., Rutten-Saris, M., & Visser, H. (2009). *Handboek beeldende therapie. Uit de verf. [Handbook art therapy. Out of paint]*. Houten: Bohn Stafleu & van Loghum.
- Schweizer, C., Knorth, E. J., & Spreen, M. (2014). Art therapy with children with autism spectrum disorders: a review of clinical case descriptions on 'what works'. *The Arts in Psychotherapy*, 41(5), 577–593. doi:10.1016/j.aip.2014.10.009
- Schweizer, C., Spreen, M., & Knorth, E. J. (2017). Exploring what works in art therapy with children with autism: tacit knowledge of art therapists. *Art Therapy*, 34(4), 183–191. doi:10.1080/07421656.2017.1392760
- Skulmoski, G. J., Hartman, F. T., & Krahn, J. (2007). The Delphi method for graduate research. *Journal of Information Technology Education*, 6, 1–21. Retrieved from: <http://www.jite.org/documents/Vol6/JITEv6p001-021Skulmoski212.pdf>
- Smeijsters, H. (2008). *Handboek creatieve therapie [Handbook arts therapies]*. Bussum, the Netherlands: Coutinho.
- Spanjaard, H. J. M., Veerman, J. W., & Van Yperen, T. A. (2015). De kern van effectieve jeugdhulp. Van erkende interventies naar werkzame elementen [The core of effective youth care. From recognized interventions to working elements]. *Orthopedagogiek: Onderzoek en Praktijk*, 54(10), 441–455.
- Stern, D. (1985). *The interpersonal world of the infant: A view from psychoanalysis and developmental psychology*. New York, NY: Basic Books.
- Trevarthen, C. (1998). The concept and foundations of infant intersubjectivity. In S. Bråten (Ed.), *Intersubjective communication and emotion in early ontogeny* (pp. 15–47). Cambridge: Cambridge University Press.
- Trevarthen, C., & Hubley, P. (1978). Secondary intersubjectivity: confidence, confiding and acts of meaning in the first year. In A. Lock (Ed.), *Action, gesture and symbol* (pp. 183–229). London: Academic Press.
- Turoff, M. (1970). The design of a policy Delphi. *Technological Forecasting and Social Change*, 2(2), 149–171.
- Van Yperen, T. A., Van der Steege, M., Addink, A., & Boendermaker, L. (2010). *Algemeen en specifiek werkzame factoren in de jeugdzorg. Stand van de discussie [General and specific working elements in youth care. State of discussion]*. Utrecht, the Netherlands: Nederlands Jeugdinstituut.
- Van Yperen, T. A., Veerman, J. W., & Bijl, B. (Eds.). (2017). *Zicht op effectiviteit. Handboek voor resultaatgerichte ontwikkeling van interventies in de jeugdsector [A view on effectiveness. Handbook on outcome-oriented development of interventions in the child and youth sector]*. Rotterdam: Lemniscaat.
- Veerman, J. W., Straathof, M. A. E., Treffers, P. D. A., Bergh, E. X. T. E., & Ten Brink, L. T. (1997). *Handleiding Competentiebelevingsschaal voor Kinderen [Manual competence perception profile for children]*. Lisse: Swets & Zeitlinger.
- Visser, H. (2009). Definiëring van het begrip beeldende therapie [Defining the concept of art therapy]. In C. Schweizer (Ed.), *Handboek beeldende therapie. Uit de Verf* (pp. 29–29). Houten, the Netherlands: Bohn Stafleu van Loghum.
- Waterhouse, L., & Gillberg, C. (2014). Why autism must be taken apart. *Journal of Autism and Developmental Disorders*, 44, 1788–1792. doi:10.1007/s10803-013-2030-5