

# Art Therapy for People with Mental Illness: Overview of the Evidence from Empirical Research on the Effectiveness of the Treatment

Salmi Razali

*Department of Psychiatry, Faculty of Medicine,  
Institute of Pathology, Laboratory and Forensic Medicine (I-PPerForM),  
Maternofoetal and Embryo Research Group (MatE)  
Selangor Campus, Sungai Buloh, Universiti Teknologi MARA  
Email: [drsalmi@uitm.edu.my](mailto:drsalmi@uitm.edu.my)*

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## ABSTRACT

Art therapy is a technique that uses creative expression to help people explore emotions, develop self-awareness and insight on life experience, overcome stress, increase self-esteem, and enhance social skills. Lately, there has been a growing interest among mental health professionals to prescribe art therapy to people with mental illness. It is crucial that the treatment for people with mental illness is informed by valid evidence, not merely anecdotal opinions, personal testimony nor superstition. This article aims to review the empirical evidence and discuss the question of whether art therapy is beneficial for an individual with mental illness. Articles published between 2000 until 2021 were retrieved from search engines including EMBASE, Medline and PsychINFO. A total of 55 empirical studies were reviewed. The majority of the review evaluating the effectiveness of art therapy suggested that most studies are limited by methodological issues including the small number of subjects, poor protocols of the intervention and subjective outcome measures. Nonetheless, current empirical evidence suggests that art therapy may be beneficial as a means for venting out the negative repressed emotions or trauma, improve communication, enhance interpersonal relationships and increase support system. Most mental health professionals recommend patients with mental illness are treated with proven effective psychotherapies (for mild to moderate cases), with additional pharmacotherapy (for moderate to severe illness), and art therapy serves as supplementary to these conventional treatments. Art therapy may be beneficial as an adjunct treatment for mental illnesses. More evidence is required to show the effectiveness of art therapy.

**Keywords:** *Art therapy, Mental illness, Psychotherapy, Counselling, Pharmacotherapy*

## INTRODUCTION

*"I dream of painting and then I paint my dream".*

Vincent van Gogh (1853-1890)

Van Gogh, one of the most eminent artists in the world, and his masterpiece perceived by many as visual expressions of the troubled mind. The powerful expression through painting, however, was unable to cure his illness. He was suggested to have an inherited metabolic disease; intermittent porphyria which manifested with bouts of intervals between mental derangement and creativity, he died of suicide at the age of 37 (Blumer, 2002; Niels Arnold, 2004).

The story of Van Gogh tells us that managing mental illness is not an easy task. Using artistic work alone may not be enough to fight mental disturbances. Both, therapists, patients or clients, as well as caregivers, should strategize the best ways to provide the best care and treatment to manage the illness. In Malaysia, since the last decade, there has been a growing interest among mental health professionals such as counsellors, psychologists, psychiatrists to prescribe art therapy to people with mental illnesses (Amos & Khairani, 2020; Apdal, Karim, & Amat, 2020; Kim & Li, 2018). It is crucial that the approaches in treating people with mental illness are informed by valid evidence, not merely anecdotal opinions, personal testimony nor superstition. Hence, to equip the therapists with evidence-based therapy, this article aims to provide an overview of empirical evidence and discuss the question of whether art therapy is beneficial for people with mental illness. It starts with an argument on the causes and treatment for mental illness so that one can have a clear understanding of these fundamental aspects before discussing art therapy. The article then proceeds with summaries of the effectiveness of art therapy in the specified group of patients with reference to the available empirical evidence.

## LITERATURE REVIEW

Emotion, behaviour, perception and cognition are subjective elements which difficult to quantify and measure. These qualitative parts of human nature are present in various ways and understood in a variety of interpretations. According to mental health professionals, when an individual manifest those psychological elements in abnormal ways, deviates from norms, and disturb his or her function, he or she is considered as having a mental illness [World Health Organization (WHO), 2021; American Psychiatric Association (APA), 2021]. In order to treat mental illness which, manifests in a complex and ambiguous presentation, understanding the genesis and the course of illness is paramount important. Moreover, a consensus in a form of standard guideline which is based on valid evidence is essential in managing the illness.

### Genesis and Treatment for Mental Illness

The cause of mental illness is unknown. Supported by scientific evidence, mental health professionals believe that mental illness occurs as a result of interaction directly or indirectly between physical, psychological, and social factors (Davies & Roache, 2017). People may easily understand that severe stress results from life events (such as job stress, financial difficulties, trauma, marital discord, losses or death) that lead to mental illness. These are examples of social factors which relates to the interaction between an individual with his or her surroundings, people and environment. Acting in concert with the genesis of mental illness is the psychological factors include personality, temperament, psychological skills (such as poor problem solving, lack of assertiveness and poor stress management) and poor coping skills (Fournier, Roberts, & Ford, 2020). Spirituality and religious rituals are parts of many other types of coping. Almost all people experience adverse life events, but only those with poor skills to manage the problems may end up with mental illness. Equally important are the physical aspects include genetic loading,

hereditary tendency, neurochemical, neurotransmitter, enzymes, hormones, anatomical structure, physical disease and other somatic elements that contribute to mental illness (Uher & Zwickler, 2017; Yamada & Sumiyoshi, 2021). For example, one may have a mental illness when severe stress causes the imbalance of neurotransmitters (such as dopamine, serotonin and adrenaline) which is pivotal for the function of the brain limbic system; part of the brain which regulates (Marzan, Aziz, & Islam, 2021; Seitz-Holland et al., 2021). Another example of a physical factor is the gene; codes for a particular protein that is involved in the expression of traits that determines the individual's character or personality. In mental illness, gene polymorphism has been shown by scientists to take part in the genesis of mental illness (Marzan et al., 2021; Seitz-Holland et al., 2021). The contribution of physical aspects to mental illness may be difficult for ordinary people to understand, hence further explanation and education may be required.

This biopsychosocial explanation of the cause of mental illness is challenged when spiritual aspects, traditional beliefs and superstitions are parts of the grounded belief system. A recent systematic review of 15 studies in low and middle-income countries indicated that delays in treating severe mental illnesses such as psychosis ranged from 30 weeks to 225 weeks (Lilford, Rajapakshe, & Singh, 2020). The study suggested that accessing traditional healers as initial contact was significantly associated with a longer duration of untreated psychosis (Lilford et al., 2020). In Malaysia, about 54% to 69% of patients with psychiatric illness had at least once in contact with a traditional healer before seeking professional consultation (Raaj, Navanathan, Tharmaselan, & Lally, 2021). Delays in seeking treatment result in an increase in the duration of untreated illness, worsen the prognosis, make the remission of the symptoms difficult and recovery hard (Marshall et al., 2005; Perkins, Gu, Boteva, & Lieberman, 2005).

In keeping with the understanding of the biopsychosocial genesis of mental illness, mental health professionals have long practised a similar approach in managing mental illness (Álvarez, Pagani, & Meucci, 2012). Guidelines are developed to assist the therapist in providing services following evidence-based practice in reference to high-quality evidence such as systematic reviews, meta-analysis and randomised controlled trials (RCT) (Djulbegovic & Guyatt, 2017). For the psychological approach, as parts of guidelines, the recommendation for psychological approach, counselling and psychotherapy mostly aim to increase the psychological skills and to restructure the distorted belief and negative thoughts of those with mental illness (Carey, Griffiths, Dixon, & Hines, 2020). Psychotherapy also helps to correct the enmeshed interpersonal relationships, dynamic and social functions of individuals with mental illness (Weissman, 2020). The effectiveness of psychotherapy has been documented by numerous research and many guidelines (such as National Institute for Health and Care Excellence, NICE (2021) guidelines and American Psychiatric Association Clinical Practice Guidelines, APA (2021a). Most mental health professionals recommend that psychotherapy is the main treatment and effective for mild to moderate cases of mental illness such as anxiety or depression (Van Dis et al., 2020). Furthermore, targeting the physical aspects of the illness is also crucial in treating mental illness. For severe illness, psychotherapy serves as an additional intervention to pharmacotherapy such as antipsychotics, antidepressants or mood stabilisers. In disturbed patients, psychotherapy may reduce stress, increase functions and improve quality of life (Laws, Darlington, Kondel, McKenna, & Jauhar, 2018). According to the guidelines, for severe mental illnesses such as major depressive disorder, bipolar disorder and schizophrenia, psychotherapy alone is inadequate, hence, neurotropic medications are required to control the symptoms, prevent relapse and achieve recovery (APA, 2021a; NICE, 2021). Finally, for the social aspect of the management, support from the caregivers, social inclusion, minimise stigma and promote healthy lifestyles are part of the management of mental illness (Aldersey, Adeponle, & Whitley, 2017).

## **Psychotherapy and Counselling**

There are many psychotherapies and counselling available for mental health problems and illnesses. Psychotherapy is a well-structured process of 'talk therapy' with specific goals of treatment and delivers for several sessions (often 6 to 20 sessions) by qualified and trained mental health professionals such as a psychologist, psychiatrist or counsellor [European Association of Psychotherapy, EAP (2021)]. On the other hand, counselling is often a one-off session to provide support, assistance and guidance in resolving personal or psychological problems. Counselling can be offered by trained personnel such as mental health professionals, nurses, teachers and social workers. Contemporary and well-studied psychotherapies that show the effectiveness in treating patients include cognitive behavioural therapy (CBT)(Feng, Han, Li, Geng, & Miao, 2020; Huang, Zhao, Qiang, & Fan, 2018; Reavell, Hopkinson, Clarkesmith, & Lane, 2018), interpersonal psychotherapy (IPT) (Sockol, 2018; Whiston, Bockting, & Semkowska, 2019), psychodynamic therapy(Briggs et al., 2019; Ho & Adcock, 2018), cognitive analytical therapy (Hallam, Simmonds-Buckley, Kellett, Greenhill, & Jones, 2021), family therapy (Cottrell et al., 2018; Spain et al., 2017), marital or couple therapy (Barbato, D'Avanzo, & Parabiaghi, 2018; Roddy, Walsh, Rothman, Hatch, & Doss, 2020) and group therapy (Elias, Neville, & Scott, 2015; Li et al., 2020). For counselling, a few examples include stress management, anger management, peer counselling, grief counselling, diet and weights counselling and many others. Traditionally, psychotherapy and counselling are conducted face-to-face individually or in a group. Nowadays, with the advance in media and the internet, psychotherapies and counselling can also be delivered through virtual methods or telephone calls (Landes, Smith, & Weingardt, 2019; Maier, Riger, & Morgan-Sowada, 2021).

## **RESEARCH METHODOLOGY**

Prescribing patients with mental illness requires the therapist to be informed with evidence-based medicine and to follow the recommended guideline. In Malaysia, since the last decade, there has been a growing interest among mental health professionals such as counsellors, psychologists, psychiatrists to prescribe art therapy to people with mental illness (Amos & Khairani, 2020; Apdal et al., 2020; Kim & Li, 2018). Hence, to equip the therapists with evidence-based therapy, this study aims to provide an overview of empirical evidence and to discuss the question of whether art therapy is beneficial for people with mental illness.

Data sources include narrative or systematic reviews and research published between 2000 until 2021. Using a keyword of 'art therapy', search engine including EMBASE, Medline and PsychINFO were used to retrieve relevant journal articles on clinical trials evaluating the effectiveness of art therapy. Selection criteria include journal articles published in English and available in full text. Refer to Figure 1 for the procedure of the review. A total of 174 abstracts from the search engines were initially retrieved. Thirty-nine abstracts had no full-text articles and were subsequently excluded. From 135 potential articles, eight articles were review articles and others were articles of empirical studies. Eighty articles were excluded because of a lack of proper methodological description on data collection and statistical analysis. The articles were iteratively read and the synthesis of the findings, authors comments and recommendations are presented in this article.

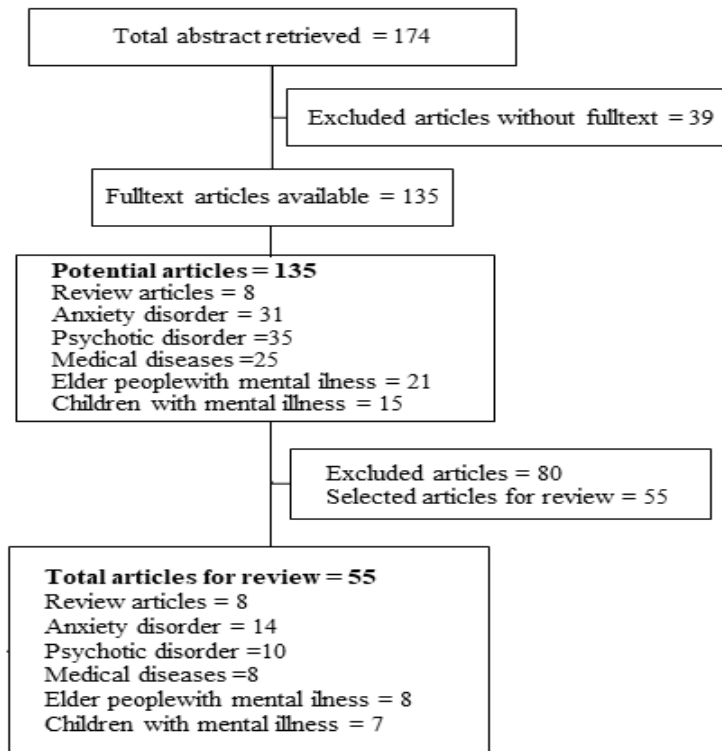


Figure 1: Flow of the process of selection of the articles for the review

## FINDINGS AND DISCUSSION

Art therapy is a technique that uses creative expression to help people explore emotions, develop self-awareness and insight into life experience, overcome stress, increase self-esteem, and enhance social skills (EAP, 2021). Various types of expressive mediums are considered as art therapy such as drawing, painting, crafting, sculpture and clay-work. Moreover, included in art therapy is music therapy, dance and movement therapy, and drama therapy (Deshmukh, Holmes, & Cardno, 2018). Its nonverbal aspects may make it highly relevant to patients or clients with different language and ethnic backgrounds. It is crucial for one to understand that clients who are referred for art therapy are not required to have experience or skill in the art and the aesthetic or diagnostic assessment is not the priority (Deshmukh et al., 2018). Psychologically, it is suggested that through art, the conscious and unconscious emotional trauma of the life experience can be channelled out to relieve the negative energy through the process of catharsis (Klinke, 2018; Palupi, Rahmanto, & Lestari, 2020; Waller, 2006). Moreover, the social activities which come together during the session of group art therapy may enhance social support and improve interpersonal relationships which is vital for mental health (Wang, Mann, Lloyd-Evans, Ma, & Johnson, 2018). In recent decades, more studies have been carried out to investigate the effectiveness of art therapy in managing mental health problems and mental illness. The findings are mixed and limited, but promising (Bastiampillai, Allison, & Gupta, 2016; Gastaldon et al., 2019; Holtum & Huet, 2014). Most often, art therapy which incorporating fundamental elements of psychotherapy such as cognitive behavioural therapy and psychodynamic psychotherapy are those that show good effects (Baker, Metcalf, Varker, & O'Donnell, 2018; Boehm, Cramer, Staroszynski, & Ostermann, 2014; Schouten, de Niet, Knipscheer, Kleber, & Hutschemaekers, 2015). The majority of mental health professional believes that art therapy may be beneficial for mild to moderate mental illness when combined with conventional treatment, and for severe disorders, it serves as a complement for psychotherapy and pharmacotherapy (NICE, 2021)

### Art Therapy for Anxiety

Anxiety disorders are one of the most diagnosed mental health disorders. Common symptoms of anxiety include shortness of breath, chest discomfort, palpitation, irritability, worries, fear, feelings of uncertainty and anticipation of negative consequences. Anxiety can come as mild symptoms to continuous apprehension, or sudden episodes of a panic attack or phobia. Common diagnoses including posttraumatic disorder (PTSD), generalised anxiety disorder, panic disorder, separation anxiety disorder, social phobia, specific phobia or agoraphobia. Mainstay proven treatment according to renowned guidelines consists of cognitive behavioural therapy and pharmacotherapy (APA, 2021c; NICE, 2021).

A total of 14 articles were reviewed. Referring to evidence from the empirical research on art therapy for PTSD, most authors described the limitations in the number of their reviewed studies, the number of participants, the heterogeneity of included studies, and the methodological quality of the reviewed study trial. Hence, to date, no conclusive evidence to support the effectiveness of art therapy in treating PTSD and improvement of the scientific quality is suggested (Abbing et al., 2018; Baker et al., 2018). Nonetheless, a few authors suggested potential benefits of art therapy to decrease psychological trauma symptoms and depression (Schouten et al., 2015), induce relaxation, gain access to unconscious traumatic memories, thereby creating possibilities to investigate cognitions and improve emotion regulation (Abbing et al., 2018). On the other hand, when art therapy was combined with other therapies such as in a recent randomised control trial of comparing art therapy plus cognitive processing therapy (CPT) vs. CPT alone among veterans with combat-related PTSD, the authors demonstrated promising effects of the earlier treatment in reducing depression and PTSD (Decker, Deaver, Abbey, Campbell, & Turpin, 2018). In another study combining art therapy and cognitive behavioural intervention, the authors postulated that the therapies may change maladaptive cognitive, affective, sensory and memory of the traumatic event (Sarid & Huss, 2010). Hence, from the reviewed evidence, it can be concluded that art therapy alone may help in treating anxiety such as PTSD, the combination of art therapy with other proven psychotherapies is required for effective treatment.

## **Art Therapy for Psychosis**

According to globally recognised classification; the Diagnostic and Statistical Manual of Mental Disorders (DSM–5), there are a few psychotic disorders such as schizophrenia, schizophreniform disorder, brief psychotic disorder, delusional disorder, substance- or medical- induced psychosis. The most commonly studied psychotic illness in measuring the effectiveness of art therapy is schizophrenia. Generally, it is an illness that manifests with a variety of complex symptoms. To simplify, the symptoms can be grouped into positive symptoms (hallucination, delusion, disorganised speech, thoughts and behaviour as well as abnormal movement) and negative symptoms (reduced affect, minimal speech and thought, apathy, lack of social drive, lack of motivation, reduced social interest, and inattention to social or cognitive input)(APA, 2021b). A mixed conclusion has been gathered from the review of a total of 10 articles on the effectiveness of art therapy in the management of psychotic disorders.

In 2009, the NICE guideline began to include art therapy as part of strategies to improve negative symptoms (NICE, 2014). It also may assist in expressing oneself and working through problems using art, music, dance or drama (NICE, 2014). Besides reducing negative symptoms (Richardson, Jones, Evans, Stevens, & Rowe, 2007), proponents of art therapy also help patients to explore and cope with their psychosis, as well as connect their existential and spiritual issues through artistic work (Hanevik, Hestad, Lien, Teglbjaerg, & Danbolt, 2013). Art therapy was suggested to adopt indirect ways of self-understanding using image-making to express and reflect the feelings (Patterson, Debate, Anju, Waller, & Crawford, 2011).

The NICE recommendation, however, was challenged by many scholars and professionals in mental illness (Bastiampillai et al., 2016; Gastaldon et al., 2019; Holttum & Huet, 2014). The evidence was referred to an early MATISSE study that compared three groups (art therapy plus standard care vs. control 'activity' group plus standard care vs. standard care alone). The study randomly allocated 417 participants with schizophrenia to either one of the groups to participate in weekly sessions (M. Crawford et al., 2012; M. J. Crawford et al., 2010; Leurent et al., 2014). Despite a year of weekly engagement with the treatment, the study found no effect of art therapy in improving global functioning, symptoms of illness, social function, satisfaction with care, mental wellbeing, and costs (M. Crawford et al., 2012; M. J. Crawford et al., 2010; Leurent et al., 2014). Moreover, in another study; a narrative review of 18 high-quality quantitative articles on the effectiveness of art therapy for psychosis, the authors concluded that the evidence was inconclusive to suggest the effectiveness of art therapy in adults with psychosis (Attard & Larkin, 2016).

## **Art Therapy for Medical Diseases**

A total of 8 studies have been carried out on the effectiveness of art therapy among patients with medical diseases including stroke, traumatic brain injury and cancer patients. A systematic and meta-analysis of 13 RCTs, quasi-experimental and controlled trials among 606 breast cancer patients, the authors demonstrated the benefit of art therapy in reducing anxiety symptoms of breast cancer patients, but the therapy was not effective for reducing mood, depression and changing the functioning as well as the quality of life of the patients (Boehm et al., 2014). In another systematic review and meta-analysis of a larger number of patients, a small benefit of art therapy to reduce anxiety, as well as depressive symptoms and fatigue among breast cancer patients, was suggested (Tang et al., 2019). The studies investigating the effectiveness of art therapy for cancer patients are limited, hence, further study is required. Furthermore, in a very small study of art therapy among seven patients with stroke, a change was seen only in the drawing content of therapy, but not to the spontaneous recovery (Sacchett, 1999)

## **Art Therapy for Elder People**

Dementia is a disease of elderly people manifested with a constellation of symptoms including deterioration of memory and cognition, personality, emotional and behavioural changes and in severe cases manifested with speech disturbances, movement difficulties and psychosis (APA, 2021b). Mixed findings were found from the review of 8 studies on the effectiveness of art therapy among elderly people and those with dementia. A few studies indicated potential benefits. For example, in a study of 45 patients with the diagnosis of mild to severe dementia who were randomly assigned to attend one hour each week for 40 successive weeks group art therapy or activity groups, the study demonstrated some positive outcomes. In the study, the participants showed some improvement in mental acuity, physical involvement, calmness and sociability (Rusted, Sheppard, & Waller, 2006). A recent systematic review and meta-analysis of 12 studies among older adults at age 60 or over, with or without any form of cognitive decline suggested some benefits of art therapy to improve global cognitive function and reduce depression and anxiety symptoms (Masika, Yu, & Li, 2020). However, in a review of studies among dementia patients, the authors found no sufficient evidence of the effectiveness of art therapy in lowering cognitive deterioration, address symptoms related to psychosocially challenging behaviours and improve quality of life (Deshmukh et al., 2018). Hence, up to date, inconclusive evidence is available to show the effectiveness of art therapy for elderly people and patients with dementia.

## **Art Therapy for Children**

From the review of 7 articles on art therapy for children, as with other studies evaluating the effectiveness of art therapy in adults, methodological issues were highlighted by many authors and reviewers. For example, in a review of 12 studies on the effectiveness of art therapy for children exposed to trauma such as physical and sexual abuse, exposure to the violence of war, terrorist attacks, gun violence within a community, and grief following the loss of a loved one, the authors discussed on methodological problems including a heterogeneous and inadequate number of samples, lack of control subjects, inconsistency study procedure and difficulties to set the empirical outcome measures (Eaton, Doherty, & Widrick, 2007). Similar issues related to the methodology of studies was also highlighted in a review of studies on the efficacy of art therapy with parent-infant dyads (Armstrong & Ross, 2020). Hence, conclusions that emerged from the studies have to be made with caution and the therapist should provide care and treatment according to each individual case.

Nevertheless, from the review, some benefits were highlighted include improvement in the relationships between the children and therapist, and reduction in symptoms when described qualitatively (Eaton et al., 2007). In a recent systematic review of the effectiveness of art therapy to 247 children aged 5–12 years with asthma, behavioural disorders, oppositional defiant disorders, separation anxiety disorders, learning disorders, and disruptive behaviours, the authors concluded that art therapy may be effective in improving children's quality of life; anxiety; self-concept; problem-solving skills, attitudes towards school; emotional and behavioural difficulties (Moula, 2020). Supporting the effectiveness of art therapy, in a more recent systematic review by Cohen-Yatziv and Regev (2019) on 13 articles published from 2000 to 2017, the authors divided the review into four groups and briefly summarised the results. The authors concluded that some benefits found to reduce the symptoms of children with posttraumatic stress, give a positive effect on children with special educational needs and disabilities, help children dealing with medical conditions, especially persistent asthma, and the therapy may help juvenile offenders (Cohen-Yatziv & Regev, 2019).



## CONCLUSION

Current empirical evidence suggests that art therapy may be beneficial for certain aspects of mental illness, but it may not be able to treat a mental illness if used alone. Art therapy may function as a means for venting out the negative repressed emotions or trauma, improve communication, enhance interpersonal relationships and increase support system. The conclusion of the effectiveness of art therapy is informed based on studies limited by methodological issues including the small number of subjects, the poor protocol of the intervention and subjective outcome measures. Hence, larger participants, more proper and thoroughly prepared protocols as well as high quality mixed methods studies are recommended to evaluate the effectiveness of art therapy. Most mental health professionals recommend patients with mental illness are treated with proven effective psychotherapies (for mild to moderate cases), with additional pharmacotherapy (for moderate to severe illness) and art therapy serves as supplementary to these conventional treatments (APA, 2021a; NICE, 2021).

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