



Research Article

Promoting mental health versus reducing mental illness in art therapy with patients with personality disorders: A quantitative study



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ABSTRACT

The distinction between mental health and mental illness has long been the subject of debate, especially in the last decade where there has been a shift in focus in mental health care from symptom reduction to the improvement of positive mental health. Art therapists have been influenced by this shift. In this study, we investigated: (1) whether art therapy improves mental health and/or reduces mental illness; and (2) what the relationship is between mental health and mental illness. We used secondary data ($n = 74$) from patients diagnosed with personality disorders from a pretest-posttest art therapy intervention, with 10 weeks in between the repeated measures. The indicators in the domains of mental health and mental illness we used were: symptom distress, flexibility, well-being, mindfulness, and schema modes. We used repeated measures ANOVA and effect sizes to examine the effects of art therapy and the Pearson correlation to examine the relationship between illness and health outcomes. Results indicated significant effects of art therapy in both domains. Furthermore, after creation of a single mental health and a mental illness score we found that the correlation between them was high. We conclude that art therapy both promotes mental health and reduces mental illness. The large correlation between these domains in patients with personality disorders suggests that we might be dealing with two sides of the same coin.

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Introduction

Current evidence based approaches to mental health care focus almost exclusively on the reduction of symptoms, with reference to the disease model of mental disorders. The term *mental disorder* refers to syndromes that are characterized by clinically significant disturbances in an individual's cognition, emotion regulation, or behavior, that reflect dysfunctions in the psychological, biological, or developmental processes underlying mental functioning (APA, 2013). Art therapists, as part of the mental health care workforce have been influenced by this approach, describing their approaches as aiming to reduce symptoms of specific mental disorders (e.g. Gussak & Rosal, 2016; Malchiodi, 2015; Schweizer et al., 2009).

Signs of a shift in the focus of mental health care can be observed, from symptom reduction to the improvement of positive mental health (Seligman & Csikszentmihalyi, 2000) and to the strengthening of psychological flexibility (Kashdan & Rottenberg, 2010). This change is advocated by positive psychology (Snyder & Lopez, 2007) and follows changes in the definition of health. In the early years health has been defined as the absence of disease. Subsequently, the World Health Organization (WHO) has extended the definition to: "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 2006, 2016). Huber et al. (2011) have suggested changing this WHO definition of health as 'the ability to adapt and self-manage in the face of social, physical and emotional challenges'. In their opinion, using the word disease signals illness, whereas the ability to adapt with these challenges is related to resilience and positive health (Huber et al., 2011). In mental health care practice, a comparable shift can be observed from symptom reduction to a recovery approach that

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emphasizes and supports a person's potential for hope and well-being. This view is transdiagnostic in nature in that it appreciates mental problems outside the conceptual structure of diagnostic categories (APA, 2013). Many art therapists have embraced this change in the focus of mental health care, because it aligns more consistently with the major objectives of art therapy. That is, improving or restoring a patient's optimal functioning and his or her sense of personal well-being on emotional, social and psychological levels (AATA [American Art Therapy Association], 2017). Aspects of psychological strength addressed in art therapy include: resilience, flexibility, adaptation, coping, personal efficacy, well-being, positive experiences, and living a meaningful life (e.g. Arts Council England, 2007; Chilton, 2013; Czamanski-Cohen & Weihs, 2016; Gussak & Rosal, 2016; Leckey, 2011; Malchiodi, 2015; Schnetz, 2005; Springham, Findlay, Woods, & Harris, 2012; Taylor, Fletcher, & Lobban, 2015; Wilkinson & Chilton, 2013).

The shift in focus within mental health care, from the disease model of mental disorders towards a transdiagnostic model, is built on the idea that mental illness and positive mental health are two distinct but related domains of personal functioning (e.g. Westerhof & Keyes, 2010). A person exhibiting (somatic or psychiatric) pathology is quite often capable of living a fruitful and happy life. Thus, pathology does not necessarily imply poor well-being/positive mental health. And, reversely, languish and struggle in life may occur despite absence of mental disorders. The distinction between both domains well-being is based on studies with healthy populations (Westerhof & Keyes, 2010). At the same time researchers argue that these two dimensions are not completely independent from each other; people with low well-being are more at risk to develop illness than people with high levels of well-being (Lamers, Westerhof, Glas, & Bohlmeijer, 2011; Trompeter, De Kleine, & Bohlmeijer, 2016). Studies on patient populations in mental health care are more hesitant about the assumed distinction between mental illness and mental health and even question the empirical evidence between mental health and illness (Lukat, Margraf, Lutz, Van der Veld, & Becker, 2016; Van Erp Taalman Kip & Hutschemaekers, 2017). Studies like these suggest that the dimensions of mental illness and mental health should be considered as a metaphor, mainly stressing different aspects of one and the same notion of health.

To what degree are effects of art therapy better described in terms of positive experiences with a focus on resilience, well-being or flexibility, than in terms of symptom reduction as prescribed by the disease model of mental disorders (e.g. Gussak & Rosal, 2016; Malchiodi, 2015; Schweizer et al., 2009)? The first aim of this study is to investigate whether the effects of art therapy are in the domain of mental illness, of positive mental health, or in both domains. The second aim is to study the relationship between mental health and mental illness. We examine these questions using data from a randomised controlled trial, which has been originally designed to evaluate the efficacy of art therapy in the treatment of personality disorders. In the present study we will use these data to better understand the benefits of art therapy and to contribute to the discussion of the nature of its effects in relation to the concepts of mental illness and positive mental health.

Method

Participants and procedure

This study used secondary data from a randomised controlled trial (RCT) conducted by Haeyen, Van Hooren, Van der Veld, and Hutschemaekers (2017). In that trial, the effects of art therapy in patients diagnosed with personality disorders were investigated. The trial was registered and approved by the Med-

ical Ethical Committee of the Radboud University Nijmegen, the Netherlands (CCMO register: NL44394.091.13 and Dutch Trial Register: NTR3925). For a full description of the RCT's design and procedure see Haeyen, Van Hooren, Van der Veld, and Hutschemaekers (2017).

Participants were recruited from a waiting list of patients indicated for treatment in an outpatient specialized treatment unit for personality disorders. Inclusion criteria were: age (18+ years), IQ >80, adequate mastery of the Dutch language and a primary diagnosis of at least one Axis II Personality Disorder cluster B and/or C, or a personality disorder not otherwise specified (APA, 2013) as determined with SCID-II. Exclusion criteria were: acute crisis, psychosis, actual and serious suicidal behavior and/or thought, and severe brain pathology. After signing informed consent forms, 74 participants were randomly assigned to the weekly art therapy group (1.5 h, 10 weeks) or the waiting list group.

The 10-week art therapy program consisted of a structured art therapy intervention protocol for patients with personality disorders. The principles of intervention mapping were applied to construct this program that was tailored to the needs of the target group (Haeyen, Van Hooren, Dehue, & Hutschemaekers, 2017). The protocol described the generic structure, the content of the sessions, the qualifications and therapeutic style of the art therapist, and the context including support for the therapist. The protocol consisted of assignments aimed at improving mindfulness, self-validation, emotion regulation skills, interpersonal functioning and insight and comprehension. The assignments were extracted from the workbook *Don't Act Out, but Live Through* (Haeyen, 2007). Examples of art assignments are: (a) Make a "Clay monster" as horrible as possible, as a symbolization of anger, also using other supplementary materials. This assignment focuses on exploration, regulation, and integration of this emotion. The monster is a kind of self-image that represents a part or polarity of the person that is often avoided. Or (b) make a "helping symbol" for a feature or skill to develop and stimulate an opposite action to painful, negative thoughts and emotions. This symbol is made on a laminated "flash card," which serves as a transfer tool, to be taken home as a reminder for the helping feature or skill, which is visual, tangible, and present outside the therapy setting. Other assignments are also in duo or group interaction.

The protocol was designed for an open group with a maximum of nine participants, meaning that participants could start at different times but always participated in a 10-session cycle and the number of participants for each session varied. Participants ($N = 74$) were on average 37.48 years old ($SD = 10.45$) and the majority (70.3%) were female. The most prevalent personality disorders were: borderline personality disorder (32.3%), avoidant personality disorder (20.4%) and unspecified personality disorder (23.1%).

Eleven patients dropped out between the pre-test and post-test: six from the experimental group and five from the control group. Reasons for drop out were psychological problems, mourning, fear of travel, crisis (psychological/alcohol), work-related problems and unknown (no contact). Post-test measures of the drop-outs were not available. However, in a drop-out analysis of pre-test measures, we did not find any significant differences between the groups' demographic and diagnostic characteristics.

Measures

To examine the effects of art therapy on mental health and mental illness, we used scales that are often used to operationalize mental health and mental illness. To measure mental health, we used the following indicators: the Acceptance and Action Questionnaire-II (Jacobs, Kleen, De Groot, & A-Tjak, 2008), the Dutch Mental Health Continuum-Short Form (Lamers, Westerhof, Bohlmeijer, Ten Klooster, & Keyes, 2011), the Mindful Attention

Awareness Scale (Schroevers, Nyklicek, & Topman, 2008) and the adaptive scales of the Schema Mode Inventory (Young et al., 2007). To measure mental illness, we used the following indicators: the symptom distress subscale and interpersonal relations subscales of the OQ45 (De Jong et al., 2007; Lambert et al., 1996), and the maladaptive scales of the Schema Mode Inventory (Young et al., 2007).

The Acceptance and Action Questionnaire (AAQ-II) measures the experiential avoidance, the opposite of acceptance and psychological flexibility. The AAQ-II consists of 10 items (e.g. "I'm afraid of my feelings" or "I am in control of my life") that are scored on a 7-point scale ranging from 1 (never true) to 7 (always true). The reliability of the Dutch version of the AAQ-II is good (Bond et al., 2011; Fledderus, Oude Voshaar, Ten Klooster & Bohlmeijer, 2012; Jacobs et al., 2008).

The Mental Health Continuum – Short Form (MHC-SF) measures emotional, social, and psychological well-being. The scale consists of 14 items (e.g., "During the past month, how often did you feel happy?" or "During the past month, how often did you feel that you had experiences that challenged you to grow and become a better person?") that are scored on a 6-point scale ranging from never (0) to every day (5). Emotional well-being is about satisfaction and positive feelings like happiness, interest and pleasure in life. Social well-being focuses on optimal functioning in society, such as social contribution and integration. Psychological well-being focusses on optimal personal performance and includes aspects such as autonomy and self-acceptance. The reliability of the MHC-SF is good (Lamers, Westerhof, Bohlmeijer, Ten Klooster, & Keyes, 2011).

The Mindful Attention and Awareness Scale (MAAS) measures receptive awareness of, and attention to, what is taking place in the present. The scale consists of 15 items, e.g. "I notice that I do things without paying attention", and "I find it difficult to stay focused on what's happening in the present". The items are scored on a 6-point scale ranging from almost always (1) to almost never (6). The test's reliability and validity are good (Brown and Ryan, 2003; Carlson & Brown, 2005).

The Outcome Questionnaire 45 (OQ45) measures global subjective mental functioning. This questionnaire contains three sub domain scores: 'Symptom distress,' 'Interpersonal relations' and 'Social role.' It consists of 45 items ("I get along well with others" or "I blame myself for things") that are scored on a 5-point scale ranging from 0 (never) to 4 (almost always). The reliability and validity for the Dutch version are good (De Jong & Nugter, 2004; De Jong et al., 2007). We excluded the 'social role' subscale because of less convincing internal consistency; disappointing values for Cronbach's alpha were found in the university, community and clinical samples (De Jong et al., 2007). In addition, social role functioning

probably does not represent problematic behavior (mental illness) in all items.

The Schema Mode Inventory (SMI version 1), measures 14 states of mind (modes) divided in two categories: adaptive and maladaptive schema modes, that a patient may experience for a shorter or longer period, e.g. the vulnerable child, the raging child, the compliant surrender, the punitive parent and the healthy adult. The inventory contains of 124 items (e.g. "I often feel alone in the world" or "I feel listened to, understood and validated") that are scored on a 6-point scale ranging from 0 (never or almost never) to 5 (always). The reliability of the Dutch version is good (Lobbestael, van Vreeswijk, Spinhoven, Schouten & Arntz, 2010).

Statistical analysis

All data were analyzed with SPSS 22 (IBM Corp, 2013). To examine the effect of art therapy in the domains mental health and mental illness, we used Repeated Measures ANOVA. In addition, we also calculated effect sizes (Cohen's *d*) to be able to compare the effects of art therapy (Cohen, 1988). Effect sizes were calculated using David Wilson's web-based effect size calculator (Lipsey & Wilson, 2001). We were interested in the effect of art therapy on outcomes (not whether art therapy worked or not), therefore we analyzed the pre- and post-test scores of the experimental group in the RCT ($n = 32$).

To examine the relationship between mental health and mental illness, we estimated the Pearson correlation between their factor scores. The factor scores were created by performing a principal component analysis (PCA) on the indicators of mental health and mental illness. In order to have a large enough sample size for the PCA, we used the pre-test data (not post-test data) and we included the control group; hence the sample size for this analysis was 74. We used the Kaiser rule ($EV > 1$) to determine the number of factors, and factor scores were estimated using the regression method.

Results

We tested whether art therapy improved positive mental health and/or reduced symptoms of mental illness (see Table 1). We found that all indicators changed significantly over time, indicating that art therapy had an effect in both of the domains of mental health and mental illness. The effect of art therapy on the indicators of mental health ranged between $d = 0.52$ for the MHC-SF SW and $d = 1.46$ for the AAQ-II. For mental illness, the effect sizes ranged between $d = -0.82$ for the OQ45 IR and $d = -1.32$ for the SMI maladaptive modes. The average effect of art therapy on indicators of mental health was $d = 1.06$ and on indicators of mental illness it was

Table 1
Results of the Repeated Measures ANOVA and the effect sizes ($n = 32$).

Indicators of	T1 Mean (SD)	T2 Mean (SD)	F	df	Sig.	Cohen's d^a
Mental health						
AAQ-II	30.44 (9.07)	40.03 (7.04)	60.00	1	0.00	1.46
SMI adaptive scale	3.18 (.66)	3.98 (.56)	133.44	1	0.00	1.31
MAAS	3.20 (.80)	4.14 (.69)	190.74	1	0.00	1.26
MHC-SF EW	1.97 (1.13)	2.84 (.93)	52.25	1	0.00	0.84
MHC-SF SW	1.52 (.96)	1.99 (.86)	28.05	1	0.00	0.52
MHC-SF PW	1.86 (1.01)	2.78 (.85)	88.24	1	0.00	0.99
Mental illness						
OQ45-SD	55.16 (15.48)	39.56 (11.84)	75.01	1	0.00	-1.13
OQ45 - IR	20.67 (6.34)	16.13 (4.63)	27.83	1	0.00	-0.82
SMI maladaptive scale	3.09 (.47)	2.50 (.42)	109.85	1	0.00	-1.32

AAQ-II = Acceptance and Action Questionnaire II; SMI = Schema Mode Inventory; MAAS = Mindfulness Attention Awareness Scale; MHC-SF = Mental Health Continuum – short form, EW = Emotional well-being, SW = Social well-being, PW = Psychological well-being; OQ45 = Outcome questionnaire 45, SD = Symptom distress, IR = interpersonal relations.

^a This is a standardized mean difference effect size, computed with David Wilson's web-based effect size calculator (<https://www.campbellcollaboration.org/escalc/html/EffectSizeCalculator-Formulas.php>).

$d = -1.09$. Both were considered as large effect sizes and indicated that art therapy promoted mental health (mean $d = 1.06$) as well as reduced mental illness (mean $d = -1.09$).

To examine the relationship between mental health and mental illness, we first performed a PCA on the indicators of mental health (MH). This resulted in one factor that explained 57.71% of the variance. The factor loadings varied from 0.55 to 0.89. A second PCA on the indicators of mental illness (MI) resulted in one factor that explained 77.08% of the variance. The factor loadings varied between 0.87 and 0.89. The strength of the relationship between mental health and mental illness was assessed by estimating the correlation between the two factors. The correlation between mental health and mental illness was significant and quite strong ($r = -0.75$, $p < 0.00$). This result indicated that the empirical distinction between mental health and mental illness in this sample of personality disorder patients was poor at best.

Discussion

The results of this investigation indicate that art therapy simultaneously reduces symptoms of mental illness and promotes positive mental health. Results showed large to very large effects sizes for patients with personality disorders cluster B/C using an art therapy intervention protocol (Haeyen, Van Hooren, Dehue, & Hutschemaekers, 2017). As expected, art therapy is an effective treatment for attaining positive mental health, but it is also effective in reducing mental illness. Based on our findings, we conclude that art therapy effectively helps patients with a personality disorders cluster B/C by decreasing symptoms of psychopathology and maladaptive schema modes, and at the same time by increasing positive mental health such as well-being, psychological flexibility, mindfulness and adaptive schema modes. These are eye-opening results. Art therapy-experts or other mental health care professionals often view the impact of art therapy to be mainly related to the domain of positive mental health. This view should be reconsidered. The effects of art therapy go beyond the scope of energizing, relaxing, or bringing relief on positive psychological aspects such as attention, autonomy, flexibility, social connection with others, emotional well-being, experiencing freedom, play and being self-directed. Art therapists should note that art therapy is also effective in reducing specific symptoms of personality disorders.

One explanation of the working mechanisms of art therapy on *symptom reduction* of personality disorders is that art therapists focus on *emotion-regulation* problems of personality disorder patients using art therapy techniques for improving regulation of emotions, helping patients to express, explore and manage emotions. During this kind of art therapy intervention, patients may become aware of contradictory emotions and achieve dialectic emotional integration (Haeyen, 2007; Huckvale & Learmonth, 2009; Rubin, 2001). In addition, the use of experiential and imagining techniques in art therapy could provoke and transform experiences, feelings and mental states (e.g., vulnerability, loneliness, anger, impulsivity) in personality disorder patients (Haeyen, 2007, 2011; Keulen - De Vos, 2013; Van den Broek, Keulen-de Vos, & Bernstein, 2011). *Self-regulation* could be improved by working towards a more stable, positive self-image and to help explore, express and integrate conflicting sides of one-self. Art therapy techniques make these changes concrete and visible. *Enduring and inflexible patterns of cognitions, emotions and behaviors* characteristic of personality disorders could be recognized, and new feelings and behaviors challenged with the help of creating art. The process of art making could also help to defuse negative feelings and thoughts and allow patients to cope with them more effectively. Instead of regressive, inflexible and/or emotional impulsive behav-

ior, spontaneous and adult behavior is encouraged (Schweizer et al., 2009; Van Vreeswijk, Broersen, Bloo, & Haeyen, 2012). *Interpersonal functioning* of personality disorder patients could be improved by art therapy interventions implicitly focusing on improving mentalizing skills. If so, art therapy might facilitate mentalization by giving meaning (to mentalize) through objects in the form of artwork (Bateman and Fonagy, 2004; Springham et al., 2012; Verfaillie, 2016).

The simultaneous increase in positive mental health and decrease in symptoms of mental illness also might indicate that the distinction between both concepts is problematic. Our data do not support the assumption that the absence of symptoms is a prerequisite of well-being and positive health. Much stronger is the evidence for the hypothesis that health and illness are two sides of the same coin. Our results show a strong correlation between the two concepts suggesting that positive mental health and decreases in symptoms of mental illness are hard to distinguish empirically. These results are in contrast with the two continuum-model of Keyes (2005), in which the first continuum refers to well-being and the second to mental illness/(psycho)pathology and in which both states are relatively independent from one another (Keyes, 2005; Westerhof & Keyes, 2010). Our results are in line with recent findings from Van Erp Taalman Kip & Hutschemaekers (2017) that indicate at least very strong interdependences between well-being and psychopathology (see also: Bartels, Cacioppo, Van Beijsterveldt, & Boomsma, 2013; Lukat, Margraf, Lutz, Van der Veld, & Becker, 2016; Rogers, Hengartner, Angst, Ajdacic-Gross, & Rössler, 2014). Our data thus raises questions about the *theoretical* relevance of the concept of well-being in relation to psychopathology within the population of mental health patients.

In the case of personality disorders, the central symptoms are emotion regulation problems and emotional vulnerability with specific problems (e.g., pervasive patterns of instability in relationships, self-image, identity, behavior) that affect impulsivity, attention-seeking behavior and pervasive feelings of social inadequacy or rigidity. These central symptoms are not only characteristic of personality disorders, but they are also at the same time general adaptation and self-management problems, which could explain why interventions aimed at reducing psychopathology simultaneously increase well-being (Appelo & Bos, 2008; Vissers, Hutschemaekers, Keijsers, Van der Veld, & Hendriks, 2010). Based on our findings and those of others, psychopathology and mental health seem to be two sides of the same coin, not separate constructs.

Some limitations of this study need to be considered. First, we drew on data from our RCT which was not specifically designed to examine the concepts of mental health and mental illness. Second, the number of respondents was relatively small for the performed analyses. However, in the initial phase of the RCT a power analyses was performed that indicated that 28 patients in each group would ensure sufficient statistical power. Moreover, the empirical effects were large. Third, we only examined personality disorder patients. Further generalization of results would require patients from other diagnostic categories. Fourth, the choice of measures may not be the best to operationalize the concepts of mental health and mental illness. For example, we used the OQ45 for mental illness, which is a very general questionnaire and not a specific measure of personality disorder pathology. However, the OQ45 is one of the 10 instruments most frequently used by practitioners in the USA to measure clinical outcomes (Hatfield & Ogles, 2004) and is often used in clinical outcome research to measure general symptoms and distress in diverse target groups (De Jong et al., 2007). Finally, positive mental health as a concept is not well defined. It is a diffuse concept unlikely to be operationalized by one factor.

Conclusion

This exploratory study has shed some light on the effects of art therapy in reducing symptoms of psychopathology and increasing positive mental health and well-being. The results indicate that art therapy is a powerful therapy for reducing psychopathology; as powerful as it is for enhancing well-being (increasing resilience and emotional adaptation). Therefore, we conclude that our view on art therapy should therefore be recalibrated: art therapy is not *mainly* or *only* a general procedure for improving well-being and quality of life. It also is a specific therapy, with interventions that reduce specific symptoms. Of course, this conclusion is based on our studied intervention, we do not know if other art therapy interventions also show these effects. Our results may help art therapists and other mental health care professionals develop greater awareness of the scope and efficacy of art therapy. Also, the quality of art therapy interventions can be improved by finding a balance between focusing on promoting positive mental health and reducing the symptoms of specific diagnostic target groups, depending on therapeutic goals, target groups and contexts.

It is our hope that this study contributes to the understanding of art therapy and its benefits, and provides insight into the scope of art therapy. Although more research is needed, the present study adds evidence to the empirical base of art therapy in patients with personality disorders cluster B and C and asks for a reappraisal of its symptom reduction quality next to the quality of enhancing positive mental health. In addition to the conclusions we can draw about art therapy, we also conclude that positive mental health and symptoms of mental illness are closely related. In this way, this study also contributes to the general discussion about mental health versus mental illness.

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